

OFFICIAL  
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OF THE  
COMMONWEALTH  
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*Prepared under instructions from the Right Honourable the Treasurer by*

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## PREFACE

By the Constitution of the Commonwealth of Australia, the Parliament of the Commonwealth is empowered, subject to the Constitution, 'to make laws for the peace, order, and good government of the Commonwealth, with respect to . . . Census and statistics.' In the exercise of the power so conferred, a Census and Statistics Act was passed in 1905, and in the year following the Commonwealth Bureau of Census and Statistics was created. The first Official Year Book was published early in 1908. The publication here presented is the fifty-fourth Official Year Book issued under the authority of the Commonwealth Government.

The special index (preceding the general index) provided at the end of the volume, together with certain references given in the various chapters, will assist in tracing in previous issues special articles and other more or less important miscellaneous matter which, in order to conserve space, have been omitted or abbreviated in the present volume. Where, in the general index, more than one reference to a subject is given, the chief reference (or references) has been specially indicated wherever possible.

Among new or revised material included the following items may be especially mentioned.

Chapter 7. Population. Inclusion of 1966 population census material, in particular a new table Urban Centres: Number and Population, by Size, States and Territories (pages 127-8) and characteristics of the population (pages 135-49), together with graphs.

Chapter 9. Housing and Building. Inclusion of 1966 population census material on dwellings, together with graphs (pages 219-30).

Chapter 11. Overseas Transactions. Expanded tables of exports and imports, by country of consignment or origin, and by divisions of the Australian Export and Import Commodity Classifications (pages 350-69).

Chapter 12. Transport, Communication and Travel. Revision and amplification of paragraphs on Commonwealth navigation and shipping legislation (pages 389-91); inclusion of new tables on overseas shipping cargo loaded and discharged, according to major trade areas and types of service (liner or tramp, etc.) (pages 402-5); revision of section Railways (pages 412-23).

Chapter 15. Education, Cultural Activities, and Research. Inclusion of new matter and tables on teachers colleges (pages 524-5), and on expenditure on education (pages 551-3 and 554-5).

Chapter 16. Public Justice. Re-insertion of paragraphs on children's courts, revised (pages 591-3); inclusion of new comprehensive table on numbers in police force staffs (pages 611-12).

Chapter 18. Private Finance. Insertion of a revised and expanded section on Finance Companies (pages 677-87).

Chapter 22. Water Conservation and Irrigation. Inclusion of former article on *Droughts in Australia* by J. C. Foley, revised and brought up-to-date by the Director of the Commonwealth Bureau of Meteorology (pages 991-6).

Chapter 25. Mineral Industry. Addition of a section on overseas participation in the Australian mining industry (pages 1059-61), and expansion of the section on mineral exploration (pages 1062-4).

Chapter 26. Manufacturing Industry. Addition of a section on indexes of factory production (pages 1098-9).

Chapter 29. The Territories of Australia. Inclusion of a section on the weather and climate of Papua and New Guinea, prepared by the Director of the Commonwealth Bureau of Meteorology (pages 1190-6).

Statistical Summary (pages 1259-71). This has been expanded, both in subject-matter and in the range of years covered, running back in single years to 1942 or 1941-42.

A large density map of Australia is inserted loose inside the back cover. It shows urban and rural densities of the various States and Territories against a background of rainfall distribution.

The usual series of graphs has been revised and extended.

The material in the Year Book has been carefully checked throughout, but I shall be grateful to those who will be kind enough to point out defects or make suggestions.

The statistics contained in the majority of the chapters of this volume relate to the years ended June or December 1967. More detailed statistics on subjects dealt with in the Year Book are available in the various annual reports published by this Bureau, and more recent statistics are contained in the *Digest of Current Economic Statistics* (monthly), the *Monthly Review of Business Statistics*, the *Quarterly Summary of Australian Statistics*, and in other publications issued monthly, quarterly,

half-yearly, or yearly. These publications are listed in Statistical publications of Australia (*see* Chapter 30, Miscellaneous), and the last pages of this volume contain a list of current and recent printed publications available for purchase, showing issue numbers, dates, and prices.

This issue of the Year Book is published for the first time in International size B5, resulting in a slight increase in page dimensions; and the opportunity has been taken to increase the size of type generally used from 7 on 8 point Times Roman to 8 on 9 point Times Roman, and to make some other changes in presentation.

A State Year Book is published by the Deputy Commonwealth Statistician of each State. These publications contain greater statistical detail and additional supplementary material concerning the individual States which cannot be accommodated in the Commonwealth Year Book. The Deputy Commonwealth Statisticians of all States also issue Pocket Year Books and a number of printed and mimeographed publications dealing with their respective States. These publications are listed on pages 1163-5 of the 1962 issue of the Year Book, and, together with publications of the Central Bureau, in *Publications of the Commonwealth Bureau of Census and Statistics* issued annually by this Bureau.

My thanks are tendered to the Deputy Commonwealth Statisticians of the several States, who have collected and compiled the data on which a great part of the information given in the Year Book is based. Thanks are also tendered to the responsible officers of the various Commonwealth and State Departments and to others who have kindly, and often at considerable trouble, supplied information, and to the Government Printer and his staff for their services in printing this Year Book and in assisting and advising throughout its preparation.

K. M. ARCHER  
Commonwealth Statistician

Commonwealth Bureau of Census and Statistics,  
Canberra, A.C.T. 2600. August 1968

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## SYMBOLS AND OTHER FORMS OF USAGE IN THIS YEAR BOOK

The following *symbols*, where shown in tables, mean:

- n.a. —not available
- .. —nil or less than half the final digit shown, or not applicable
- p —preliminary—figure or series subject to revision
- r —figure or series revised since previous issue
- n.e.i.—not elsewhere included
- n.e.c.—not elsewhere classified
- n.s. —not stated
- m.—males; f.—females; p.—persons

A blank space in a column of figures means that the figure concerned is not yet available.

The following *abbreviations* are used for the titles of the Australian States and Territories and the Commonwealth of Australia: N.S.W. (New South Wales), Vic. (Victoria), Qld (Queensland), S.A. (South Australia), W.A. (Western Australia), Tas. (Tasmania), N.T. (Northern Territory), A.C.T. (Australian Capital Territory), T.P.N.G. (Territory of Papua and New Guinea), Aust. (Australia), Cwlth (Commonwealth).

In general, the *statistics in this volume relate to the States and Territories of the Commonwealth of Australia*, i.e. they exclude particulars of the External Territories of Australia, which, however, are specifically dealt with in Chapter 29, The Territories of Australia. A few series elsewhere include particulars of the Territory of Papua and New Guinea because of the nature of the subject-matter—these series are indicated.

*Yearly periods* shown as e.g. 1967 refer to the year ended 31 December 1967; those shown as e.g. 1966–67 refer to the year ended 30 June 1967. Other yearly periods are specifically indicated. The range of years shown in table headings, e.g. 1901 to 1966–67, indicates the period covered, but does not necessarily imply that each intervening year is included.

*Values* are shown in Australian dollars (\$) or cents (c) unless another currency is specified.

*Any discrepancies between totals and sums of components* in tables are due to rounding.

*Population and vital statistics have been revised* in this issue of the Year Book to include particulars of Aborigines (see pages 117 and 175), and rates based on these statistics have been revised accordingly. This has caused considerable variation in the rates shown for the Northern Territory compared with those shown in previous issues.

Unless otherwise indicated, the *British system of weights and measures* is used. The weights and measures used in recording production, etc. of different commodities are as follows:

Bushel (bus)	.	.	.	=	approximately 2,218 cubic inches
Gallon (gal)	.	.	.	=	Imperial gallon of approximately 277 cubic inches
Pound (lb)	.	.	.	=	pound avoirdupois
Cental	.	.	.	=	100 pounds
Hundredweight (cwt)	.	.	.	=	112 pounds
Ton	.	.	.	=	Long ton of 2,240 pounds
Short ton	.	.	.	=	2,000 pounds
Bale (of wool)	.	.	.	=	approximately 300 pounds

Cereals, fruit and certain other products are generally recorded in bushels. While the weight of a bushel varies according to the nature of the product, it is also subject to considerable variation for individual products on account of such things as variety and method of packing. However, average bushel equivalent weights, as set out below, may be used for the conversion of each of these products to pounds weight avoirdupois.

#### BUSHEL WEIGHTS

(lb per bushel)

<i>Product</i>	<i>lb per bushel</i>	<i>Product</i>	<i>lb per bushel</i>	<i>Product</i>	<i>lb per bushel</i>
Apples . . . . .	42	Maize . . . . .	56	Pineapples . . . . .	42
Apricots . . . . .	48	Mandarins . . . . .	48	Plums and prunes . . . . .	58
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Clover seed . . . . .	60	Oranges . . . . .	48	Setaria . . . . .	60
Custard apples . . . . .	35	Panicum . . . . .	60	Sorghum . . . . .	60
Figs . . . . .	44	Papaws . . . . .	24	Soya beans . . . . .	60
Flax seed (pure seed) . . . . .	56	Passion fruit . . . . .	34	Strawberries . . . . .	30
Flour . . . . .	56	Peaches . . . . .	45	Sunflower seed . . . . .	33
Grapefruit . . . . .	42	Peanuts . . . . .	22	Tares . . . . .	60
Grass seed (most varieties) . . . . .	20	Pears . . . . .	45	Tomatoes . . . . .	48
Lemons . . . . .	48	Peas, field (dry) . . . . .	60	Wheat . . . . .	60
Loquats . . . . .	45	Peas in pod (green) . . . . .	28		
Lucerne seed . . . . .	60	Persimmons . . . . .	44		

## CORRIGENDA

### PAGE

- 40—HUMIDITY, RAINFALL, AND FOG, *Rainfall, Greatest in one day, May*—for 2.19 6/22 read 6.71 2/82
- 58—WESTERN AUSTRALIA, THE HON. L. A. LOGAN, M.L.C., THE HON. J. F. CRAIG, M.L.A.—for (L.C.L.) read (C.P.)
- 68—table AUSTRALIAN PARLIAMENTS, ANNUAL SALARY, *Tas.*—for (g) 4,600 each House read (g) 6,000; footnote (c)—after (c) insert Plus allowance of \$1,440
- 122—last line of text before second table—for 134-5 read 133-4
- 146—PERSONS, Greek, *Australia*—for 106,671 read 106,677
- 402-5—Figures in the tables on these pages have been extensively revised because of transfers in the classification of individual vessels between the two groups of shipping services—*Liners* and *Tramps, bulkships, tankers*. Figures for *All vessels* are unchanged. The revised totals for Australia are:

<i>Liners</i>		<i>Tramps, bulkships, tankers</i>	
<i>Weight</i>	<i>Meas.</i>	<i>Weight</i>	<i>Meas.</i>
page 403, CARGO LOADED—			
4,617,527	1,778,681	28,073,555	164,499
page 405, CARGO DISCHARGED—			
1,800,665	3,470,224	25,308,086	681,908

Detailed revised figures for 1966-67 are available in the bulletin *Overseas Shipping Cargo*, April, 1968, and will be included in the annual bulletin *Transport and Communication*, 1966-67.

Map inside back cover—QUEENSLAND, lat. 25° 30', long. 152° 40' insert name **Maryborough**; NEW SOUTH WALES, lat. 32° 10', long. 148° 40' delete name **Orange**, lat. 33° 20', long. 149° 10' insert name **Orange**; SOUTH AUSTRALIA, lat. 33° 00', long. 137° 30' insert name **Whyalla**



## CHAPTER 1

# DISCOVERY, COLONISATION, AND FEDERATION OF AUSTRALIA

### Early knowledge and discovery of Australia

The following paragraphs contain only a bare outline of the more important facts relating to the early history of Australian discovery. A more detailed summary of these facts may be found in Year Book No. 39 (*see* page 1) and earlier issues.

#### Terra Australis

Although references to an Austral land are found in the works of writers in the early centuries after Christ, and evidence appeared in maps, globes, and manuscripts from the Middle Ages onward, there is no definite evidence connecting this so-called *Terra Australis* with Australia. Cornelius Wytfliet's map of 1597, however, indicates roughly the eastern and western coasts of Australia, as well as the Gulf of Carpentaria.

#### Early discoveries of Australia

The Portuguese may have discovered part of the Australian coast before 1542, and it has been suggested that the Arabs may have come to Australia even earlier, though there is no evidence to support this theory. For all practical purposes, however, the coastal exploration of Australia may be taken as having begun with the Spaniards and the Dutch.

In 1606 the Spaniard Quiros, on reaching the island that has retained the name of Espiritu Santo (the largest island of the New Hebrides group), thought he had discovered the great land of the south, and therefore named the group *La Australia del Espiritu Santo*. After leaving the New Hebrides Quiros sailed eastward, but Torres, his second-in-command, took a westerly course and passed through the strait that now bears his name. In all probability he sighted the Australian continent but no mention of it is made in his records. This voyage marks the close of Spanish activity in the work of discovery in the South Seas.

The Dutch discovered Australia when the Dutch East India Company sent the *Duyfken* from Bantam, Java, to explore the island of New Guinea. During March 1606 the *Duyfken* coasted along the southern shores of New Guinea and followed the west coast of Cape York peninsula as far as Cape Keer-Weer (Turn Again).

During the following thirty years there were nine visits of Dutch navigators to Australian waters; by 1636, through their efforts, the coast of Australia from Cape York westward around to the Great Australian Bight had been discovered.

In 1642 Abel Janszoon Tasman set out from Batavia to ascertain the extent of the great southern continent. He named Van Diemen's Land, imagining it to be part of Australia proper, and sailing north-easterly discovered New Zealand and returned to Batavia. In his second voyage in 1644 Tasman visited the northern coast of Australia, sailing round the Gulf of Carpentaria and along the north-west coast as far south as the tropic of Capricorn. This voyage of Tasman's may be said to have ended the period of Dutch discoveries, although there were subsequent visits by the Dutch to Australia (de Vlamingh in 1696 and Van Delft in 1705).

#### Discoveries by the English

In the meantime the English had made their first appearance on the Australian coast in 1688, when the north-westerly shores were visited by William Dampier, as supercargo of the *Cygnets*, a trading vessel whose crew had turned buccaneers. In 1699 he again visited Australia, in command of H.M.S. *Roebuck*, and on his return to England published an account in which a description is given of trees, flowers, birds, and reptiles observed, and of encounters with natives.

At the end of the seventeenth century it was uncertain whether Tasmania and New Zealand were parts of Australia or whether they were separated from it but themselves formed part of a great Antarctic Continent. Lieutenant (later Captain) James Cook's first voyage, though undertaken primarily for the purpose of observing the transit of Venus from Tahiti, had also the objective of

ascertaining whether the unexplored part of the southern hemisphere was only an immense mass of water or contained another continent. In command of H.M.S. *Endeavour*, and accompanied by Sir Joseph Banks, the botanist, Dr Solander the naturalist, Green the astronomer, draughtsmen, and servants, Cook, after observing the transit of Venus at Tahiti, turned towards New Zealand, sighting that land on 7 October 1769 in the neighbourhood of Poverty Bay. Circumnavigating the North and South Islands, he proved that New Zealand was connected neither with the supposed Antarctic Continent nor with Australia, and took formal possession thereof in the name of the British Crown.

#### Discovery of Australia by Captain Cook

On 20 April 1770 Cook sighted the Australian mainland at a place he called Point Hicks, naming it after his first-lieutenant, who first saw it. Coasting northwards, on 29 April 1770 he discovered Botany Bay, where he landed. Cook sailed along the coast in a northerly direction for nearly 1,300 miles until 11 June 1770, when the *Endeavour* was seriously damaged by striking a coral reef in the vicinity of Trinity Bay. Repairs occupied nearly two months, and the *Endeavour* then again set her course to the north, sailing through Torres Strait and anchoring in the Downs on 13 July 1771. In 1772 Cook was put in command of the ships *Resolution* and *Adventure* with a view to ascertaining whether a great southern continent existed. Having satisfied himself that, even if it did, it lay so far to the south as to be useless for trade and settlement, he returned to England in 1774. Cook's last voyage was undertaken in 1776, and he met his death on 14 February 1779, by which date practically the whole coast of Australia had been explored. The only remaining discovery of importance, the existence of a channel between Tasmania and Australia, was made by Bass and Flinders in 1798.

### The annexation of Australia

#### Possession taken of eastern coast of Australia by Captain Cook

Although representatives of the nations mentioned in the previous section landed or claimed to have landed on the shores of Australia on various occasions during the sixteenth and seventeenth centuries, it was not until 23 August 1770 that the history of Australia was brought into definite political connection with western civilisation. It was on that date that Captain Cook took possession 'of the whole eastern coast, from latitude 38° S. to this place, latitude 10½° S., in right of His Majesty King George the Third', i.e. over only what are now the eastern parts of New South Wales, Victoria and Queensland.

#### Annexation of eastern part of Australian continent and Tasmania

Formal possession, on behalf of the British Crown, of the whole of the eastern part of the Australian continent and Tasmania was not taken until 26 January 1788, when Captain Phillip's Commission, first issued to him on 12 October 1786 and amplified on 2 April 1787, was read to the people whom he had brought with him in the 'First Fleet'. The commission appointed Phillip 'Captain-General and Governor-in-Chief in and over our territory called New South Wales, extending from the Northern Cape or extremity of the coast called Cape York, in the latitude of ten degrees thirty-seven minutes south, to the southern extremity of the said territory of New South Wales or South Cape, in the latitude of forty-three degrees thirty-nine minutes south and of all the country inland westward as far as the one hundred and thirty-fifth degree of east longitude reckoning from the meridian of Greenwich, including all the islands adjacent in the Pacific Ocean within the latitudes aforesaid of ten degrees thirty-seven minutes south and forty-three degrees thirty-nine minutes south'.

#### Extension of New South Wales westward

On 17 February 1824 Earl Bathurst notified Sir Thomas Brisbane that he had recommended to His Majesty the dispatch of a ship of war to the north-west coast of New Holland for the purpose of taking possession of the coast between the western coast of Bathurst Island and the eastern side of Coburg Peninsula. Captain James J. Gordon Bremer of H.M.S. *Tamar*, who was selected for the purpose, took possession on 20 September 1824 of the coast from the 135th to the 129th degree of east longitude. On 16 July 1825 the whole territory between those boundaries was described in Darling's commission as being within the boundaries of New South Wales.

#### Annexation of Western Australia

An expedition under Major Lockyer, sent by Lieutenant-General Sir Ralph Darling, then Governor of New South Wales, to found a settlement at King George Sound, sailed from Sydney on 9 November 1826, landed at the Sound on 26 December following, and on 21 January 1827 hoisted the British flag. Captain Stirling, in command of H.M.S. *Success*, arrived at Sydney a few

weeks after the departure of the expedition to King George Sound. He obtained the Governor's permission to visit Swan River with a view to seizing a position on the western coast and reporting upon its suitability as a place of settlement. Captain Stirling left Sydney on 17 January 1827, and on his return in the following April submitted a glowing report on what he described as a 'rich and romantic country', urging its occupation for the purpose of settlement. He left for England in July 1827, continuing his advocacy, notwithstanding much discouragement, with unabated enthusiasm. He was at last successful, the result being due mainly to the formation of an association of prospective settlers having capital at their disposal. He was appointed Lieutenant-Governor and with a party of settlers arrived at Garden Island, near the Swan River, in the ship *Parmelia* in June 1829. On the second of the preceding month Captain Fremantle, in command of H.M.S. *Challenge*, arrived and hoisted the British flag on the south head of Swan River, again asserting possession of 'all that part of New Holland which is not included within the territory of New South Wales'. Thus before the middle of 1829 the whole territory now known as the Commonwealth of Australia had been constituted a dependency of the United Kingdom.

### The creation of the several Colonies

#### New South Wales

In Governor Phillip's commission of 1786 the mainland of Australia was divided by the 135th meridian of east longitude into two parts. The earliest colonists believed that the present State of Tasmania was actually joined to the mainland, and it was not until 1798 that the contrary was known. In that year Bass and Flinders proved that it was an island by sailing through Bass Strait. The territory of New South Wales, as originally constituted (1,480,527 square miles, including Van Diemen's Land, 26,215 square miles), and of New Zealand (103,862 square miles), which may be included although Cook's annexation was not properly given effect to until 1840, consisted of 1,584,389 square miles. A further area of 518,134 square miles was added in 1825 when the western boundary was extended to the 129th east meridian. The territory was subsequently reduced by the separation of various areas to form the other colonies, and at the time of the establishment of the Commonwealth the area of New South Wales was 310,372 square miles. Following the transfer of the Australian Capital Territory to the Commonwealth in 1911 the area was further reduced to 309,433 square miles.

Lord Howe Island, which is a dependency of New South Wales, and for political purposes is included in one of the electorates of Sydney, is situated in latitude 31° 30' south, longitude 159° 5' east, about 436 miles north-east of Sydney, and has an area of 3,220 acres.

#### Tasmania

Van Diemen's Land, first settled in 1803, was politically separated from New South Wales in 1825, being constituted a separate colony on 14 June. The area of the colony was 26,215 square miles. The name of the colony was officially changed to Tasmania in 1856 when responsible government was established. Following a resurvey of local government areas, the area of Tasmania was determined at 26,383 square miles at the end of 1964.

Macquarie Island, about 1,000 miles south-east of Hobart, together with a few rocky islets nearby, has been a dependency of Tasmania since the nineteenth century. In December 1911 five members of the Australasian Antarctic Expedition landed on the island and remained there until 1915. On 3 March 1948 another party was landed to man a new station which has since been maintained as a scientific base. The island is about twenty-one miles long and two miles wide.

#### Western Australia

The territory westward of the 129th meridian, comprising 975,920 square miles, was constituted a colony under the name of Western Australia in June 1829. It was always distinct and independent of New South Wales, except for the settlement on King George Sound (*see above*), which remained under the jurisdiction of New South Wales until 1831.

#### South Australia

On 15 August 1834 the Act 4 and 5 William IV., cap. 95, was passed, creating South Australia a 'province', and settlement took place towards the end of the year 1836. The first Governor, Captain Hindmarsh, R.N., arrived at Holdfast Bay on 28 December 1836, and on the same day the new colony was officially proclaimed. The new colony embraced 309,850 square miles of territory, lying south of the 26th parallel of south latitude and between the 141st and 132nd meridians of east longitude. On 10 December 1861, by authority of the Imperial Act 24 and 25 Vict., cap. 44, the western boundary of South Australia was extended to coincide with the eastern



boundary of Western Australia, namely, the 129th east meridian. The area of the extension was approximately 70,220 square miles. Nearly two years later, on 6 July 1863, the Northern Territory, comprising 523,620 square miles, was brought under the jurisdiction of South Australia, which thereupon controlled an area of 903,690 square miles. The Territory was transferred to the Commonwealth on 1 January 1911 (*see page 5*).

#### **New Zealand**

Although Captain Cook had taken possession of the North Island of New Zealand in November 1769, and of the South Island in January 1770, it is doubtful whether at the time when Captain Phillip's commission was drawn up New Zealand was considered as one of the 'islands adjacent in the Pacific Ocean' (*see page 2*). The fact that under the Supreme Court Act (Imperial) of 1823 British residents in New Zealand were brought under the jurisdiction of the Court at Sydney, and that in 1839 there was a proposal on the part of the British Government to appoint a consul in New Zealand, leaves this an open question, as nothing more than extra-territorial jurisdiction may have been intended. New Zealand does not appear to have become British territory unequivocally until 1840, when Captain Hobson arrived at the Bay of Islands, and on 30 January read his commissions, which extended the boundaries of the Colony of New South Wales so as to embrace and comprehend the islands of New Zealand. In February 1840 the Treaty of Waitangi, made with the native chiefs, was signed. Finally, on 21 May 1840 British sovereignty over the islands of New Zealand was explicitly proclaimed. New Zealand remained a dependency of New South Wales until, by letters patent of 16 November 1840, it was constituted a separate colony under the powers of the Act 3 and 4 Vict., cap. 62, of 7 August 1840. Proclamation of the separation was made on 3 May 1841. The area of the colony was 103,862 square miles. The present area of New Zealand, which acquired responsible government on 7 May 1856 and Dominion status on 26 September 1907, exclusive of island territories but including minor islands, is 103,736 square miles.

#### **Victoria**

In 1851 the 'Port Phillip District' of New South Wales was constituted the colony of Victoria, 'bounded on the north and north-west by a straight line drawn from Cape Howe to the nearest source of the River Murray and thence by the course of that river to the eastern boundary of the colony of South Australia'. The area of the new colony was 87,884 square miles, and its separate existence took effect from 1 July 1851.

#### **Queensland**

The northern squatting districts of Moreton, Darling Downs, Burnett, Wide Bay, Maranoa, Leichhardt, and Port Curtis, together with the reputed county of Stanley, were granted an independent administration and formed into a distinct colony under the name of Queensland by letters patent dated 6 June 1859, although separation from New South Wales was not completed until 10 December of the same year. The territory comprised by the new colony was 'so much of the colony of New South Wales as lies northwards of a line commencing on the sea-coast at Point Danger in latitude about 28° 8' south, running westward along the Macpherson and Dividing Ranges and the Dumaresq River to the MacIntyre River, thence downward to the 29th parallel of south latitude, and following that parallel westerly to the 141st meridian of east longitude, which is the eastern boundary of South Australia, together with all the adjacent islands, their members, and appurtenances in the Pacific Ocean'. The area of the colony thus constituted was 554,300 square miles. By letters patent dated 13 March 1861, forwarded by the Colonial Secretary to the Governor of Queensland on 12 April 1862, the area of Queensland was increased by the annexation of 'so much of the colony of New South Wales as lies to the northward of the 26th parallel of south latitude, and between the 141st and 138th meridians of east longitude, together with all and every the adjacent islands, their members, and appurtenances, in the Gulf of Carpentaria'. With this addition the area of Queensland became 670,500 square miles. Following a thorough revision of the area of each local government area of Queensland, based on the most recent maps available, the Surveyor-General in 1958 determined the area of Queensland as 667,000 square miles—a reduction of 3,500 square miles from the area previously determined.

### **The establishment of the Commonwealth of Australia**

#### **Federation**

On 1 January 1901 the colonies mentioned, with the exception of New Zealand, were federated under the name of the 'Commonwealth of Australia', the designation of 'Colonies'—except in the case of the Northern Territory, to which the designation 'Territory' applied—being at the same time changed to that of 'States'.

### Transfer of the Northern Territory to the Commonwealth

On 7 December 1907 the Commonwealth and the State of South Australia entered into an agreement for the transfer of the Northern Territory to the Commonwealth, subject to approval by the Parliaments of the Commonwealth and the State. This approval was given by the South Australian Parliament under The Northern Territory Surrender Act, 1907 and by the Commonwealth Parliament under the *Northern Territory Acceptance Act* 1910. The Territory was formally transferred to the Commonwealth on 1 January 1911, and became the Northern Territory of Australia.

By Imperial Order in Council dated 23 July 1931 Ashmore Islands, known as Middle, East, and West Islands, and Cartier Island, situated in the Indian Ocean off the north-west coast of Australia, were placed under the authority of the Commonwealth. The islands were accepted by the Commonwealth on 10 May 1934, in the *Ashmore and Cartier Islands Acceptance Act* 1933, under the name of the Territory of Ashmore and Cartier Islands. The Act authorised the Governor of Western Australia to make ordinances having the force of law in and in relation to the Territory. An amendment to the Act in July 1938 annexed the islands to the Northern Territory, whose laws, ordinances, and regulations, wherever applicable, thereupon applied.

The area of Ashmore Reef is approximately 60 square miles (to the limit of the reef), and it is situated 220 statute miles off the western coast of Australia and 520 statute miles west of Darwin. Cartier Island is approximately 17 square miles in area (to the limit of the reef), and is situated 184 statute miles off the western coast of Australia and 490 statute miles west of Darwin.

### Transfer of the Australian Capital Territory to the Commonwealth

On 18 October 1909 the Commonwealth and the State of New South Wales entered into an agreement for the surrender to and acceptance by the Commonwealth of an area of 911 square miles as the Seat of Government of the Commonwealth. In December 1909, Acts were passed by the Commonwealth and New South Wales Parliaments approving the agreement, and on 5 December 1910 a proclamation was issued vesting the Territory in the Commonwealth on and from 1 January 1911. By the *Jervis Bay Territory Acceptance Act* 1915 an area of 28 square miles at Jervis Bay, surrendered by New South Wales according to an agreement made in 1913, was accepted by the Commonwealth, and was transferred as from 4 September 1915.

### Present composition of the Commonwealth

Following revision of the areas of Tasmania and Queensland as mentioned on pages 3 and 4, and of the area of the Northern Territory during 1964, the total area of the Commonwealth of Australia has been determined as 2,967,909 square miles. The years in which the respective areas were annexed, the years of first permanent settlement, and the years in which responsible government was granted to the Colonies, and the present areas of the several States and Territories and of the Commonwealth are shown below.

#### THE COMMONWEALTH OF AUSTRALIA: COMPONENT STATES AND TERRITORIES

<i>State or Territory</i>	<i>Year of annexation</i>	<i>Year of first permanent settlement</i>	<i>Year of formation into separate Colony or Territory</i>	<i>Year in which responsible government was granted</i>	<i>Present area in square miles</i>
New South Wales . . . . .	1770	1788	1786	1855	309,433
Victoria . . . . .	1770	1834	1851	1855	87,884
Queensland . . . . .	1770	1824	1859	(a) 1859	667,000
South Australia . . . . .	1788	1836	1834	1856	380,070
Western Australia . . . . .	1829	1829	1829	1890	975,920
Tasmania . . . . .	1788	1803	1825	1855	26,383
Northern Territory . . . . .	..	..	(b) 1863	..	520,280
Australian Capital Territory . . . . .	..	..	(c) 1911	..	939
Commonwealth of Australia . . . . .	..	..	..	(d)	2,967,909

(a) As a separate State—as part of New South Wales, in 1855. (b) Previously part of New South Wales—transferred to the Commonwealth in 1911—see page 4. (c) Previously part of New South Wales. (d) Constituted as from 1 January 1901.

## The Constitution of the Commonwealth

Information regarding the development of the Constitutions of the various Colonies (now States), together with a brief history of the federal movement in Australia, was embodied in this chapter in issues of the Year Book up to and including No. 22.

### Commonwealth Constitution Act

The Commonwealth of Australia Constitution Act, 63 and 64 Vict., Chapter 12, namely: 'An Act to constitute the Commonwealth of Australia', as amended by the *Constitution Alteration (Senate Elections)* 1906, the *Constitution Alteration (State Debts)* 1909, the *Constitution Alteration (State Debts)* 1928, the *Constitution Alteration (Social Services)* 1946, and the *Constitution Alteration (Aboriginals)* 1967, is given *in extenso* hereunder, and the text contains all the alterations of the Constitution which have been made up to and including 31 December 1967.

### THE COMMONWEALTH OF AUSTRALIA CONSTITUTION ACT. 63 & 64 VICT., CHAPTER 12.

*An Act to Constitute the Commonwealth of Australia. (9th July, 1900.)*

**W**HEREAS the people of New South Wales, Victoria, South Australia, Queensland, and Tasmania, humbly relying on the blessing of Almighty God, have agreed to unite in one indissoluble Federal Commonwealth under the Crown of the United Kingdom of Great Britain and Ireland, and under the Constitution hereby established:

And whereas it is expedient to provide for the admission into the Commonwealth of other Australasian colonies and possessions of the Queen:

Be it therefore enacted by the Queen's Most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled and by the authority of the same, as follows:—

1. This Act may be cited as the Commonwealth of Australia Constitution Act.
2. The provisions of this Act referring to the Queen shall extend to Her Majesty's heirs and successors in the sovereignty of the United Kingdom.
3. It shall be lawful for the Queen, with the advice of the Privy Council, to declare by proclamation that, on and after a day therein appointed, not being later than one year after the passing of this Act, the people of New South Wales, Victoria, South Australia, Queensland, and Tasmania, and also, if Her Majesty is satisfied that the people of Western Australia have agreed thereto, of Western Australia, shall be united in a Federal Commonwealth under the name of the Commonwealth of Australia. But the Queen may, at any time after the proclamation, appoint a Governor-General for the Commonwealth.
4. The Commonwealth shall be established, and the Constitution of the Commonwealth shall take effect, on and after the day so appointed. But the Parliaments of the several colonies may at any time after the passing of this Act make any such laws, to come into operation on the day so appointed, as they might have made if the Constitution had taken effect at the passing of this Act.
5. This Act, and all laws made by the Parliament of the Commonwealth under the Constitution, shall be binding on the courts, judges, and people of every State and of every part of the Commonwealth, notwithstanding anything in the laws of any State: and the laws of the Commonwealth shall be in force on all British ships, the Queen's ships of war excepted, whose first port of clearance and whose port of destination are in the Commonwealth.
6. "The Commonwealth" shall mean the Commonwealth of Australia as established under this Act.
- "The States" shall mean such of the colonies of New South Wales, New Zealand, Queensland, Tasmania, Victoria, Western Australia, and South Australia, including the northern territory of South Australia, as for the time being are parts of the Commonwealth, and such colonies or territories as may be admitted into or established by the Commonwealth as States; and each of such parts of the Commonwealth shall be called "a State."

"Original States" shall mean such States as are parts of the Commonwealth at its establishment.

7. The Federal Council of Australasia Act, 1885, is hereby repealed, but so as not to affect any laws passed by the Federal Council of Australasia and in force at the establishment of the Commonwealth.

Any such law may be repealed as to any State by the Parliament of the Commonwealth, or as to any colony not being a State by the Parliament thereof.

8. After the passing of this Act the Colonial Boundaries Act, 1895, shall not apply to any colony which becomes a State of the Commonwealth; but the Commonwealth shall be taken to be a self-governing colony for the purposes of that Act.

9. The Constitution of the Commonwealth shall be as follows:—

### THE CONSTITUTION.

This Constitution is divided as follows:—

- Chapter I.—The Parliament:
  - Part I.—General:
  - Part II.—The Senate:
  - Part III.—The House of Representatives:
  - Part IV.—Both Houses of the Parliament:
  - Part V.—Powers of the Parliament:
- Chapter II.—The Executive Government:
- Chapter III.—The Judicature:
- Chapter IV.—Finance and Trade:
- Chapter V.—The States:
- Chapter VI.—New States:
- Chapter VII.—Miscellaneous:
- Chapter VIII.—Alteration of the Constitution.
- The Schedule.

### CHAPTER I.—THE PARLIAMENT.

#### PART I.—GENERAL.

1. The legislative power of the Commonwealth shall be vested in a Federal Parliament, which shall consist of the Queen, a Senate, and a House of Representatives, and which is hereinafter called “The Parliament”, or “The Parliament of the Commonwealth”.

2. A Governor-General appointed by the Queen shall be Her Majesty’s representative in the Commonwealth, and shall have and may exercise in the Commonwealth during the Queen’s pleasure, but subject to this Constitution, such powers and functions of the Queen as Her Majesty may be pleased to assign to him.

3. There shall be payable to the Queen out of the Consolidated Revenue Fund of the Commonwealth, for the salary of the Governor-General, an annual sum which, until the Parliament otherwise provides, shall be ten thousand pounds.

The salary of a Governor-General shall not be altered during his continuance in office.

4. The provisions of this Constitution relating to the Governor-General extend and apply to the Governor-General for the time being, or such person as the Queen may appoint to administer the Government of the Commonwealth; but no such person shall be entitled to receive any salary from the Commonwealth in respect of any other office during his administration of the Government of the Commonwealth.

5. The Governor-General may appoint such times for holding the sessions of the Parliament as he thinks fit, and may also from time to time, by Proclamation or otherwise, prorogue the Parliament, and may in like manner dissolve the House of Representatives.

After any general election the Parliament shall be summoned to meet not later than thirty days after the day appointed for the return of the writs.

The Parliament shall be summoned to meet not later than six months after the establishment of the Commonwealth.

6. There shall be a session of the Parliament once at least in every year, so that twelve months shall not intervene between the last sitting of the Parliament in one session and its first sitting in the next session.

#### PART II.—THE SENATE.

7. The Senate shall be composed of senators for each State, directly chosen by the people of the State, voting, until the Parliament otherwise provides, as one electorate.

But until the Parliament of the Commonwealth otherwise provides, the Parliament of the State of Queensland, if that State be an Original State, may make laws dividing the State into divisions and determining the number of senators to be chosen for each division, and in the absence of such provision the State shall be one electorate.

Until the Parliament otherwise provides there shall be six senators for each Original State.\* The Parliament may make laws increasing or diminishing the number of senators for each State, but so that equal representation of the several Original States shall be maintained and that no Original State shall have less than six senators.

The senators shall be chosen for a term of six years, and the names of the senators chosen for each State shall be certified by the Governor to the Governor-General.

8. The qualification of electors of senators shall be in each State that which is prescribed by this Constitution, or by the Parliament, as the qualification for electors of members of the House of Representatives; but in the choosing of senators each elector shall vote only once.

9. The Parliament of the Commonwealth may make laws prescribing the method of choosing senators, but so that the method shall be uniform for all the States. Subject to any such law, the Parliament of each State may make laws prescribing the method of choosing the senators for that State.

The Parliament of a State may make laws for determining the times and places of elections of senators for the State.

10. Until the Parliament otherwise provides, but subject to this Constitution, the laws in force in each State, for the time being, relating to elections for the more numerous House of the Parliament of the State shall, as nearly as practicable, apply to elections of senators for the State.

11. The Senate may proceed to the despatch of business, notwithstanding the failure of any State to provide for its representation in the Senate.

12. The Governor of any State may cause writs to be issued for elections of senators for the State. In case of the dissolution of the Senate the writs shall be issued within ten days from the proclamation of such dissolution.

13. As soon as may be after the Senate first meets, and after each first meeting of the Senate following a dissolution thereof, the Senate shall divide the senators chosen for each State into two classes, as nearly equal in number as practicable; and the places of the senators of the first class shall become vacant at the expiration of [the third year] *three years*,† and the places of those of the second class at the expiration of [the sixth year] *six years*,† from the beginning of their term of service; and afterwards the places of senators shall become vacant at the expiration of six years from the beginning of their term of service.

The election to fill vacant places shall be made [in the year at the expiration of which] *within one year before*† the places are to become vacant.

For the purposes of this section the term of service of a senator shall be taken to begin on the first day of [January] *July*† following the day of his election, except in the cases of the first election and of the election next after any dissolution of the Senate, when it shall be taken to begin on the first day of [January] *July*† preceding the day of his election.

14. Whenever the number of senators for a State is increased or diminished, the Parliament of the Commonwealth may make such provision for the vacating of the places of senators for the State as it deems necessary to maintain regularity in the rotation.

15. If the place of a senator becomes vacant before the expiration of his term of service, the Houses of Parliament of the State for which he was chosen shall, sitting and voting together, choose a person to hold the place until the expiration of the term, or until the election of a successor as hereinafter provided, whichever first happens. But if the Houses of Parliament of the State are not in session at the time when the vacancy is notified, the Governor of the State, with the advice of the Executive Council thereof, may appoint a person to hold the place until the expiration of fourteen days after the beginning of the next session of the Parliament of the State, or until the election of a successor, whichever first happens.

At the next general election of members of the House of Representatives, or at the next election of senators for the State, whichever first happens, a successor shall, if the term has not then expired, be chosen to hold the place from the date of his election until the expiration of the term.

The name of any senator so chosen or appointed shall be certified by the Governor of the State to the Governor-General.

16. The qualifications of a senator shall be the same as those of a member of the House of Representatives.

\* The Parliament has otherwise provided, by means of the *Representation Act 1948*, that the number of senators shall be ten for each State from the first meeting of Parliament after the first dissolution of the House of Representatives occurring after the commencement of the Act (18 May 1948).

† As amended by Section 2 of the *Constitution Alteration (Senate Elections) 1906*. The words in square brackets have been repealed; amendments are shown in italics.

17. The Senate shall, before proceeding to the despatch of any other business, choose a senator to be the President of the Senate; and as often as the office of President becomes vacant the Senate shall again choose a senator to be the President.

The President shall cease to hold his office if he ceases to be a senator. He may be removed from office by a vote of the Senate, or he may resign his office or his seat by writing addressed to the Governor-General.

18. Before or during any absence of the President, the Senate may choose a senator to perform his duties in his absence.

19. A senator may, by writing addressed to the President, or to the Governor-General if there is no President or if the President is absent from the Commonwealth, resign his place, which thereupon shall become vacant.

20. The place of a senator shall become vacant if for two consecutive months of any session of the Parliament he, without the permission of the Senate, fails to attend the Senate.

21. Whenever a vacancy happens in the Senate, the President, or if there is no President or if the President is absent from the Commonwealth the Governor-General, shall notify the same to the Governor of the State in the representation of which the vacancy has happened.

22. Until the Parliament otherwise provides, the presence of at least one third of the whole number of the senators shall be necessary to constitute a meeting of the Senate for the exercise of its powers.

23. Questions arising in the Senate shall be determined by a majority of votes, and each senator shall have one vote. The President shall in all cases be entitled to a vote; and when the votes are equal the question shall pass in the negative.

### PART III.—THE HOUSE OF REPRESENTATIVES.

24. The House of Representatives shall be composed of members directly chosen by the people of the Commonwealth, and the number of such members shall be, as nearly as practicable, twice the number of the senators.

The number of members chosen in the several States shall be in proportion to the respective numbers of their people, and shall, until the Parliament otherwise provides, be determined, whenever necessary, in the following manner:—

- (i) A quota shall be ascertained by dividing the number of the people of the Commonwealth, as shown by the latest statistics of the Commonwealth, by twice the number of the senators;
- (ii) The number of members to be chosen in each State shall be determined by dividing the number of the people of the State, as shown by the latest statistics of the Commonwealth, by the quota; and if on such division there is a remainder greater than one-half of the quota, one more member shall be chosen in the State.

But notwithstanding anything in this section, five members at least shall be chosen in each Original State.

25. For the purposes of the last section, if by the law of any State all persons of any race are disqualified from voting at elections for the more numerous House of the Parliament of the State, then, in reckoning the number of the people of the State or of the Commonwealth, persons of that race resident in that State shall not be counted.

26. Notwithstanding anything in section twenty-four, the number of members to be chosen in each State at the first election shall be as follows:—

New South Wales	twenty-three;	South Australia	six;
Victoria	twenty;	Tasmania	five;
Queensland	eight;		

Provided that if Western Australia is an Original State, the numbers shall be as follows:—

New South Wales	twenty-six;	South Australia	seven;
Victoria	twenty-three;	Western Australia	five;
Queensland	nine;	Tasmania	five.

27. Subject to this Constitution, the Parliament may make laws for increasing or diminishing the number of the members of the House of Representatives.

28. Every House of Representatives shall continue for three years from the first meeting of the House, and no longer, but may be sooner dissolved by the Governor-General.

29. Until the Parliament of the Commonwealth otherwise provides, the Parliament of any State may make laws for determining the divisions in each State for which members of the House of Representatives may be chosen, and the number of members to be chosen for each division. A division shall not be formed out of parts of different States.

In the absence of other provision, each State shall be one electorate.

30. Until the Parliament otherwise provides, the qualification of electors of members of the House of Representatives shall be in each State that which is prescribed by the law of the State as the qualification of electors of the more numerous House of Parliament of the State; but in the choosing of members each elector shall vote only once.\*

31. Until the Parliament otherwise provides, but subject to this Constitution, the laws in force in each State for the time being relating to elections for the more numerous House of the Parliament of the State shall, as nearly as practicable, apply to elections in the State of members of the House of Representatives.

32. The Governor-General in Council may cause writs to be issued for general elections of members of the House of Representatives.

After the first general election, the writs shall be issued within ten days from the expiry of a House of Representatives or from the proclamation of a dissolution thereof.

33. Whenever a vacancy happens in the House of Representatives, the Speaker shall issue his writ for the election of a new member, or if there is no Speaker or if he is absent from the Commonwealth the Governor-General in Council may issue the writ.

34. Until the Parliament otherwise provides, the qualifications of a member of the House of Representatives shall be as follows:—

- (i) He must be of the full age of twenty-one years, and must be an elector entitled to vote at the election of members of the House of Representatives, or a person qualified to become such elector, and must have been for three years at the least a resident within the limits of the Commonwealth as existing at the time when he is chosen:
- (ii) He must be a subject of the Queen, either natural-born or for at least five years naturalized under a law of the United Kingdom, or of a Colony which has become or becomes a State, or of the Commonwealth, or of a State.†

35. The House of Representatives shall, before proceeding to the despatch of any other business, choose a member to be the Speaker of the House, and as often as the office of Speaker becomes vacant the House shall again choose a member to be the Speaker.

The Speaker shall cease to hold his office if he ceases to be a member. He may be removed from office by a vote of the House, or he may resign his office or his seat by writing addressed to the Governor-General.

36. Before or during any absence of the Speaker, the House of Representatives may choose a member to perform his duties in his absence.

37. A member may by writing addressed to the Speaker, or to the Governor-General if there is no Speaker or if the Speaker is absent from the Commonwealth, resign his place, which thereupon shall become vacant.

38. The place of a member shall become vacant if for two consecutive months of any session of the Parliament he, without the permission of the House, fails to attend the House.

39. Until the Parliament otherwise provides, the presence of at least one-third of the whole number of the members of the House of Representatives shall be necessary to constitute a meeting of the House for the exercise of its powers.

40. Questions arising in the House of Representatives shall be determined by a majority of votes other than that of the Speaker. The Speaker shall not vote unless the numbers are equal, and then he shall have a casting vote.

#### PART IV.—BOTH HOUSES OF THE PARLIAMENT.

41. No adult person who has or acquires a right to vote at elections for the more numerous House of the Parliament of a State shall, while the right continues, be prevented by any law of the Commonwealth from voting at elections for either House of the Parliament of the Commonwealth.

\* The Parliament has otherwise provided, by means of the *Commonwealth Electoral Act 1918–1965*, Sections 39 and 39A (repealing an earlier provision made by the *Commonwealth Franchise Act 1902*). For present qualifications see Chapter 3, General Government.

† The Parliament has otherwise provided, by means of the *Commonwealth Electoral Act 1918–1965*, Section 69. For present qualifications see Chapter 3, General Government.

42. Every senator and every member of the House of Representatives shall before taking his seat make and subscribe before the Governor-General, or some person authorized by him, an oath or affirmation of allegiance in the form set forth in the schedule to this Constitution.

43. A member of either House of the Parliament shall be incapable of being chosen or of sitting as a member of the other House.

44. Any person who—

- (i) Is under any acknowledgment of allegiance, obedience, or adherence to a foreign power, or is a subject or a citizen or entitled to the rights or privileges of a subject or a citizen of a foreign power: or
- (ii) Is attainted of treason, or has been convicted and is under sentence, or subject to be sentenced, for any offence punishable under the law of the Commonwealth or of a State by imprisonment for one year or longer: or
- (iii) Is an undischarged bankrupt or insolvent: or
- (iv) Holds any office of profit under the Crown, or any pension payable during the pleasure of the Crown out of any of the revenues of the Commonwealth: or
- (v) Has any direct or indirect pecuniary interest in any agreement with the Public Service of the Commonwealth otherwise than as a member and in common with the other members of an incorporated company consisting of more than twenty-five persons:

shall be incapable of being chosen or of sitting as a senator or a member of the House of Representatives.

But sub-section (iv) does not apply to the office of any of the Queen's Ministers of State for the Commonwealth, or of any of the Queen's Ministers for a State, or to the receipt of pay, half-pay, or a pension by any person as an officer or member of the Queen's navy or army, or to the receipt of pay as an officer or member of the naval or military forces of the Commonwealth by any person whose services are not wholly employed by the Commonwealth.

45. If a senator or member of the House of Representatives—

- (i) Becomes subject to any of the disabilities mentioned in the last preceding section: or
- (ii) Takes the benefit, whether by assignment, composition, or otherwise, of any law relating to bankrupt or insolvent debtors: or
- (iii) Directly or indirectly takes or agrees to take any fee or honorarium for services rendered to the Commonwealth, or for services rendered in the Parliament to any person or State:

his place shall thereupon become vacant.

46. Until the Parliament otherwise provides, any person declared by this Constitution to be incapable of sitting as a senator or as a member of the House of Representatives shall, for every day on which he so sits, be liable to pay the sum of one hundred pounds to any person who sues for it in any court of competent jurisdiction.

47. Until the Parliament otherwise provides, any question respecting the qualification of a senator or of a member of the House of Representatives, or respecting a vacancy in either House of the Parliament, and any question of a disputed election to either House shall be determined by the House in which the question arises.

48. Until the Parliament otherwise provides, each senator and each member of the House of Representatives shall receive an allowance of four hundred pounds a year, to be reckoned from the day on which he takes his seat.\*

49. The powers, privileges, and immunities of the Senate and of the House of Representatives, and of the members and the committees of each House, shall be such as are declared by the Parliament, and until declared shall be those of the Commons House of Parliament of the United Kingdom, and of its members and committees, at the establishment of the Commonwealth.

50. Each House of the Parliament may make rules and orders with respect to—

- (i) The mode in which its powers, privileges, and immunities may be exercised and upheld;
- (ii) The order and conduct of its business and proceedings either separately or jointly with the other House.

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\* The Parliamentary allowance has been varied from time to time. For current allowances, see Chapter 3, General Government.



## PART V.—POWERS OF THE PARLIAMENT\*

51. The Parliament shall, subject to this Constitution, have power to make laws for the peace, order, and good government of the Commonwealth with respect to:—

- (i) Trade and commerce with other countries, and among the States:
- (ii) Taxation; but so as not to discriminate between States or parts of States:
- (iii) Bounties on the production or export of goods, but so that such bounties shall be uniform throughout the Commonwealth:
- (iv) Borrowing money on the public credit of the Commonwealth:
- (v) Postal, telegraphic, telephonic, and other like services:
- (vi) The naval and military defence of the Commonwealth and of the several States, and the control of the forces to execute and maintain the laws of the Commonwealth:
- (vii) Lighthouses, lightships, beacons and buoys:
- (viii) Astronomical and meteorological observations:
- (ix) Quarantine:
- (x) Fisheries in Australian waters beyond territorial limits:
- (xi) Census and statistics:
- (xii) Currency, coinage, and legal tender:
- (xiii) Banking, other than State banking; also State banking extending beyond the limits of the State concerned, the incorporation of banks, and the issue of paper money:
- (xiv) Insurance, other than State insurance; also State insurance extending beyond the limits of the State concerned:
- (xv) Weights and measures:
- (xvi) Bills of exchange and promissory notes:
- (xvii) Bankruptcy and insolvency:
- (xviii) Copyrights, patents of inventions and designs, and trade marks:
- (xix) Naturalization and aliens:
- (xx) Foreign corporations, and trading or financial corporations formed within the limits of the Commonwealth:
- (xxi) Marriage:
- (xxii) Divorce and matrimonial causes; and in relation thereto, parental rights, and the custody and guardianship of infants:
- (xxiii) Invalid and old-age pensions:
- (xxiiiA) †*The provision of maternity allowances, widows' pensions, child endowment, unemployment, pharmaceutical, sickness and hospital benefits, medical and dental services (but not so as to authorize any form of civil conscription), benefits to students and family allowances:*
- (xxiv) The service and execution throughout the Commonwealth of the civil and criminal process and the judgments of the courts of the States:
- (xxv) The recognition throughout the Commonwealth of the laws, the public Acts and records, and the judicial proceedings of the States:
- (xxvi) The people of any race [other than the aboriginal race in any State]‡ for whom it is deemed necessary to make special laws:
- (xxvii) Immigration and emigration:
- (xxviii) The influx of criminals:
- (xxix) External affairs:
- (xxx) The relations of the Commonwealth with the islands of the Pacific:
- (xxxi) The acquisition of property on just terms from any State or person for any purpose in respect of which the Parliament has power to make laws:
- (xxxii) The control of railways with respect to transport for the naval and military purposes of the Commonwealth:

\* Particulars of proposed laws which were submitted to referendums are referred to in Chapter 3, General Government, of this Year Book.

† Under Section 2 of the *Constitution Alteration (Social Services)* 1946, the Constitution was amended by the insertion of this paragraph.

‡ Under Section 2 of the *Constitution Alteration (Aboriginals)* 1967, the words in square brackets were omitted.

- (xxxiii) The acquisition, with the consent of a State, of any railways of the State on terms arranged between the Commonwealth and the State:
- (xxxiv) Railway construction and extension in any State with the consent of that State:
- (xxxv) Conciliation and arbitration for the prevention and settlement of industrial disputes extending beyond the limits of any one State:
- (xxxvi) Matters in respect of which this Constitution makes provision until the Parliament otherwise provides:
- (xxxvii) Matters referred to the Parliament of the Commonwealth by the Parliament or Parliaments of any State or States, but so that the law shall extend only to States by whose Parliaments the matter is referred, or which afterwards adopt the law:
- (xxxviii) The exercise within the Commonwealth, at the request or with the concurrence of the Parliaments of all the States directly concerned, of any power which can at the establishment of this Constitution be exercised only by the Parliament of the United Kingdom or by the Federal Council of Australasia:
- (xxxix) Matters incidental to the execution of any power vested by this Constitution in the Parliament or in either House thereof, or in the Government of the Commonwealth, or in the Federal Judicature, or in any department or officer of the Commonwealth.

52. The Parliament shall, subject to this Constitution, have exclusive power to make laws for the peace, order, and good government of the Commonwealth with respect to—

- (i) The seat of Government of the Commonwealth, and all places acquired by the Commonwealth for public purposes:
- (ii) Matters relating to any department of the public service the control of which is by this Constitution transferred to the Executive Government of the Commonwealth:
- (iii) Other matters declared by this Constitution to be within the exclusive power of the Parliament.

53. Proposed laws appropriating revenue or moneys, or imposing taxation, shall not originate in the Senate. But a proposed law shall not be taken to appropriate revenue or moneys, or to impose taxation, by reason only of its containing provisions for the imposition or appropriation of fines or other pecuniary penalties, or for the demand or payment or appropriation of fees for licences, or fees for services under the proposed law.

The Senate may not amend proposed laws imposing taxation, or proposed laws appropriating revenue or moneys for the ordinary annual services of the Government.

The Senate may not amend any proposed law so as to increase any proposed charge or burden on the people.

The Senate may at any stage return to the House of Representatives any proposed law which the Senate may not amend, requesting, by message, the omission or amendment of any items or provisions therein. And the House of Representatives may, if it thinks fit, make any of such omissions or amendments, with or without modifications.

Except as provided in this section, the Senate shall have equal power with the House of Representatives in respect of all proposed laws.

54. The proposed law which appropriates revenue or moneys for the ordinary annual services of the Government shall deal only with such appropriation.

55. Laws imposing taxation shall deal only with the imposition of taxation, and any provision therein dealing with any other matter shall be of no effect.

Laws imposing taxation, except laws imposing duties of customs or of excise, shall deal with one subject of taxation only; but laws imposing duties of customs shall deal with duties of customs only, and laws imposing duties of excise shall deal with duties of excise only.

56. A vote, resolution, or proposed law for the appropriation of revenue or moneys shall not be passed unless the purpose of the appropriation has in the same session been recommended by message of the Governor-General to the House in which the proposal originated.

57. If the House of Representatives passes any proposed law, and the Senate rejects or fails to pass it, or passes it with amendments to which the House of Representatives will not agree, and if after an interval of three months the House of Representatives, in the same or the next session, again passes the proposed law with or without any amendments which have been made, suggested, or agreed to by the Senate, and the Senate rejects or fails to pass it, or passes it with amendments to which the House of Representatives will not agree, the Governor-General may dissolve the Senate and the House of Representatives simultaneously. But such dissolution shall not take place within six months before the date of the expiry of the House of Representatives by effluxion of time.

If after such dissolution the House of Representatives again passes the proposed law, with or without any amendments which have been made, suggested, or agreed to by the Senate, and the Senate rejects or fails to pass it, or passes it with amendments to which the House of Representatives will not agree, the Governor-General may convene a joint sitting of the members of the Senate and of the House of Representatives.

The members present at the joint sitting may deliberate and shall vote together upon the proposed law as last proposed by the House of Representatives, and upon amendments, if any, which have been made therein by one House and not agreed to by the other, and any such amendments which are affirmed by an absolute majority of the total number of the members of the Senate and House of Representatives shall be taken to have been carried, and if the proposed law, with the amendments, if any, so carried is affirmed by an absolute majority of the total number of the members of the Senate and House of Representatives, it shall be taken to have been duly passed by both Houses of the Parliament, and shall be presented to the Governor-General for the Queen's assent.

58. When a proposed law passed by both Houses of the Parliament is presented to the Governor-General for the Queen's assent he shall declare, according to his discretion, but subject to this Constitution, that he assents in the Queen's name, or that he withholds assent, or that he reserves the law for the Queen's pleasure.

The Governor-General may return to the House in which it originated any proposed law so presented to him, and may transmit therewith any amendments which he may recommend, and the Houses may deal with the recommendation.

59. The Queen may disallow any law within one year from the Governor-General's assent, and such disallowance on being made known by the Governor-General by speech or message to each of the Houses of the Parliament, or by Proclamation, shall annul the law from the day when the disallowance is so made known.

60. A proposed law reserved for the Queen's pleasure shall not have any force unless and until within two years from the day on which it was presented to the Governor-General for the Queen's assent the Governor-General makes known, by speech or message to each of the Houses of the Parliament, or by Proclamation, that it has received the Queen's assent.

## CHAPTER II.—THE EXECUTIVE GOVERNMENT.

61. The executive power of the Commonwealth is vested in the Queen and is exercisable by the Governor-General as the Queen's representative, and extends to the execution and maintenance of this Constitution, and of the laws of the Commonwealth.

62. There shall be a Federal Executive Council to advise the Governor-General in the government of the Commonwealth, and the members of the Council shall be chosen and summoned by the Governor-General and sworn as Executive Councillors, and shall hold office during his pleasure.

63. The provisions of this Constitution referring to the Governor-General in Council shall be construed as referring to the Governor-General acting with the advice of the Federal Executive Council.

64. The Governor-General may appoint officers to administer such departments of State of the Commonwealth as the Governor-General in Council may establish.

Such officers shall hold office during the pleasure of the Governor-General. They shall be members of the Federal Executive Council, and shall be the Queen's Ministers of State for the Commonwealth.

After the first general election no Minister of State shall hold office for a longer period than three months unless he is or becomes a senator or a member of the House of Representatives.

65. Until the Parliament otherwise provides, the Ministers of State shall not exceed seven in number, and shall hold such offices as the Parliament prescribes, or, in the absence of provision, as the Governor-General directs.\*

66. There shall be payable to the Queen, out of the Consolidated Revenue Fund of the Commonwealth, for the salaries of the Ministers of State, an annual sum which, until the Parliament otherwise provides, shall not exceed twelve thousand pounds a year.\*

67. Until the Parliament otherwise provides, the appointment and removal of all other officers of the Executive Government of the Commonwealth shall be vested in the Governor-General in Council, unless the appointment is delegated by the Governor-General in Council or by a law of the Commonwealth to some other authority.

\* The number of Ministers of State has been increased from time to time and has been 26 since 1967. The annual appropriation for Ministers' salaries has been correspondingly increased and has been \$197,300 since February 1967.

68. The command in chief of the naval and military forces of the Commonwealth is vested in the Governor-General as the Queen's representative.

69. On a date or dates to be proclaimed by the Governor-General after the establishment of the Commonwealth the following departments of the public service in each State shall become transferred to the Commonwealth:—

Posts, telegraphs, and telephones:	Lighthouses, lightships, beacons, and buoys:
Naval and military defence:	Quarantine.

But the departments of customs and of excise in each State shall become transferred to the Commonwealth on its establishment.

70. In respect of matters which, under this Constitution, pass to the Executive Government of the Commonwealth, all powers and functions which at the establishment of the Commonwealth are vested in the Governor of a Colony, or in the Governor of a Colony with the advice of his Executive Council, or in any authority of a Colony, shall vest in the Governor-General, or in the Governor-General in Council, or in the authority exercising similar powers under the Commonwealth, as the case requires.

### CHAPTER III.—THE JUDICATURE.

71. The judicial power of the Commonwealth shall be vested in a Federal Supreme Court, to be called the High Court of Australia, and in such other federal courts as the Parliament creates, and in such other courts as it invests with federal jurisdiction. The High Court shall consist of a Chief Justice, and so many other Justices, not less than two, as the Parliament prescribes.\*

72. The Justices of the High Court and of the other Courts created by the Parliament—

- (i) Shall be appointed by the Governor-General in Council:
- (ii) Shall not be removed except by the Governor-General in Council, on an address from both Houses of the Parliament in the same session, praying for such removal on the ground of proved misbehaviour or incapacity:
- (iii) Shall receive such remuneration as the Parliament may fix; but the remuneration shall shall not be diminished during their continuance in office.†

73. The High Court shall have jurisdiction, with such exceptions and subject to such regulations as the Parliament prescribes, to hear and determine appeals from all judgments, decrees, orders, and sentences—

- (i) Of any Justice or Justices exercising the original jurisdiction of the High Court:
- (ii) Of any other federal court, or court exercising federal jurisdiction; or of the Supreme Court of any State, or of any other court of any State from which at the establishment of the Commonwealth an appeal lies to the Queen in Council:
- (iii) Of the Inter-State Commission, but as to questions of law only:

and the judgment of the High Court in all such cases shall be final and conclusive.

But no exception or regulation prescribed by the Parliament shall prevent the High Court from hearing and determining any appeal from the Supreme Court of a State in any matter in which at the establishment of the Commonwealth an appeal lies from such Supreme Court to the Queen in Council.

Until the Parliament otherwise provides, the conditions of and restrictions on appeals to the Queen in Council from the Supreme Courts of the several States shall be applicable to appeals from them to the High Court.

74. No appeal shall be permitted to the Queen in Council from a decision of the High Court upon any question, howsoever arising, as to the limits inter se of the Constitutional powers of the Commonwealth and those of any State or States, or as to the limits inter se of the Constitutional powers of any two or more States, unless the High Court shall certify that the question is one which ought to be determined by Her Majesty in Council.

The High Court may so certify if satisfied that for any special reason the certificate should be granted, and thereupon an appeal shall lie to Her Majesty in Council on the question without further leave.

Except as provided in this section, this Constitution shall not impair any right which the Queen may be pleased to exercise by virtue of Her Royal prerogative to grant special leave of appeal from the High Court to Her Majesty in Council. The Parliament may make laws limiting the matters in which such leave may be asked, but proposed laws containing any such limitation shall be reserved by the Governor-General for Her Majesty's pleasure.

\* The *Judiciary Act* 1903 provided for a Chief Justice and two other Justices, increased by subsequent amendments to six.

† The *Judiciary Act* 1903 provided for the payment of a salary of £3,500 (\$7,000) a year to the Chief Justice and of £3,000 (\$6,000) a year to each other Justice, increased by subsequent amendments to \$24,000 and \$21,000 a year, respectively.

## 75. In all matters—

- (i) Arising under any treaty:
- (ii) Affecting consuls or other representatives of other countries:
- (iii) In which the Commonwealth, or a person suing or being sued on behalf of the Commonwealth, is a party:
- (iv) Between States, or between residents of different States, or between a State and a resident of another State:
- (v) In which a writ of Mandamus or prohibition or an injunction is sought against an officer of the Commonwealth:

the High Court shall have original jurisdiction.

## 76. The Parliament may make laws conferring original jurisdiction on the High Court in any matter—

- (i) Arising under this Constitution, or involving its interpretation:
- (ii) Arising under any laws made by the Parliament:
- (iii) Of Admiralty and maritime jurisdiction:
- (iv) Relating to the same subject-matter claimed under the laws of different States.

## 77. With respect to any of the matters mentioned in the last two sections the Parliament may make laws—

- (i) Defining the jurisdiction of any federal court other than the High Court:
- (ii) Defining the extent to which the jurisdiction of any federal court shall be exclusive of that which belongs to or is invested in the courts of the States:
- (iii) Investing any court of a State with federal jurisdiction.

## 78. The Parliament may make laws conferring rights to proceed against the Commonwealth or a State in respect of matters within the limits of the judicial power.

## 79. The federal jurisdiction of any court may be exercised by such number of judges as the Parliament prescribes.

## 80. The trial on indictment of any offence against any law of the Commonwealth shall be by jury, and every such trial shall be held in the State where the offence was committed, and if the offence was not committed within any State the trial shall be held at such place or places as the Parliament prescribes.

## CHAPTER IV.—FINANCE AND TRADE.

## 81. All revenues or moneys raised or received by the Executive Government of the Commonwealth shall form one Consolidated Revenue Fund, to be appropriated for the purposes of the Commonwealth in the manner and subject to the charges and liabilities imposed by this Constitution.

## 82. The costs, charges, and expenses incident to the collection, management, and receipt of the Consolidated Revenue Fund shall form the first charge thereon; and the revenue of the Commonwealth shall in the first instance be applied to the payment of the expenditure of the Commonwealth.

## 83. No money shall be drawn from the Treasury of the Commonwealth except under appropriation made by law.

But until the expiration of one month after the first meeting of the Parliament the Governor-General in Council may draw from the Treasury and expend such moneys as may be necessary for the maintenance of any department transferred to the Commonwealth and for the holding of the first elections for the Parliament.

## 84. When any department of the public service of a State becomes transferred to the Commonwealth, all officers of the department shall become subject to the control of the Executive Government of the Commonwealth.

Any such officer who is not retained in the service of the Commonwealth shall, unless he is appointed to some other office of equal emolument in the public service of the State, be entitled to receive from the State any pension, gratuity, or other compensation, payable under the law of the State on the abolition of his office.

Any such officer who is retained in the service of the Commonwealth shall preserve all his existing and accruing rights, and shall be entitled to retire from office at the time, and on the pension or retiring allowance, which would be permitted by the law of the State if his service with the Commonwealth were a continuation of his service with the State. Such pension or retiring allowance shall be paid to him by the Commonwealth; but the State shall pay to the Commonwealth a part thereof

to be calculated on the proportion which his term of service with the State bears to his whole term of service, and for the purpose of the calculation his salary shall be taken to be that paid to him by the State at the time of the transfer.

Any officer who is, at the establishment of the Commonwealth, in the public service of a State, and who is, by consent of the Governor of the State with the advice of the Executive Council thereof, transferred to the public service of the Commonwealth, shall have the same rights as if he had been an officer of a department transferred to the Commonwealth and were retained in the service of the Commonwealth.

85. When any department of the public service of a State is transferred to the Commonwealth—

- (i) All property of the State of any kind, used exclusively in connexion with the department, shall become vested in the Commonwealth; but, in the case of the departments controlling customs and excise and bounties, for such time only as the Governor-General in Council may declare to be necessary:
- (ii) The Commonwealth may acquire any property of the State, of any kind used, but not exclusively used in connexion with the department; the value thereof shall, if no agreement can be made, be ascertained in, as nearly as may be, the manner in which the value of land, or of an interest in land, taken by the State for public purposes is ascertained under the law of the State in force at the establishment of the Commonwealth:
- (iii) The Commonwealth shall compensate the State for the value of any property passing to the Commonwealth under this section; if no agreement can be made as to the mode of compensation, it shall be determined under laws to be made by the Parliament:
- (iv) The Commonwealth shall, at the date of the transfer, assume the current obligations of the State in respect of the department transferred.

86. On the establishment of the Commonwealth, the collection and control of duties of customs and of excise, and the control of the payment of bounties, shall pass to the Executive Government of the Commonwealth.

87. During a period of ten years after the establishment of the Commonwealth and thereafter until the Parliament otherwise provides, of the net revenue of the Commonwealth from duties of customs and of excise not more than one-fourth shall be applied annually by the Commonwealth towards its expenditure.

The balance shall, in accordance with this Constitution, be paid to the several States, or applied towards the payment of interest on debts of the several States taken over by the Commonwealth.

88. Uniform duties of customs shall be imposed within two years after the establishment of the Commonwealth.

89. Until the imposition of uniform duties of customs—

- (i) The Commonwealth shall credit to each State the revenues collected therein by the Commonwealth.
- (ii) The Commonwealth shall debit to each State—
  - (a) The expenditure therein of the Commonwealth incurred solely for the maintenance or continuance, as at the time of transfer, of any department transferred from the State to the Commonwealth;
  - (b) The proportion of the State, according to the number of its people, in the other expenditure of the Commonwealth.
- (iii) The Commonwealth shall pay to each State month by month the balance (if any) in favour of the State.

90. On the imposition of uniform duties of customs the power of the Parliament to impose duties of customs and of excise, and to grant bounties on the production or export of goods, shall become exclusive.

On the imposition of uniform duties of customs all laws of the several States imposing duties of customs or of excise, or offering bounties on the production or export of goods, shall cease to have effect, but any grant or agreement for any such bounty lawfully made by or under the authority of the Government of any State shall be taken to be good if made before the thirtieth day of June, one thousand eight hundred and ninety-eight, and not otherwise.

91. Nothing in this Constitution prohibits a State from granting any aid to or bounty on mining for gold, silver, or other metals, nor from granting, with the consent of both Houses of the Parliament of the Commonwealth expressed by resolution, any aid to or bounty on the production or export of goods.

92. On the imposition of uniform duties of customs, trade, commerce, and intercourse among the States, whether by means of internal carriage or ocean navigation, shall be absolutely free.

But notwithstanding anything in this Constitution, goods imported before the imposition of uniform duties of customs into any State, or into any Colony which, whilst the goods remain therein, becomes a State, shall, on thence passing into another State within two years after the imposition of such duties, be liable to any duty chargeable on the importation of such goods into the Commonwealth, less any duty paid in respect of the goods on their importation.

93. During the first five years after the imposition of uniform duties of customs, and thereafter until the Parliament otherwise provides—

- (i) The duties of customs chargeable on goods imported into a State and afterwards passing into another State for consumption, and the duties of excise paid on goods produced or manufactured in a State and afterwards passing into another State for consumption, shall be taken to have been collected not in the former but in the latter State;
- (ii) Subject to the last sub-section, the Commonwealth shall credit revenue, debit expenditure, and pay balances to the several States as prescribed for the period preceding the imposition of uniform duties of customs.

94. After five years from the imposition of uniform duties of customs, the Parliament may provide, on such basis as it deems fair, for the monthly payment to the several States of all surplus revenue of the Commonwealth.

95. Notwithstanding anything in this Constitution, the Parliament of the State of Western Australia, if that State be an Original State, may, during the first five years after the imposition of uniform duties of customs, impose duties of customs on goods passing into that State and not originally imported from beyond the limits of the Commonwealth; and such duties shall be collected by the Commonwealth.

But any duty so imposed on any goods shall not exceed during the first of such years the duty chargeable on the goods under the law of Western Australia in force at the imposition of uniform duties, and shall not exceed during the second, third, fourth, and fifth of such years respectively, four-fifths, three-fifths, two-fifths and one-fifth of such latter duty, and all duties imposed under this section shall cease at the expiration of the fifth year after the imposition of uniform duties.

If at any time during the five years the duty on any goods under this section is higher than the duty imposed by the Commonwealth on the importation of the like goods, then such higher duty shall be collected on the goods when imported into Western Australia from beyond the limits of the Commonwealth.

96. During a period of ten years after the establishment of the Commonwealth and thereafter until the Parliament otherwise provides, the Parliament may grant financial assistance to any State on such terms and conditions as the Parliament thinks fit.

97. Until the Parliament otherwise provides, the laws in force in any Colony which has become or becomes a State with respect to the receipt of revenue and the expenditure of money on account of the Government of the Colony, and the review and audit of such receipt and expenditure, shall apply to the receipt of revenue and the expenditure of money on account of the Commonwealth in the State in the same manner as if the Commonwealth, or the Government or an officer of the Commonwealth, were mentioned whenever the Colony, or the Government or an officer of the Colony, is mentioned.

98. The power of the Parliament to make laws with respect to trade and commerce extends to navigation and shipping, and to railways the property of any State.

99. The Commonwealth shall not, by any law or regulation of trade, commerce, or revenue, give preference to one State or any part thereof over another State or any part thereof.

100. The Commonwealth shall not, by any law or regulation of trade or commerce, abridge the right of a State or of the residents therein to the reasonable use of the waters of rivers for conservation or irrigation.

101. There shall be an Inter-State Commission, with such powers of adjudication and administration as the Parliament deems necessary for the execution and maintenance, within the Commonwealth, of the provisions of this Constitution relating to trade and commerce, and of all laws made thereunder.

102. The Parliament may by any law with respect to trade or commerce forbid, as to railways, any preference or discrimination by any State, or by any authority constituted under a State, if such preference or discrimination is undue and unreasonable, or unjust to any State; due regard

being had to the financial responsibilities incurred by any State in connexion with the construction and maintenance of its railways. But no preference or discrimination shall, within the meaning of this section, be taken to be undue and unreasonable, or unjust to any State, unless so adjudged by the Inter-State Commission.

103. The members of the Inter-State Commission—

- (i) Shall be appointed by the Governor-General in Council:
- (ii) Shall hold office for seven years, but may be removed within that time by the Governor-General in Council, on an address from both Houses of the Parliament in the same session praying for such removal on the ground of proved misbehaviour or incapacity:
- (iii) Shall receive such remuneration as the Parliament may fix; but such remuneration shall not be diminished during their continuance in office.

104. Nothing in this Constitution shall render unlawful any rate for the carriage of goods upon a railway, the property of a State, if the rate is deemed by the Inter-State Commission to be necessary for the development of the territory of the State, and if the rate applies equally to goods within the State and to goods passing into the State from other States.

105. The Parliament may take over from the States their public debts [as existing at the establishment of the Commonwealth],\* or a proportion thereof according to the respective numbers of their people as shown by the latest statistics of the Commonwealth, and may convert, renew, or consolidate such debts, or any part thereof; and the States shall indemnify the Commonwealth in respect of the debts taken over, and thereafter the interest payable in respect of the debts shall be deducted and retained from the portions of the surplus revenue of the Commonwealth payable to the several States, or if such surplus is insufficient, or if there is no surplus, then the deficiency or the whole amount shall be paid by the several States.

105A.† (1.) *The Commonwealth may make agreements with the States with respect to the public debts of the States, including—*

- (a) *the taking over of such debts by the Commonwealth;*
- (b) *the management of such debts;*
- (c) *the payment of interest and the provision and management of sinking funds in respect of such debts;*
- (d) *the consolidation, renewal, conversion, and redemption of such debts;*
- (e) *the indemnification of the Commonwealth by the States in respect of debts taken over by the Commonwealth; and*
- (f) *the borrowing of money by the States or by the Commonwealth, or by the Commonwealth for the States.*

(2.) *The Parliament may make laws for validating any such agreement made before the commencement of this section.*

(3.) *The Parliament may make laws for the carrying out by the parties thereto of any such agreement.*

(4.) *Any such agreement may be varied or rescinded by the parties thereto.*

(5.) *Every such agreement and any such variation thereof shall be binding upon the Commonwealth and the States parties thereto notwithstanding anything contained in this Constitution or the Constitution of the several States or in any law of the Parliament of the Commonwealth or of any State.*

(6.) *The powers conferred by this section shall not be construed as being limited in any way by the provisions of section one hundred and five of this Constitution.*

#### CHAPTER V.—THE STATES.

106. The Constitution of each State of the Commonwealth shall, subject to this Constitution, continue as at the establishment of the Commonwealth, or as at the admission or establishment of the State, as the case may be, until altered in accordance with the Constitution of the State.

107. Every power of the Parliament of a Colony which has become or becomes a State, shall, unless it is by this Constitution exclusively vested in the Parliament of the Commonwealth or withdrawn from the Parliament of the State, continue as at the establishment of the Commonwealth, or as at the admission or establishment of the State, as the case may be.

\* Under Section 2 of the *Constitution Alteration (State Debts)* 1909, the words in square brackets were omitted.

† Under Section 2 of the *Constitution Alteration (State Debts)* 1928, the Constitution was amended by the insertion of this section.



108. Every law in force in a Colony which has become or becomes a State, and relating to any matter within the powers of the Parliament of the Commonwealth, shall, subject to this Constitution, continue in force in the State; and, until provision is made in that behalf by the Parliament of the Commonwealth, the Parliament of the State shall have such powers of alteration and of repeal in respect of any such law as the Parliament of the Colony had until the Colony became a State.

109. When a law of a State is inconsistent with a law of the Commonwealth, the latter shall prevail, and the former shall, to the extent of the inconsistency, be invalid.

110. The provisions of this Constitution relating to the Governor of a State extend and apply to the Governor for the time being of the State, or other chief executive officer or administrator of the government of the State.

111. The Parliament of a State may surrender any part of the State to the Commonwealth; and upon such surrender, and the acceptance thereof by the Commonwealth, such part of the State shall become subject to the exclusive jurisdiction of the Commonwealth.

112. After uniform duties of customs have been imposed, a State may levy on imports or exports, or on goods passing into or out of the State, such charges as may be necessary for executing the inspection laws of the State; but the net produce of all charges so levied shall be for the use of the Commonwealth; and any such inspection laws may be annulled by the Parliament of the Commonwealth.

113. All fermented, distilled, or other intoxicating liquids passing into any State or remaining therein for use, consumption, sale or storage, shall be subject to the laws of the State as if such liquids had been produced in the State.

114. A State shall not, without the consent of the Parliament of the Commonwealth, raise or maintain any naval or military force, or impose any tax on property of any kind belonging to the Commonwealth, nor shall the Commonwealth impose any tax on property of any kind belonging to a State.

115. A State shall not coin money, nor make anything but gold and silver coin a legal tender in payment of debts.

116. The Commonwealth shall not make any law for establishing any religion, or for imposing any religious observance, or for prohibiting the free exercise of any religion, and no religious test shall be required as a qualification for any office or public trust under the Commonwealth.

117. A subject of the Queen, resident in any State, shall not be subject in any other State to any disability or discrimination which would not be equally applicable to him if he were a subject of the Queen resident in such other State.

118. Full faith and credit shall be given, throughout the Commonwealth, to the laws, the public Acts and records, and the judicial proceedings of every State.

119. The Commonwealth shall protect every State against invasion and, on the application of the Executive Government of the State, against domestic violence.

120. Every State shall make provision for the detention in its prisons of persons accused or convicted of offences against the laws of the Commonwealth, and for the punishment of persons convicted of such offences, and the Parliament of the Commonwealth may make laws to give effect to this provision.

#### CHAPTER VI.—NEW STATES.

121. The Parliament may admit to the Commonwealth or establish new States, and may upon such admission or establishment make or impose such terms and conditions, including the extent of representation in either House of the Parliament, as it thinks fit.

122. The Parliament may make laws for the government of any territory surrendered by any State to and accepted by the Commonwealth, or of any territory placed by the Queen under the authority of and accepted by the Commonwealth, or otherwise acquired by the Commonwealth, and may allow the representation of such territory in either House of the Parliament to the extent and on the terms which it thinks fit.

123. The Parliament of the Commonwealth may, with the consent of the Parliament of a State, and the approval of the majority of the electors of the State voting upon the question, increase, diminish, or otherwise alter the limits of the State, upon such terms and conditions as may be agreed on, and may, with the like consent, make provision respecting the effect and operation of any increase or diminution or alteration of territory in relation to any State affected.

124. A new State may be formed by separation of territory from a State, but only with the consent of the Parliament thereof, and a new State may be formed by the union of two or more States or parts of States, but only with the consent of the Parliaments of the States affected.

## CHAPTER VII.—MISCELLANEOUS.

125. The seat of Government of the Commonwealth shall be determined by the Parliament and shall be within territory which shall have been granted to or acquired by the Commonwealth, and shall be vested in and belong to the Commonwealth, and shall be in the State of New South Wales, and be distant not less than one hundred miles from Sydney.

Such territory shall contain an area of not less than one hundred square miles, and such portion thereof as shall consist of Crown lands shall be granted to the Commonwealth without any payment therefor.

The Parliament shall sit at Melbourne until it meet at the Seat of Government.

126. The Queen may authorize the Governor-General to appoint any person, or any persons jointly or severally, to be his deputy or deputies within any part of the Commonwealth, and in that capacity to exercise during the pleasure of the Governor-General such powers and functions of the Governor-General as he thinks fit to assign to such deputy or deputies, subject to any limitations expressed or directions given by the Queen; but the appointment of such deputy or deputies shall not affect the exercise by the Governor-General himself of any power or function.

\*[127. In reckoning the numbers of the people of the Commonwealth, or of a State or other part of the Commonwealth, aboriginal natives shall not be counted.]

## CHAPTER VIII.—ALTERATION OF THE CONSTITUTION.

128. This Constitution shall not be altered except in the following manner:—

The proposed law for the alteration thereof must be passed by an absolute majority of each House of the Parliament, and not less than two nor more than six months after its passage through both Houses the proposed law shall be submitted in each State to the electors qualified to vote for the election of members of the House of Representatives.

But if either House passes any such proposed law by an absolute majority, and the other House rejects or fails to pass it or passes it with any amendment to which the first-mentioned House will not agree, and if after an interval of three months the first-mentioned House in the same or the next session again passes the proposed law by an absolute majority with or without any amendment which has been made or agreed to by the other House, and such other House rejects or fails to pass it or passes it with any amendment to which the first-mentioned House will not agree, the Governor-General may submit the proposed law as last proposed by the first-mentioned House, and either with or without any amendments subsequently agreed to by both Houses, to the electors in each State qualified to vote for the election of the House of Representatives.

When a proposed law is submitted to the electors the vote shall be taken in such manner as the Parliament prescribes. But until the qualification of electors of members of the House of Representatives becomes uniform throughout the Commonwealth, only one-half the electors voting for and against the proposed law shall be counted in any State in which adult suffrage prevails.

And if in a majority of the States a majority of the electors voting approve the proposed law, and if a majority of all the electors voting also approve the proposed law, it shall be presented to the Governor-General for the Queen's assent.

No alteration diminishing the proportionate representation of any State in either House of the Parliament, or the minimum number of representatives of a State in the House of Representatives, or increasing, diminishing, or otherwise altering the limits of the State, or in any manner affecting the provisions of the Constitution in relation thereto, shall become law unless the majority of the electors voting in that State approve the proposed law.

## SCHEDULE.

## OATH.

I, *A.B.*, do swear that I will be faithful and bear true allegiance to Her Majesty Queen Victoria, Her heirs and successors according to law. SO HELP ME GOD!

## AFFIRMATION.

I, *A.B.*, do solemnly and sincerely affirm and declare that I will be faithful and bear true allegiance to Her Majesty Queen Victoria, Her heirs and successors according to law.

(NOTE.—*The name of the King or Queen of the United Kingdom of Great Britain and Ireland for the time being is to be substituted from time to time.*)

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\* Under Section 3 of the *Constitution Alteration (Aboriginals)* 1967 the section in square brackets was repealed.

**The Royal Proclamation**

The preceding Act received the Royal assent on 9 July 1900. This made it lawful to declare that the people of Australia should be united in a Federal Commonwealth. This proclamation, made on 17 September 1900, constituted the Commonwealth as from 1 January 1901; it read as follows.

BY THE QUEEN.

A PROCLAMATION.

(Signed) VICTORIA R.

WHEREAS by an Act of Parliament passed in the Sixty-third and Sixty-fourth Years of Our Reign, intituled "An Act to constitute the Commonwealth of *Australia*," it is enacted that it shall be lawful for the Queen, with the advice of the Privy Council, to declare by Proclamation, that, on and after a day therein appointed, not being later than One year after the passing of this Act, the people of *New South Wales*, *Victoria*, *South Australia*, *Queensland*, and *Tasmania*, and also, if Her Majesty is satisfied that the people of *Western Australia* have agreed thereto, of *Western Australia*, shall be united in a Federal Commonwealth under the name of the Commonwealth of Australia.

And whereas We are satisfied that the people of *Western Australia* have agreed thereto accordingly.

We therefore, by and with the advice of Our Privy Council, have thought fit to issue this Our Royal Proclamation, and We do hereby declare that on and after the First day of *January* One thousand nine hundred and one, the people of *New South Wales*, *Victoria*, *South Australia*, *Queensland*, *Tasmania*, and *Western Australia* shall be united in a Federal Commonwealth under the name of the Commonwealth of *Australia*.

Given at Our Court at *Balmoral* this Seventeenth day of *September*, in the Year of Our Lord One thousand nine hundred, and in the Sixty-fourth Year of Our Reign.

GOD SAVE THE QUEEN.

**The External Territories of Australia****Norfolk Island**

In 1856 Norfolk Island was created a distinct and separate settlement under the jurisdiction of New South Wales. Later, in 1896, it was made a dependency under the Governor of that colony, and finally by the passage of the *Norfolk Island Act* 1913 it was accepted as a Territory of the Commonwealth of Australia. The island is situated in latitude 29° 3' 3" S., longitude 167° 57' 5" E., and comprises an area of approximately 14 square miles.

**Papua**

Under the administration of the Commonwealth, but not included in it, is British New Guinea or Papua, finally annexed by the British Government in 1884. This Territory was for a number of years administered by the Queensland Government, but was transferred to the Commonwealth by proclamation on 1 September 1906, under the authority of the *Papua Act* 1905. The area of Papua is about 86,100 square miles.

**Trust Territory of New Guinea**

In 1919 it was agreed by the Principal Allied and Associated Powers that a mandate should be conferred on Australia for the government of the former German territories and islands situated in latitude between the Equator and 8° S., and in longitude between 141° E. and 159° 25' E. The mandate was issued by the League of Nations on 17 December 1920. The Governor-General of the Commonwealth was authorised to accept the mandate by the *New Guinea Act* 1920, which also declared the area to be a Territory under the authority of the Commonwealth by the name of the Territory of New Guinea. The land area comprises about 92,160 square miles, and the administration under the mandate dated from 9 May 1921. New Guinea is now administered under a Trustee-ship Agreement with the United Nations, approved on 13 December 1946.

**Trust Territory of Nauru (to 31 January 1968)**

In 1919 the Governments of the United Kingdom, Australia and New Zealand entered into an agreement to make provision for the exercise of the mandate conferred on the British Empire for the administration of the island of Nauru, and for the mining of the phosphate deposits thereon. The island is situated in latitude 0° 32' S., and longitude 166° 55' E. and is about 8½ square miles

in area. The agreement provided that the administration of the island should be vested in an administrator, the first appointment to be made by the Commonwealth Government, and thereafter in such manner as the three Governments decided (administrators have been appointed by the Commonwealth Government). The agreement was approved by the Commonwealth Parliament in the *Nauru Island Agreement Act* 1919, and a supplementary agreement of 30 May 1923, which gave the Government immediately responsible for the administration greater powers of control over the Administrator, was approved in 1932. The administration under the mandate operated from 17 December 1920 to 1 November 1947, and from that date to 31 January 1968 Nauru was administered under a Trusteeship Agreement with the United Nations.

Following discussions between representatives of the Nauruan people and of the Governments of Britain, New Zealand, and Australia, legislation was enacted by each Government to provide for the independence of Nauru as from 31 January 1968. (See *Nauru Independence Act* 1967, page 71 and Chapter 29, *The Territories of Australia*.)

#### **Australian Antarctic Territory**

An Imperial Order in Council of 7 February 1933 placed under Australian authority 'all the islands and territories other than Adelie Land which are situated south of the 60th degree of South Latitude and lying between the 160th degree of East Longitude and the 45th degree of East Longitude'.

The Order came into force with a proclamation issued by the Governor-General on 24 August 1936, after the passing of the *Australian Antarctic Territory Acceptance Act* 1933 by the Commonwealth Parliament. The boundaries of Adelie Land were definitely fixed by a decree of 1 April 1938 as latitude 60° S., longitude 136° E., and longitude 142° E.

#### **Heard and McDonald Islands**

Heard and McDonald Islands, about 2,500 miles south-west of Fremantle, were transferred from United Kingdom to Australian control as from 26 December 1947. Heard Island is approximately 27 miles long and 13 miles wide, and McDonald Islands, about 26 miles to the west of Heard Island, are small, rocky and precipitous.

#### **Cocos (Keeling) Islands**

*The Cocos (Keeling) Islands Act* 1955 provided for the acceptance of the Cocos Islands, in the Indian Ocean, as a Territory under the authority of the Commonwealth of Australia and was parallel to an Act of the United Kingdom Parliament transferring authority over the islands to the Commonwealth. Consequent on the passing of these Acts, Her Majesty, by Order in Council, specified 23 November 1955 as the date of transfer. From that date the islands came under Australian administration and an Official Representative of Australia was appointed to take charge of the local administration of the islands. Their approximate area is about 5½ square miles, and they are situated in the Indian Ocean in latitude 12° 5' S. and longitude 96° 53' E.

#### **Christmas Island**

*The Christmas Island Act* 1958 provided for the acceptance of Christmas Island, in the Indian Ocean, as a Territory under the authority of the Commonwealth of Australia. Complementary legislation having been passed by the Parliament of the United Kingdom, the island was transferred to the Australian administration on 1 October 1958, and an Official Representative was appointed to administer the Territory. The area of the island is about 52 square miles and it is situated in the Indian Ocean in latitude 10° 25' 22" S. and longitude 105° 39' 59" E.



## CHAPTER 2

# PHYSICAL GEOGRAPHY AND CLIMATE

### General description of Australia

#### Geographical position

The Australian Commonwealth, which includes the island continent of Australia and the island of Tasmania, is situated in the Southern Hemisphere, and comprises an area of 2,967,909 square miles, the mainland alone containing 2,941,526 square miles. Bounded on the west and east by the Indian and Pacific Oceans respectively, it lies between longitudes 113° 9' E. and 153° 39' E., while its northern and southern limits are the parallels of latitude 10° 41' S. and 43° 39' S., or, excluding Tasmania, 39° 8' S. On its north are the Timor and Arafura Seas and Torres Strait, on its south the Southern Ocean\*. The extreme points are Steep Point on the west, Cape Byron on the east, Cape York on the north, and South-East Cape or, if Tasmania be excluded, Wilson's Promontory, on the south. The difference in latitude between Cape York and Wilson's Promontory is 1,959 miles, and in longitude between Steep Point and Cape Byron 2,489 miles.

#### Tropical and temperate regions

Of the total area of Australia, nearly 39 per cent lies within the tropics. Taking the latitude of the Tropic of Capricorn as 23° 30' S., the areas within the tropical and temperate zones are approximately as follows.

**AREAS OF TROPICAL AND TEMPERATE REGIONS: STATES AND TERRITORIES**  
(Square miles)

<i>Area</i>	<i>N.S.W. (a)</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>Total</i>
Within tropical zone .	..	..	360,642	..	364,000	..	422,980	1,147,622
„ temperate zone	310,372	87,884	306,358	380,070	611,920	26,383	97,300	1,820,287
Total area .	310,372	87,884	667,000	380,070	975,920	26,383	520,280	2,967,909

(a) Includes Australian Capital Territory (939 square miles).

Fifty-four per cent of Queensland lies within the tropical zone and 46 per cent in the temperate zone; 37 per cent of Western Australia is tropical and 63 per cent temperate; while 81 per cent of the Northern Territory is tropical and 19 per cent temperate. All the remaining States lie within the temperate zone.

#### Area of Australia compared with areas of other countries

The area of Australia is almost as great as that of the United States of America excluding Alaska, four-fifths of that of Canada, more than half as large again as Europe excluding the U.S.S.R., and about twenty-five times that of Great Britain and Ireland. The areas of Australia and of certain other countries are shown in the table on the following page. The areas shown are in the main obtained from the *Statistical Yearbook* 1966, published by the Statistical Office of the United Nations, and the countries have been arranged in accordance with the continental groups used therein.

\* The Southern Ocean is a local designation for that part of the Indian Ocean lying between the southern shores of Australia and Antarctica.

**AREA OF AUSTRALIA AND OF OTHER COUNTRIES, *circa* 1965**

('000 square miles)

Country	Area	Country	Area
Continental divisions—		Africa—continued	
Europe(a)	1,903	Niger	489
Asia(a)	10,671	Angola	481
U.S.S.R. (Europe and Asia)	8,650	Ethiopia	472
Africa	11,677	South Africa, Republic of	471
North and Central America and West Indies	9,362	Mali	464
South America	6,881	Mauritania	398
Oceania	3,286	United Arab Republic	386
Total, World, excluding Arctic and Antarctic continents	52,430	Tanzania, United Republic of	363
		Nigeria	357
Europe(a)—		South-West Africa	318
France	211	Mozambique	302
Spain (including possessions)	195	Zambia	291
Sweden	174	Somalia	246
Finland	130	Central African Republic	241
Norway	125	Madagascar	227
Poland	121	Kenya	225
Italy	116	Other	1,979
Yugoslavia	99	Total, Africa	11,677
Germany, Federal Republic of	96		
United Kingdom	94	North and Central America—	
Romania	92	Canada	3,852
Other	451	United States of America(b)	3,615
Total, Europe(a)	1,903	Greenland	840
		Mexico	762
Asia(a)—		Nicaragua	50
China (mainland)	3,692	Cuba	44
India	1,176	Honduras	43
Saudi Arabia	870	Other	155
Iran	636	Total, North and Central America	9,362
Mongolia	604		
Indonesia	576	South America—	
Pakistan	366	Brazil	3,286
Trucial Oman	301	Argentina	1,072
Turkey	292	Peru	496
Burma	262	Colombia (excluding Panama)	440
Afghanistan	250	Bolivia	424
Thailand	198	Venezuela	352
Iraq	173	Chile	292
Other	1,275	Paraguay	157
Total, Asia(a)	10,671	Ecuador	109
		Other	251
U.S.S.R.—		Total, South America	6,881
Total, U.S.S.R.	8,650		
Africa—		Oceania—	
Sudan	967	Australia	2,968
Algeria	920	New Zealand	104
Congo, Democratic Republic of	906	New Guinea(c)	92
Libya	679	Papua	86
Chad	496	Other	36
		Total, Oceania	3,286

(a) Excludes U.S.S.R., shown below.  
(West Irian) is included in Other Asia.

(b) Includes Hawaii.

(c) Australian Trust Territory. Western New Guinea

## AREAS OF STATES AND TERRITORIES, AND STANDARD TIMES

State or Territory	Area	Percentage of total area	Standard times	
			Meridian selected	Ahead of G.M.T.
	sq miles			hours
New South Wales . . . .	309,433	10.43	150° E.	10
Victoria . . . . .	87,884	2.96	150° E.	10
Queensland . . . . .	667,000	22.47	150° E.	10
South Australia . . . .	380,070	12.81	142°30' E.	9½
Western Australia . . . .	975,920	32.88	120° E.	8
Northern Territory . . .	520,280	17.53	142°30' E.	9½
Australian Capital Territory .	939	0.03	150° E.	10
<i>Mainland</i> . . . . .	2,941,526	99.11	..	..
Tasmania . . . . .	26,383	0.89	150° E.	10
<i>Australia</i> . . . . .	2,967,909	100.00	..	..

The coastline of Australia is approximately 12,000 miles long—New South Wales, 700 miles; Victoria, 700 miles; Queensland, 3,200 miles; South Australia, 1,500 miles; Western Australia, 4,000 miles; Northern Territory, 1,000 miles; Australian Capital Territory, Jervis Bay area included in New South Wales; Tasmania, 900 miles. These measurements are broadly on a 'direct' basis, but even so they must be regarded as approximate only.

**Geographical features of Australia**

The following description is a broad summary of the main physical characteristics of the Australian continent.

A section through the Australian continent from east to west, at the point of its greatest breadth, shows first a narrow belt of coastal plain. This plain, extending north and south along the whole east coast, is well watered by rivers. It is of variable width, seldom more than sixty or seventy miles, and occasionally only a few miles, the average being roughly about forty to fifty miles. Bordering this plain is the Great Dividing Range, which extends from the north of Queensland to the south of New South Wales, and thence one branch sweeps westwards towards the boundary of Victoria and South Australia, and the other, the main branch, terminates in Tasmania. This range, which rises, often abruptly, from the plain, frequently presents bold escarpments on its eastern face, but the descent on its western slopes is gradual, until, in the country to the north of Spencer's Gulf, the plain is not above sea-level and occasionally even below it. Thence there is another almost imperceptible rise until the mountain ranges of Western Australia are reached, and beyond these lies another coastal plain. The mountains of Australia are relatively low, the highest peak, Mount Kosciusko, in New South Wales, being only about 7,300 feet. Three-quarters of the land-mass of Australia lies between the 600 and 1,500 feet contours in the form of a huge plateau, constituting the most distinctive feature of the Australian continent, to which the peculiarities of Australia's climate can probably be largely ascribed.

The rivers of Australia may be divided into two major classes, those of the coastal plains with moderate rates of fall and those of the central plains with very slight fall. Of the former not many are navigable for any distance from their mouths, and bars make many of them difficult of access or inaccessible from the sea.

The two longest rivers of the northern part of the east coast are the Burdekin and the Fitzroy in Queensland. The Hunter is the largest coastal river of New South Wales, and the Murray River, with its great tributary the Darling, drains part of Queensland, the major part of New South Wales,



and a large part of Victoria, finally flowing into the arm of the sea known as Lake Alexandrina, on the eastern side of the South Australian coast. The total length of the Murray is about 1,600 miles, 400 being in South Australia and 1,200 constituting the boundary between New South Wales and Victoria. The total length of the Murray-Darling from the source of the Darling to the mouth of the Murray is about 2,300 miles. The rivers of the north-west coast of Australia (Western Australia), e.g. the Murchison, Gascoyne, Ashburton, Fortesque, De Grey, Fitzroy, Drysdale, and Ord are of considerable size. So also are those in the Northern Territory, e.g. the Victoria and Daly, and those on the Queensland side of the Gulf of Carpentaria, such as the Gregory, Leichhardt, Cloncurry, Gilbert, and Mitchell. The rivers of Tasmania have short and rapid courses, as might be expected from the configuration of the country.

The 'lakes' of Australia may be divided into three classes: true permanent lakes; lakes which, being very shallow, become mere morasses in dry seasons or even dry up, and finally present a cracked surface of salt and dry mud; and lakes which are really inlets of the ocean, opening out into a lake-like expanse. The second class is the only one which seems to demand special mention. These are a characteristic of the great central plain of Australia. Some of them, such as Lakes Torrens, Gairdner, Eyre, and Frome, are of considerable extent.

For further information on the geographical features of Australia earlier issues of the Year Book should be consulted. The list of special articles, etc., at the end of this volume indicates the nature of the information available and its position in the various issues.

## Weather and climate of Australia

This section has been prepared by the Director of the Commonwealth Bureau of Meteorology, and the various States and Territories have been arranged in the standard order adopted by that Bureau. The section concludes with a brief summary of the weather of 1967.

### Introduction

Australia extends from about latitude 10° S. to latitude 44° S., but owing largely to the moderating effects of the surrounding oceans and the absence of very pronounced and extensive mountain masses it is less subject to extremes of climate than are regions of similar size in other parts of the world. The average elevation of the land surface is low—probably close to 900 feet above the sea; while the maximum altitude is just above 7,300 feet. Latitude for latitude the Australian climate is generally more temperate than that of the other large land masses of the earth, although it varies considerably from the tropical to the alpine.

The Australian meteorological seasons are: Summer—December, January, February; Autumn—March, April, May; Winter—June, July, August; Spring—September, October, November.

The following general discussion of the climate of Australia is necessarily brief. However, extensive records of Australian climatic data are held and published in various forms by the Bureau of Meteorology. A programme of regional climatic survey has been in progress for some years, and a large number of studies have been published by the Bureau of Meteorology, by the Department of National Development, and by State Development Authorities. The Bureau of Meteorology welcomes inquiries for climatic information, which may be made at its Central Office in Melbourne or through the Regional Offices which are situated in each of the State capital cities and in Canberra and Darwin. Reference may also be made to various bulletins and research papers mentioned in this text for more detailed information on particular topics.

### Precipitation

Precipitation of moisture from the atmosphere may take various forms depending chiefly on the thermal conditions existing at the time. Within the Australian region precipitation occurs chiefly as rain because of the generally mild temperatures, but may also occur as snow or hail. Broadly, the immediate physical cause of rainfall may be said to be the lifting of moist air with resultant cooling, condensation into cloud, and eventual precipitation of the heavy water droplets as rain. This process may be achieved by three different means each of which may be combined with either or both of the others:

- (a) Orographic lifting caused by winds blowing onto rising terrain;
- (b) convectional lifting resulting in the development of individual rain clouds of the cumulus or cumulonimbus type producing showers and thunderstorms;
- (c) lifting of a warm air mass as it rises over cooler air—known as a 'frontal' process.

*Average annual rainfall.* The distribution of the average annual rainfall over Australia is shown in plate 2 (between pages 32 and 33), while plate 3 shows the distribution in 1967.

While Australia is a continent of comparatively low relief, the orographic processes in rain production are very marked in the chain of the Great Dividing Range bordering the whole east coast of the continent, in the ranges of the south-western corner of Western Australia, and in Tasmania. Thus on the east coast the higher rainfall areas lie between the ranges and the Pacific Ocean in the region of prevailing south-east wind circulation. In Tasmania and the south-west of Western Australia the region of high rainfall lies between the ranges and the ocean to the west, these areas lying in a region of predominantly westerly wind flow.

The north-western part of the continent and to some extent the whole region of the Northern Territory and inland north Queensland comes under the influence of the Australian-Asian monsoon. This results in high rainfalls in a summer wet season with the inflow of moist air from the north-west, and a winter dry season with predominantly south-east winds blowing across the dry regions of the interior and producing little rainfall. Tropical cyclones affect the waters adjacent to the north-east and north-west of Australia between December and April. Their frequency varies greatly from season to season, but on the average about three of these disturbances occur in the Coral Sea each season and about two in the eastern Indian Ocean adjacent to the west coast of the continent. When tropical cyclones move close to the tropical coast of the continent they cause very heavy rainfalls over the coastal regions. On occasions these cyclones move over the land and lose intensity, but may still continue to be accompanied by heavy rainfall along their path.

Southern Australia lies in the region of the mid-latitude westerlies for the winter half of the year and is subject to the rain-producing influences of the great depressions of the Southern Ocean and their associated frontal systems. The combined effects of these systems and the topography lead to high winter rainfalls in south-western and south-eastern Australia and in Tasmania, with the highest falls occurring on the windward side of the mountains. The rainfall generally decreases inland with distance from the coast, although the 10-inch isohyet reaches the shore of the Great Australian Bight and the central western coast of Western Australia in regions which are of very flat relief and which, because of their position and the orientation of the coastline, are only rarely exposed to moist winds.

**AREA DISTRIBUTION OF AVERAGE ANNUAL RAINFALL: STATES AND TERRITORIES**  
(Per cent)

<i>Average annual rainfall</i>	<i>W.A.</i>	<i>N.T.</i>	<i>S.A.</i>	<i>Qld</i>	<i>N.S.W.</i> (a)	<i>Vic.</i>	<i>Tas.</i>	<i>Total</i>
Under 10 inches . . .	58.0	24.7	82.8	13.0	19.7	Nil	Nil	39.0
10 and under 15 inches . .	22.4	32.4	9.4	14.4	23.5	22.4	Nil	20.6
15 " " 20 " " . .	6.8	9.7	4.5	19.7	17.5	15.2	0.7	11.2
20 " " 25 " " . .	3.7	6.6	2.2	18.8	14.2	17.9	11.0	9.0
25 " " 30 " " . .	3.7	9.3	0.8	11.6	9.1	18.0	11.4	7.2
30 " " 40 " " . .	3.3	4.7	0.3	11.1	9.9	16.1	20.4	6.1
40 inches and over . . .	2.1	12.6	Nil	11.4	6.1	10.4	56.5	6.9
<b>Total . . . . .</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

(a) Includes Australian Capital Territory.

The region with the highest average annual rainfall is the east coast of Queensland between Port Douglas and Cardwell, where Tully has an annual average of 177 inches. A further very high rainfall region is the mountainous west coast of Tasmania, where Lake Margaret has the highest average annual total of 145 inches. The area of lowest average annual rainfall is that of some 180,000 square miles surrounding Lake Eyre in South Australia, where on the average only 4 to 6 inches are received annually. The lowest average over a long period of record is at Troudaninna—4.13 inches. Rain occurs very irregularly, averaging only about one or two days a month in this region.

Of all the continents (excluding Antarctica), Australia receives the least average depth of rainfall and has the least run-off from its rivers into the oceans. Only in relatively small areas of the continent could the rainfall be described as abundant.

*Seasonal distribution of rainfall.* The average monthly distribution of rainfall in the various Australian rainfall districts is shown by the histograms of plate 4.

The following are the most marked features.

- (a) The clearly defined wet summer and dry winter of the monsoon region of northern Australia.
- (b) The more regular distribution of rainfall throughout the year in south-eastern Australia. In the region to the south and west of the Great Dividing Range a less pronounced maximum of rainfall is noticeable in the winter or early spring. On the Gippsland (eastern Victoria) coast the rainfall is fairly evenly distributed throughout the year, but further along the east coast of the continent the rainfall minimum in late winter and early spring begins to appear and becomes more marked as the tropical regions are approached.
- (c) The marked rainfall maximum in the south-western districts of Western Australia in winter—the period of the most active southern depressions and frontal systems in this region.

For further information on monthly rainfalls reference may be made to the various Australian rainfall bulletins, to the Climatological Surveys of particular districts, and to the annual rain maps and books of normals (standard 30 year periods), all published by the Bureau of Meteorology.

*Variability of rainfall.* For most agricultural pursuits a more important criterion of the value of rainfall is its variability or reliability. The adequate description of rainfall variability over an extensive geographical area is a matter of some difficulty. Probably the best available measures are to be found in the tables which have been calculated for a number of individual stations in some of the Climatological Survey districts. These tables show the percentage chances of receiving specified amounts of rainfall in monthly seasonal or annual time spans. Statistical indexes of rainfall variation based on a number of different techniques have been used to produce maps which show the main features of the variability of annual rainfall over Australia. A discussion of these methods and the maps is given by F. Loewe in *Some Considerations Regarding the Variability of Annual Rainfall in Australia*, Bureau of Meteorology Bulletin No. 39 (1948).

In general it may be stated that the regions of most reliable rainfall are the south-west of Western Australia, western Tasmania, and western and southern Victoria south of the divide. These areas have one of the most reliable rainfalls in the world. Elsewhere in Australia the degree of variability, in general, increases inland, but the region of the highest variability for low average annual rainfalls extends across the central part of the continent from south-western Queensland to the central coast of Western Australia. Some outstanding examples of the numerous instances of high rainfall variability throughout Australia are given below.

At Onslow (Western Australia) annual totals vary from 0.05 inches to 28 inches, and in the four consecutive years 1921 to 1924 the annual totals were 22.25, 2.71, 26.82, and 2.18 inches respectively. At Whim Creek, where 29.41 inches have been recorded in a single day, only 17 points (0.17 inches) were received in the whole of 1924. Great variability can also occur in the heavy rainfall areas, e.g. at Tully the annual rainfalls have varied from 310.92 inches in 1950 to 104.98 inches in 1943.

The following table of annual rainfall for the Australian capital cities for the past thirty years indicates the variation in rainfall at these sites.

RAINFALL: AUSTRALIAN CAPITAL CITIES, 1936 TO 1966

Year	Perth		Adelaide		Brisbane		Sydney		Canberra(a)		Melbourne		Hobart(b)	
	Amount	No. of days	Amount	No. of days	Amount	No. of days	Amount	No. of days	Amount	No. of days	Amount	No. of days	Amount	No. of days
1936	30.64	118	19.34	121	21.77	101	30.22	130	n.a.	n.a.	24.30	187	19.60	178
1937	35.28	120	23.01	128	34.79	113	52.00	157	n.a.	n.a.	21.45	144	20.65	160
1938	29.64	111	19.26	119	43.49	110	39.17	132	n.a.	n.a.	17.63	131	31.32	169
1939	45.70	123	23.29	139	41.43	122	33.67	127	n.a.	n.a.	33.11	166	27.23	188
1940	20.00	98	16.16	116	42.37	93	39.34	125	14.65	67	19.83	126	17.17	135
1941	34.74	122	22.56	126	31.50	105	26.74	129	21.33	93	31.78	157	23.49	145
1942	39.24	140	25.44	133	44.01	125	48.29	121	25.18	108	29.79	148	19.42	163
1943	31.46	117	17.84	135	50.68	126	50.74	136	22.82	141	18.80	150	20.84	149
1944	27.39	123	17.13	114	27.85	100	31.04	115	11.96	82	21.32	143	26.23	151
1945	52.67	137	17.85	105	48.16	130	46.47	136	23.76		19.22	152	16.92	157
1946	41.47	122	22.59	135	38.66	83	36.05	111	20.53	162	29.80	177	39.45	193
1947	43.42	137	21.89	146	60.30	146	41.45	137	26.30	121	30.47	163	38.61	181
1948	34.75	126	21.40	122	41.54	106	38.83	131	31.49	104	20.98	155	23.42	178
1949	27.15	126	18.23	119	47.18	121	66.26	149	25.42	115	31.41	163	22.85	157
1950	32.27	122	16.06	91	63.93	152	86.33	183	41.79	124	26.18	147	19.25	131
1951	34.14	127	25.44	135	33.89	87	53.15	143	18.97	95	29.85	155	24.57	163
1952	39.28	123	19.99	128	33.49	122	59.19	130	37.98	143	34.39	177	30.35	165
1953	37.14	119	20.00	121	43.60	101	40.86	110	19.42	110	28.38	148	28.06	162
1954	28.05	112	16.73	109	61.36	142	41.29	134	18.00	80	33.53	139	27.20	143
1955	46.52	138	24.58	134	50.41	136	72.46	160	28.92	128	30.70	160	22.32	168
1956	37.35	107	27.24	154	59.18	120	67.33	155	34.90	159	30.96	188	36.63	175
1957	33.40	117	16.71	110	20.58	80	27.13	110	13.39	78	20.68	146	28.66	129
1958	32.08	107	17.57	121	46.61	115	59.19	144	23.51	106	26.98	155	36.55	166
1959	24.23	114	11.32	88	45.84	146	59.67	164	35.07	106	25.84	131	19.28	136
1960	28.21	112	23.07	129	27.51	103	51.01	152	31.98	128	33.50	162	29.35	140
1961	32.27	113	14.91	122	42.36	134	57.08	161	30.42	109	22.05	129	18.03	156
1962	28.75	123	17.96	125	41.39	131	44.90	137	25.71	122	23.06	140	25.40	161
1963	39.14	140	24.43	118	49.09	134	80.11	169	24.32	126	29.04	149	15.51	129
1964	38.40	127	21.89	135	48.18	112	43.30	99	25.29	106	27.80	166	28.06	169
1965	40.98	128	13.34	111	41.02	113	36.01	118	15.72	87	23.24	122	20.98	158
1966	30.45	116	19.49	123	43.80	111	48.40	130	27.22	117	26.81	156	27.52	145
Average	34.82	121	20.86	121	44.67	124	47.70	150	25.04	109	25.95	143	24.87	165
No. of years	91	91	128	128	115	107	108	108	27	27	111	111	84	84
Standard 30 years' normal(c)	35.99	128	21.09	122	40.09	117	44.80	143	(d)24.53	(d)103	25.89	156	25.03	180

(a) Fairbairn Aerodrome; records in issues of the Year Book prior to No. 36 were for the station at Acton which closed down in 1939, while from Year Book No. 36 to Year Book No. 53 records were for the Commonwealth Forestry Bureau station. (b) Records taken from present site commenced 1883. (c) 1911-1940. (d) Commonwealth Forestry Bureau; thirty years to 1957 inclusive.

Prolonged dry spells are fairly common in much of Australia, particularly in inland areas. A detailed discussion of the history of droughts and the frequency in particular areas may be found in Foley, J. C., *Droughts in Australia*, Bureau of Meteorology Bulletin No. 43 (1957). A shorter account of droughts in Australia will be found in a special article in Year Book No. 45, pages 51-6.\*

**Rainfall and vegetation.** In general, the three main climatic zones of the continent exert a particular controlling influence on the general vegetation. These are the northern third of the continent where rainfall is almost always restricted to the warmer months of the year, the southern third where rainfall is predominantly a winter and spring event, and a transitional zone which experiences rainfall from both sources, although in greatly reduced quantity over the interior which is subject to frequent drought.

The length of the growing season, or conversely the extent of dry periods during the year, decides the type of vegetation which establishes in a region. The climatic influence on vegetative response is primarily through soil moisture and temperature. Thus in colder south-eastern areas the growing season is mainly temperature dependent, but elsewhere the availability of soil moisture is the prime factor. All rainfall is not equally effective in increasing the soil moisture, its availability from the soil storage to plants depending on the extent of surface run-off, seepage beyond the root zone, and loss by surface evaporation. Furthermore, the effectiveness of available soil moisture depends on the evaporative demand of the local climate; for example, an inch of stored moisture may maintain

\*See also the chapter Water Conservation and Irrigation.

vigorous plant growth for twice as long in Tasmania as in the warmer, drier atmosphere of inland New South Wales. Thus it is not a sound practice to assess the agricultural potential of different areas simply by reference to average rainfall.

Generally speaking, the length of the growing season exceeds nine months over the far south-west of Western Australia and in all eastern coastal districts from Cape York Peninsula to western Victoria, and within this region humid and semi-humid plant formations thrive. Soil types, of course, also play a part in the distribution of vegetation, but they too are, to a considerable extent, the result of climate and weather.

The climate of Arnhem Land (Northern Territory) is such that there is a considerable surplus of moisture for about five months of the warm season, followed regularly by a virtual drought which frequently reaches severe intensity, and this special combination of meteorological conditions results in annual and perennial vegetation adapted to this cycle.

Over the interior the position is more complex because of the lower levels of the rainfall, its greater variability, and the high evaporative power of the drier, warmer atmosphere. In this vast section of the continent the climatic demands are so severe that the vegetative formations of the moister zones (i.e. the mesophytes, requiring about five months or longer growing season) are unable to exist. Thus a plant species adapted to these very dry and variable conditions (xerophytes), e.g. spinifex, salt bush, blue bush, and stunted eucalypts, capable of maintaining a cattle population, predominates over the arid interior.

The arid and semi-arid lands of Western Australia and inland New South Wales which border the desert carry the majority of the sheep in these States. In New South Wales the most important vegetative formations in these areas are savannah (treeless plains), savannah woodland, mulga scrub, and mallee scrub. In Western Australia sclerophyllous grass steppe and mulga scrub border the deserts and are succeeded to the south by zones of mallee scrub and mallee heath.

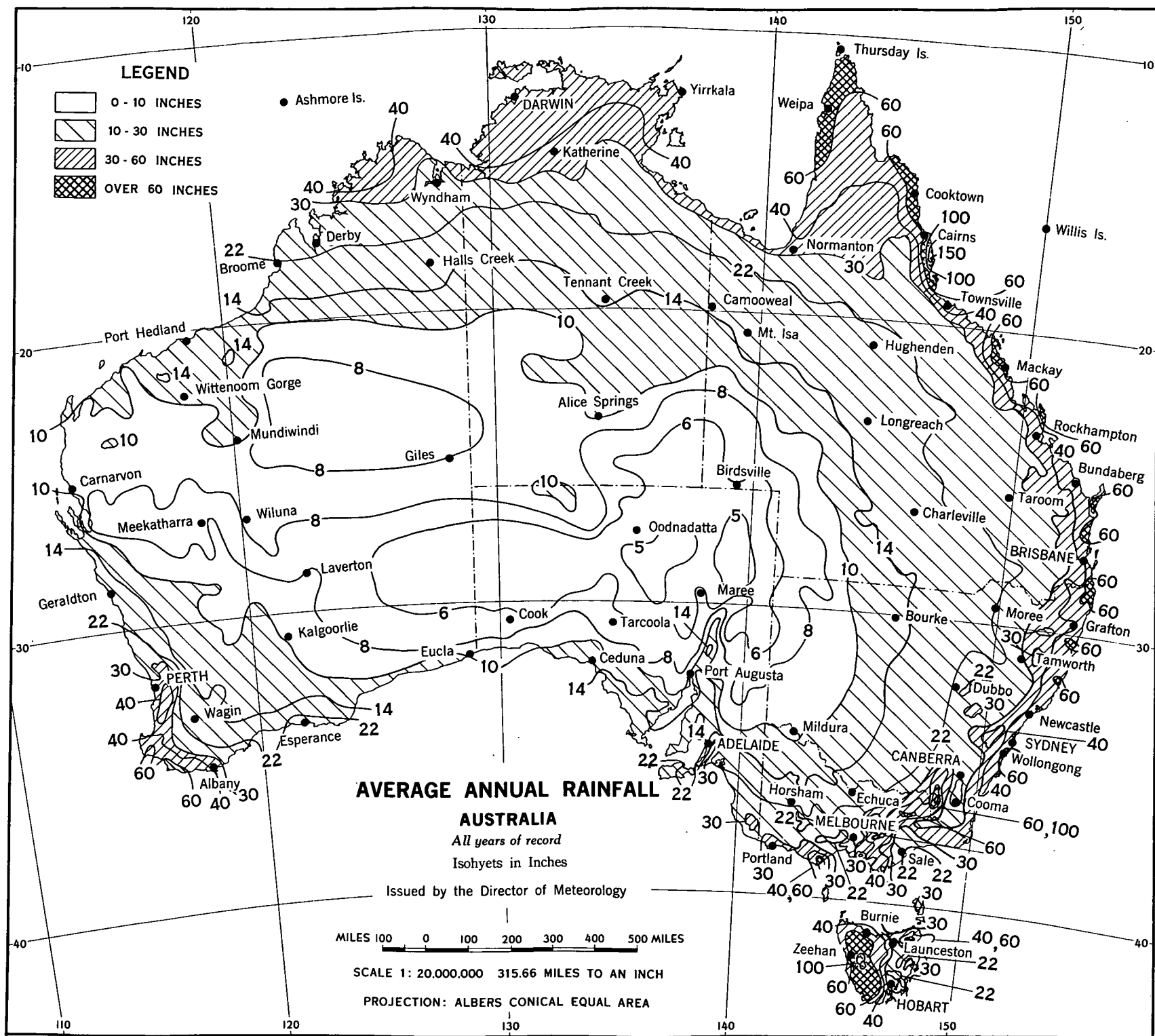
*Rainfall intensity.* The study of extremely high rainfall intensities is important in the investigation of the flow characteristics of river systems, and flood prevention measures, the design of irrigation works, and hydro-electric schemes. The highest rainfalls recorded in a period of twenty-four hours up to 1966 for each State and Territory were: Western Australia, Whim Creek, 29.41 inches, 3 April 1898; Northern Territory, Roper Valley, 21.44 inches, 15 April 1963; South Australia, Ardrossan, 8.10 inches, 18 February 1946; Queensland, Crohamhurst, 35.71 inches, 3 February 1893; New South Wales, Dorrigo, 25.04 inches, 24 June 1950; Australian Capital Territory, Jervis Bay, 7.15 inches, 29 April 1963; Victoria, Balook, 10.81 inches, 18 February 1951; and Tasmania, Mathinna, 13.25 inches, 5 April 1929. Most of the very high intensities have occurred in the coastal strip of Queensland, where the combination of a tropical cyclone moving close to mountainous terrain provides ideal conditions for spectacular falls. For other very heavy falls at various localities reference may be made to Year Books No. 14, pages 60-4, No. 22, pages 46-8, No. 29, pages 43, 44 and 51, and No. 53, pages 32-4.

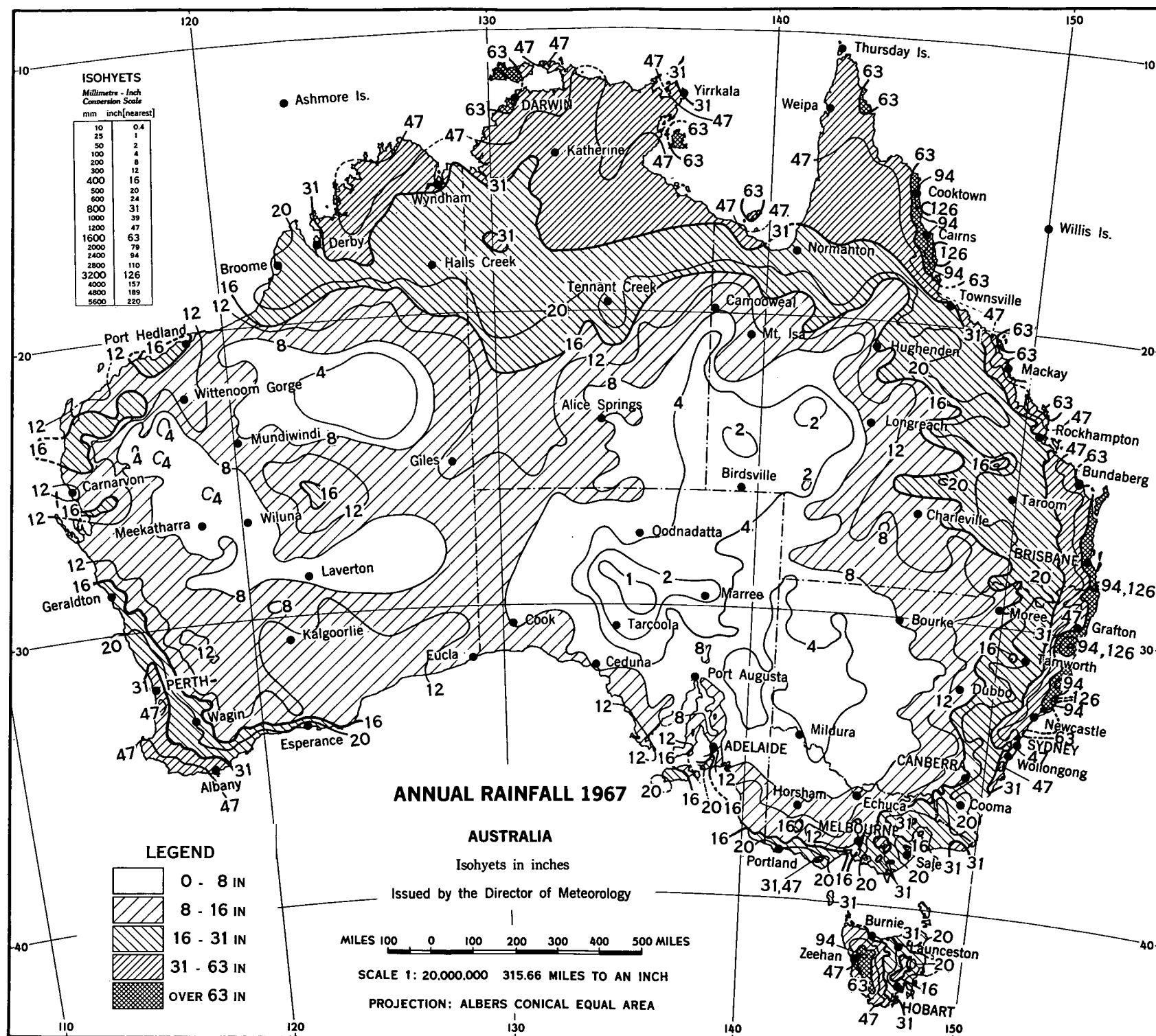
*Snow and hail.* For varying periods from late autumn to early spring snow usually covers the ground to a great extent on the Australian Alps above a level of about 4,500 to 5,000 feet, where in both New South Wales and Victoria ski-ing resorts operate throughout the season.

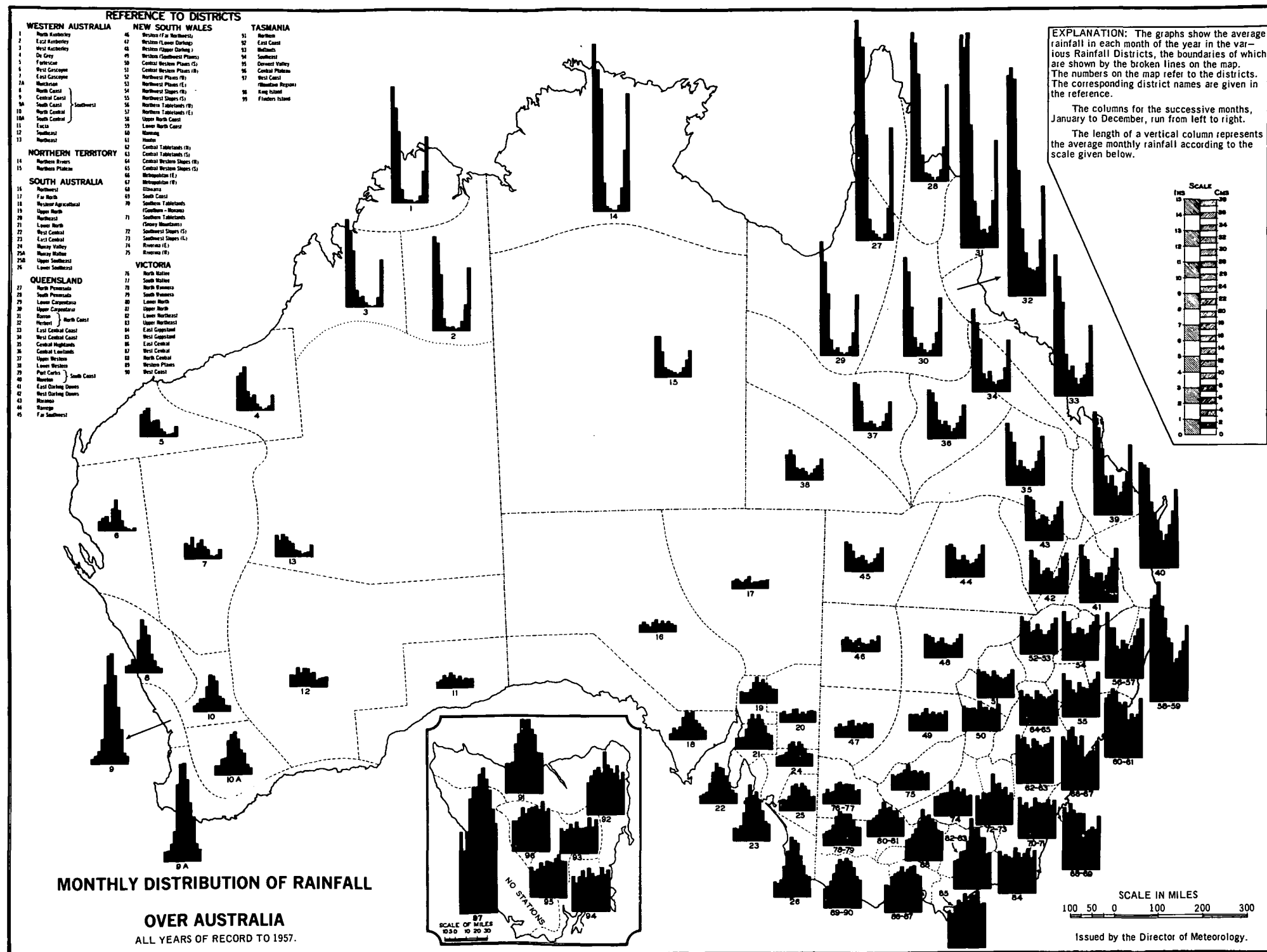
In Tasmania also the highlands are frequently covered above the 3,500 feet level for extended periods of the winter. There are, however, some years when snowfalls are much lighter than normal and even fail completely. Light snow has been known to fall occasionally as far north as the New England plateau in New South Wales (latitude 31° S.), and in exceptional seasons much of the dividing range from Victoria to Toowoomba (Queensland) has been covered above a level of about 4,000 feet. In ravines around Mount Kosciuszko small areas of snow may persist throughout the summer after a heavy winter fall. This winter snowfall of south-eastern Australia is important in aiding the reliable flow of many streams which are utilised in the hydro-electric schemes of the Snowy Mountains, northern Victoria, and Tasmania. Snowfall at low terrain elevations occurs from time to time, particularly in Tasmania and Victoria, but falls are usually light and rarely lie more than a few days.

Hail is most frequent in winter and spring along the south-eastern coastal region of the continent and in Tasmania, where it is usually of a relatively small size. Summer storms, however, which are quite frequent, particularly in the highland plateau regions of eastern Australia, often produce stones of large size and of destructive intensity. Very large stones capable of piercing light gauge galvanised iron are reported from time to time, and damage to fruit crops in south-eastern Australia from large hail stones is quite frequent.

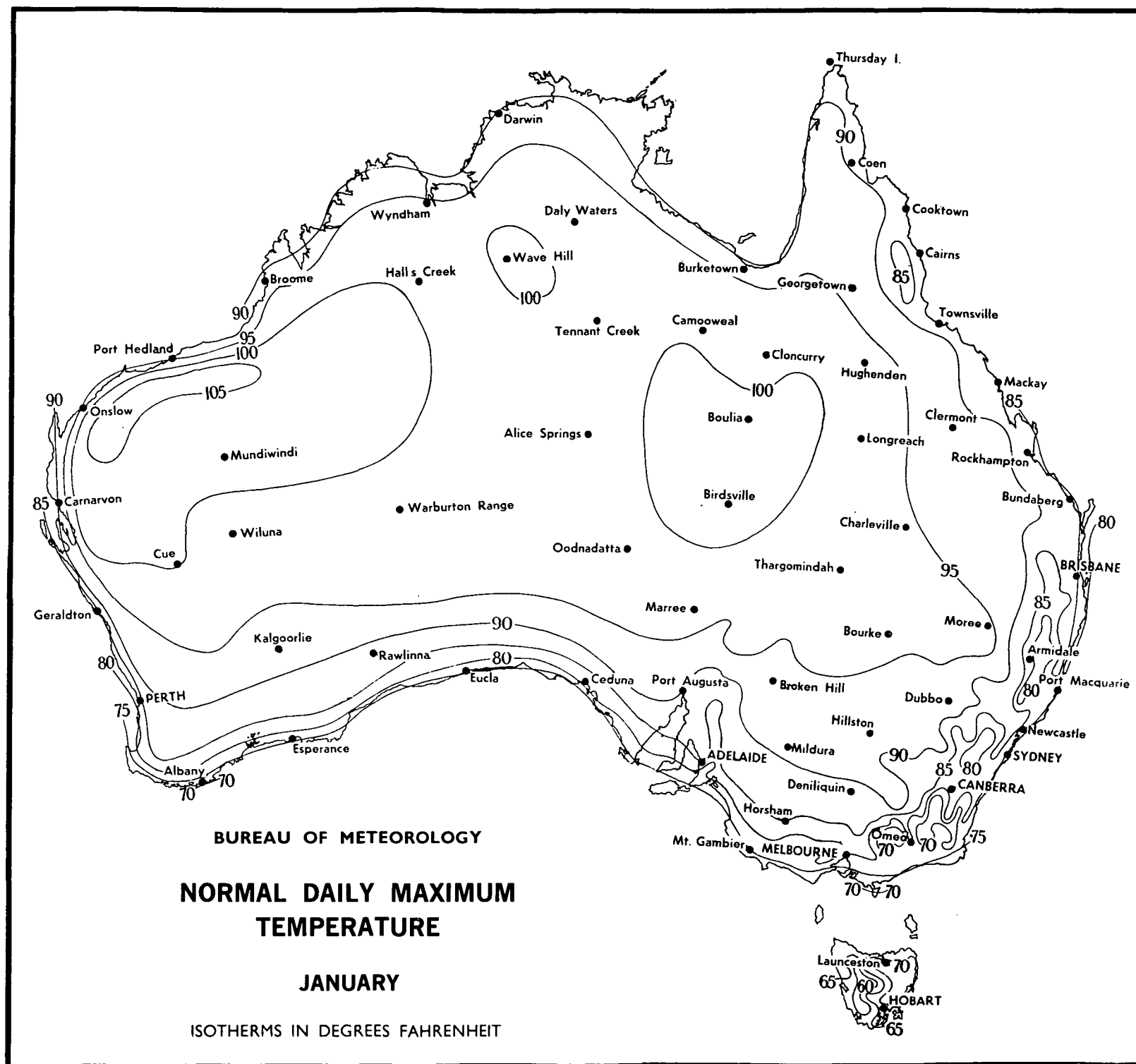
*Floods.* In general, flooding in Australia is most pronounced on the shorter streams flowing from the Great Dividing Range into the Pacific Ocean along the seaboard of Queensland and New South Wales. These floods are particularly destructive on the more densely populated coast

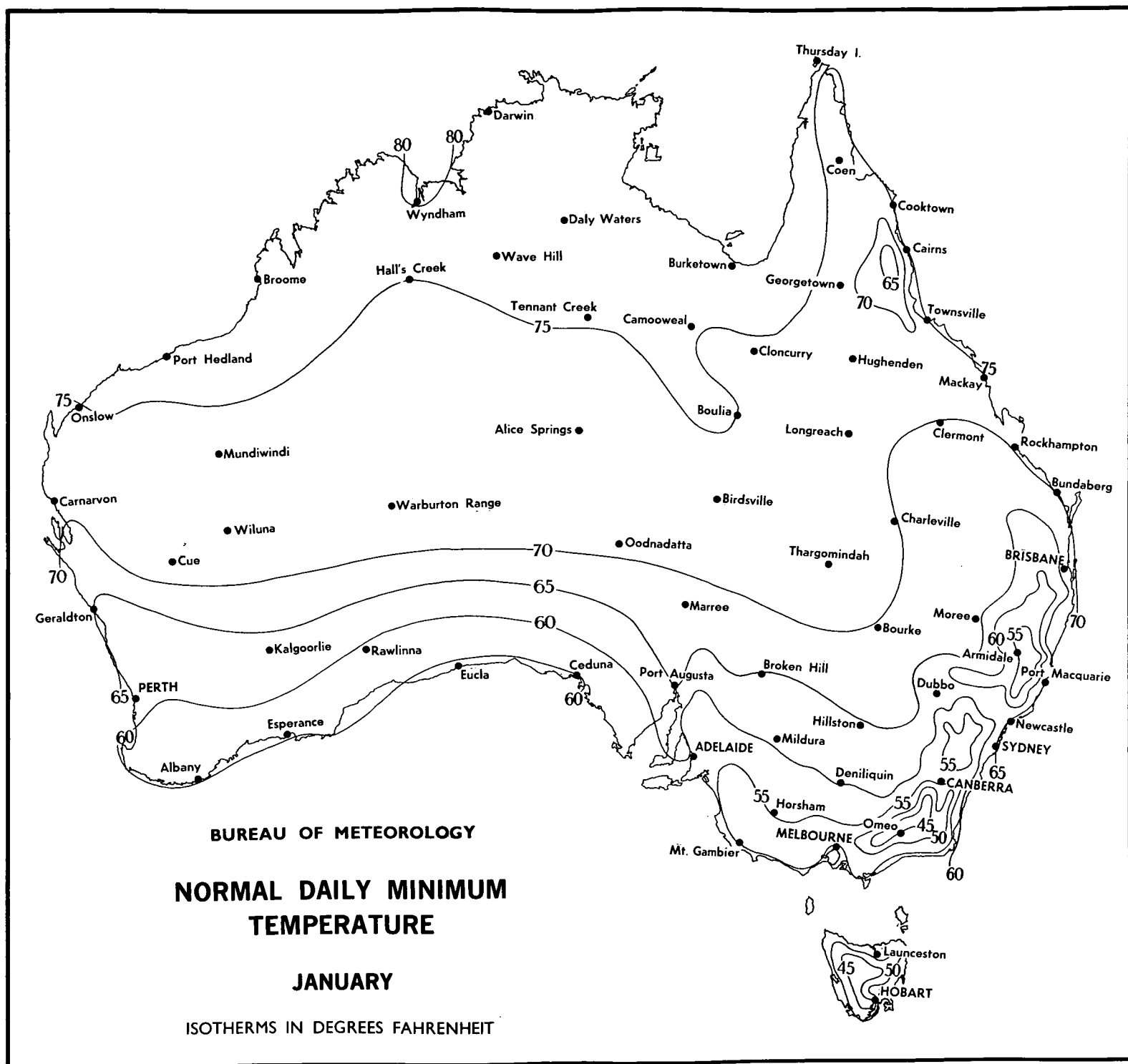


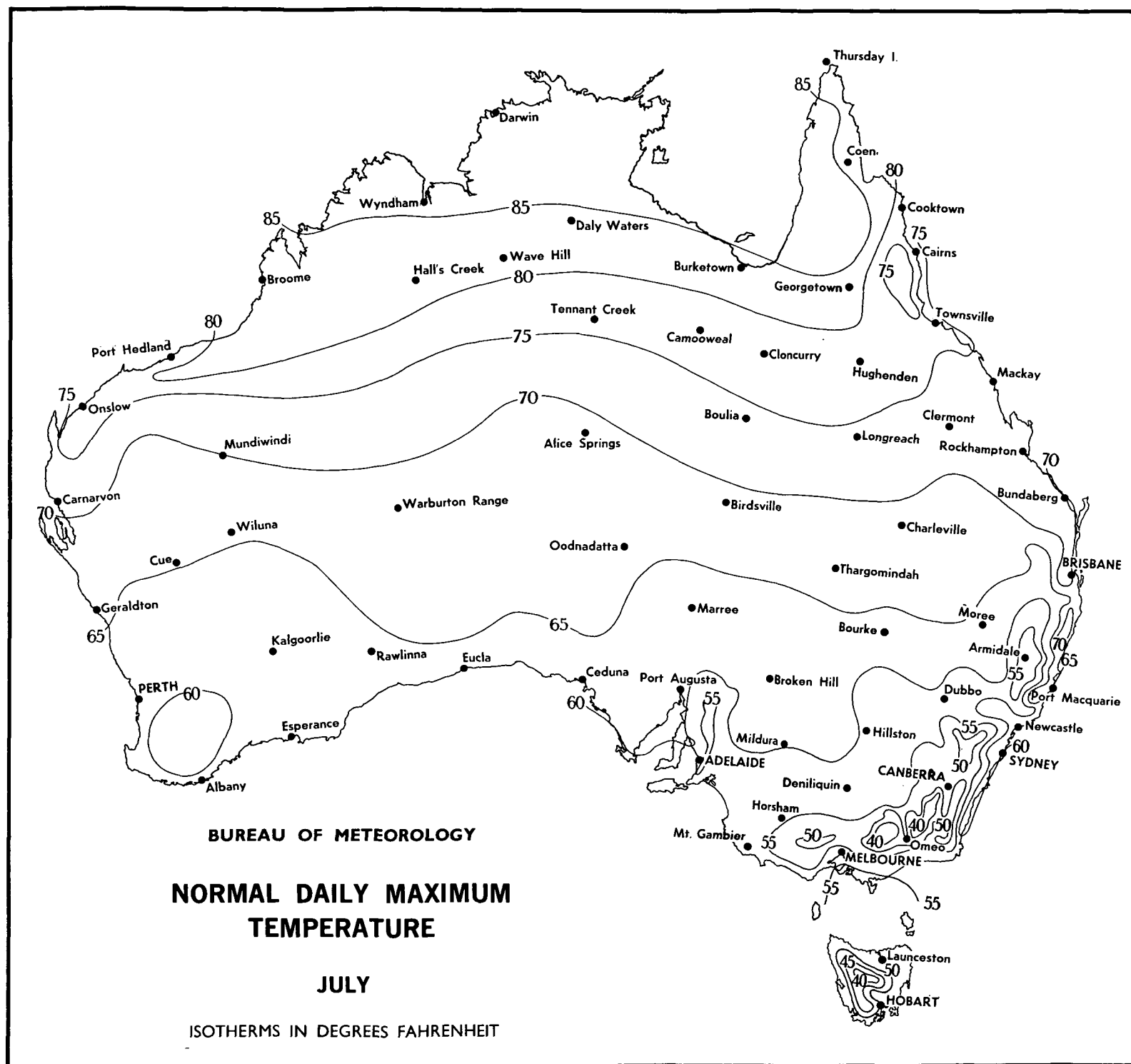


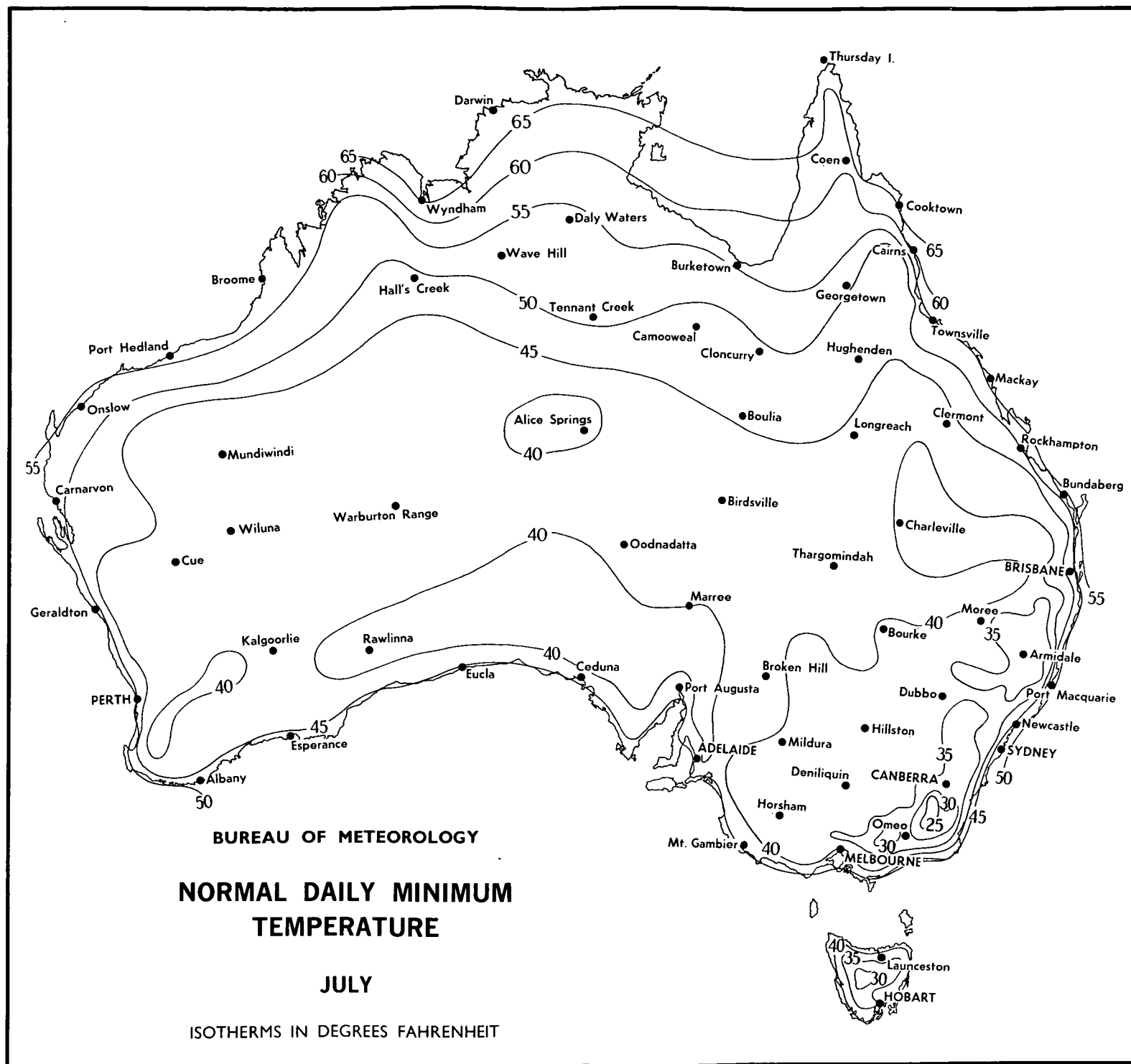




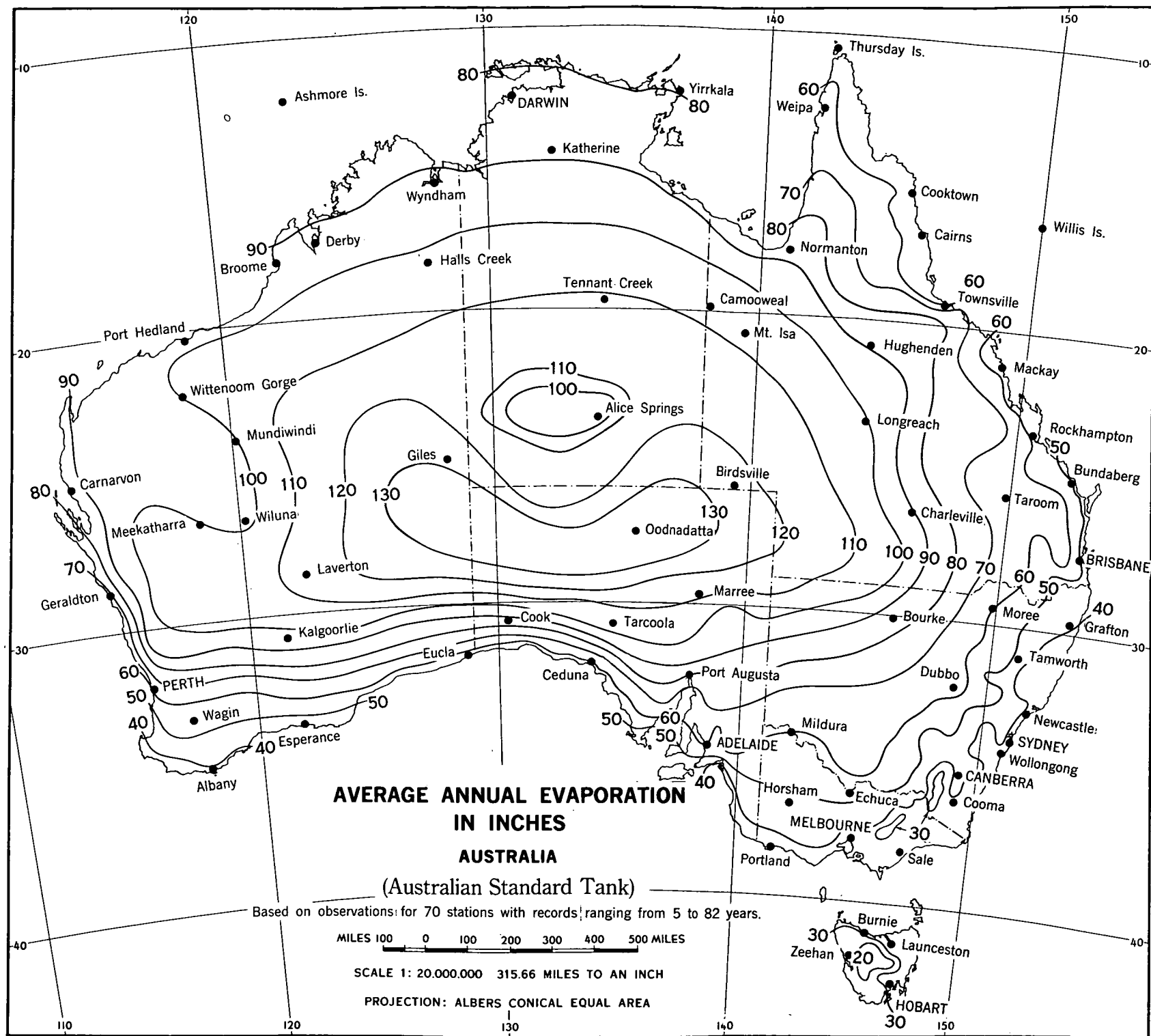




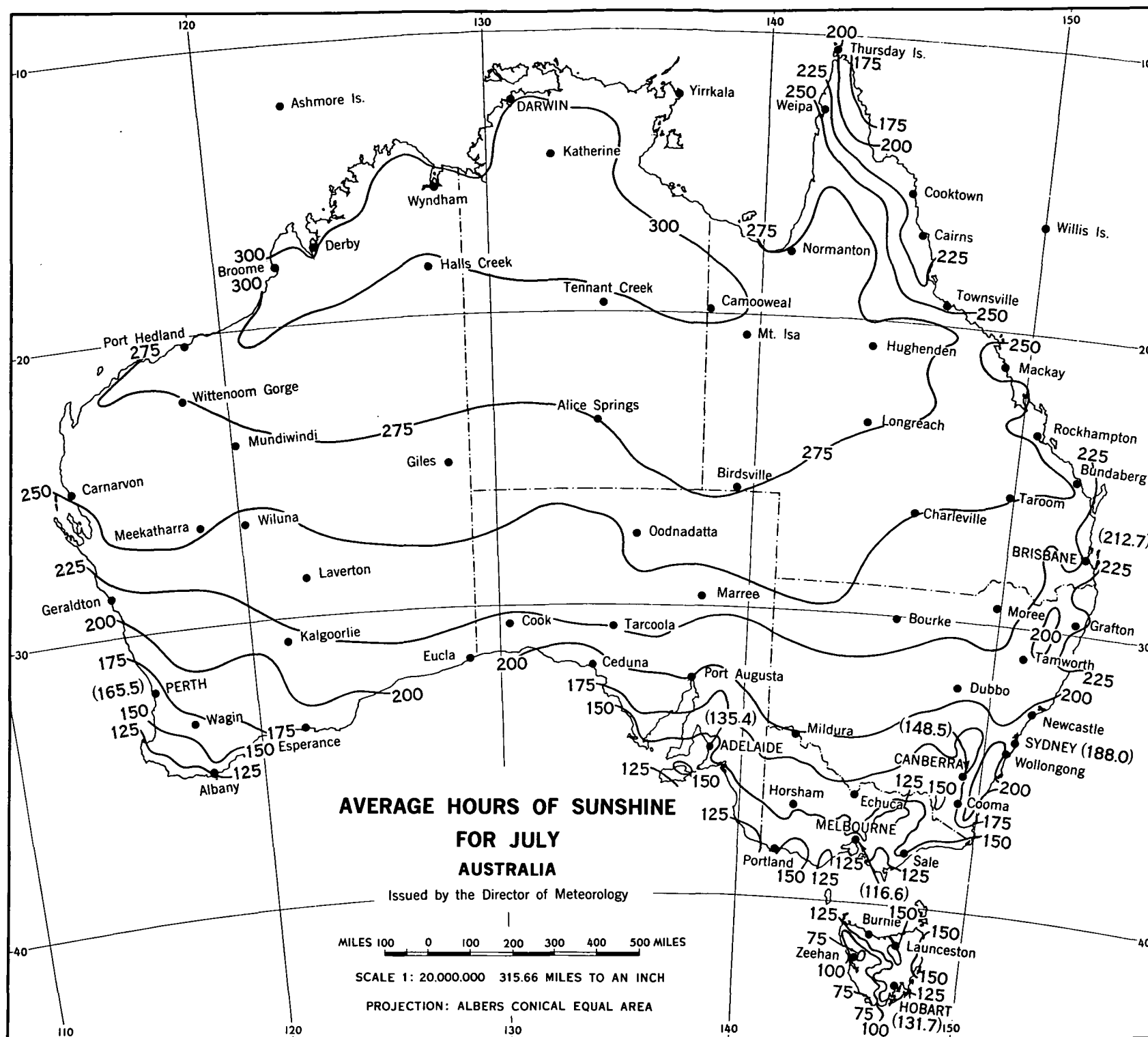












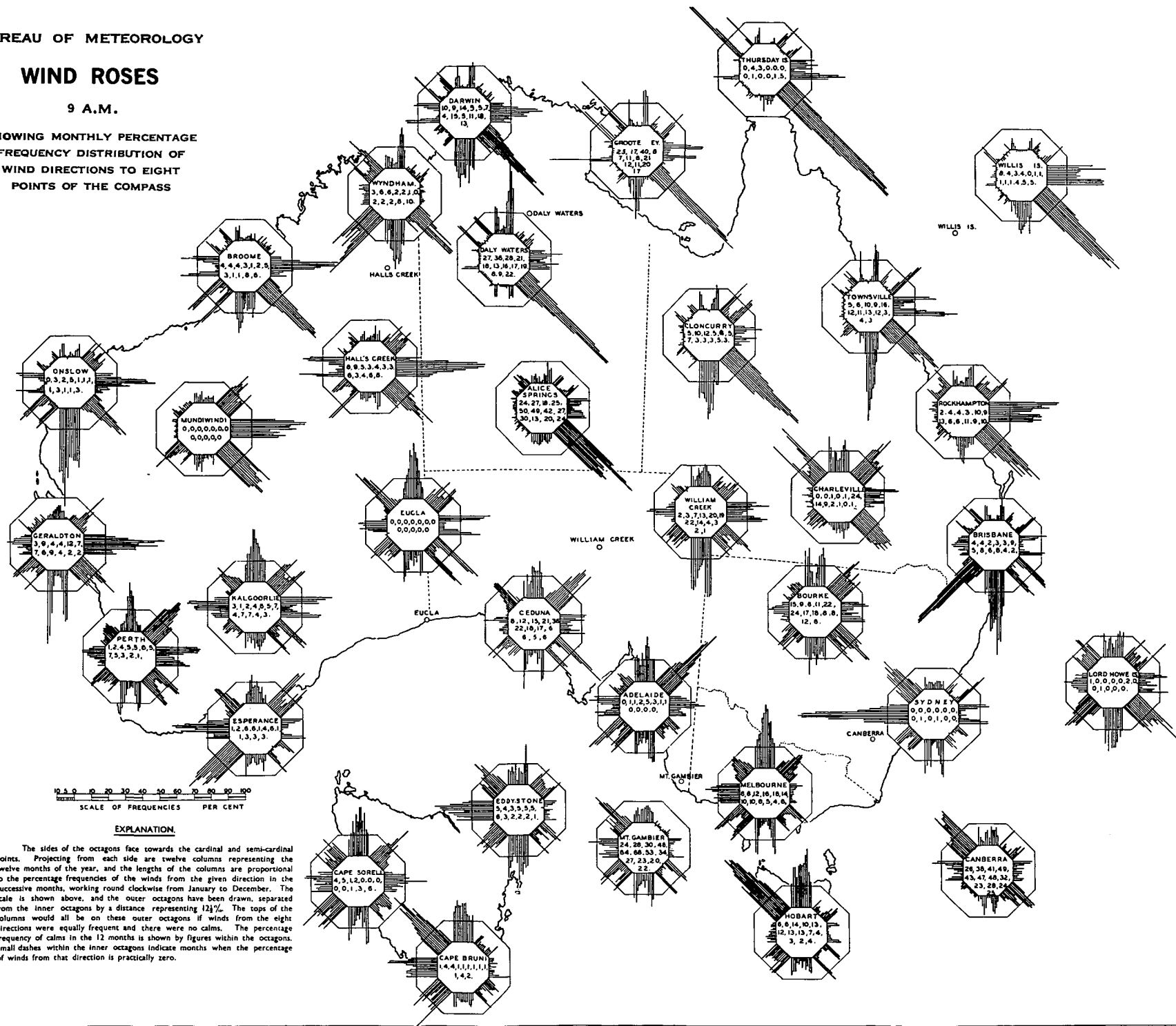


BUREAU OF METEOROLOGY

WIND ROSES

9 A.M.

SHOWING MONTHLY PERCENTAGE  
FREQUENCY DISTRIBUTION OF  
WIND DIRECTIONS TO EIGHT  
POINTS OF THE COMPASS

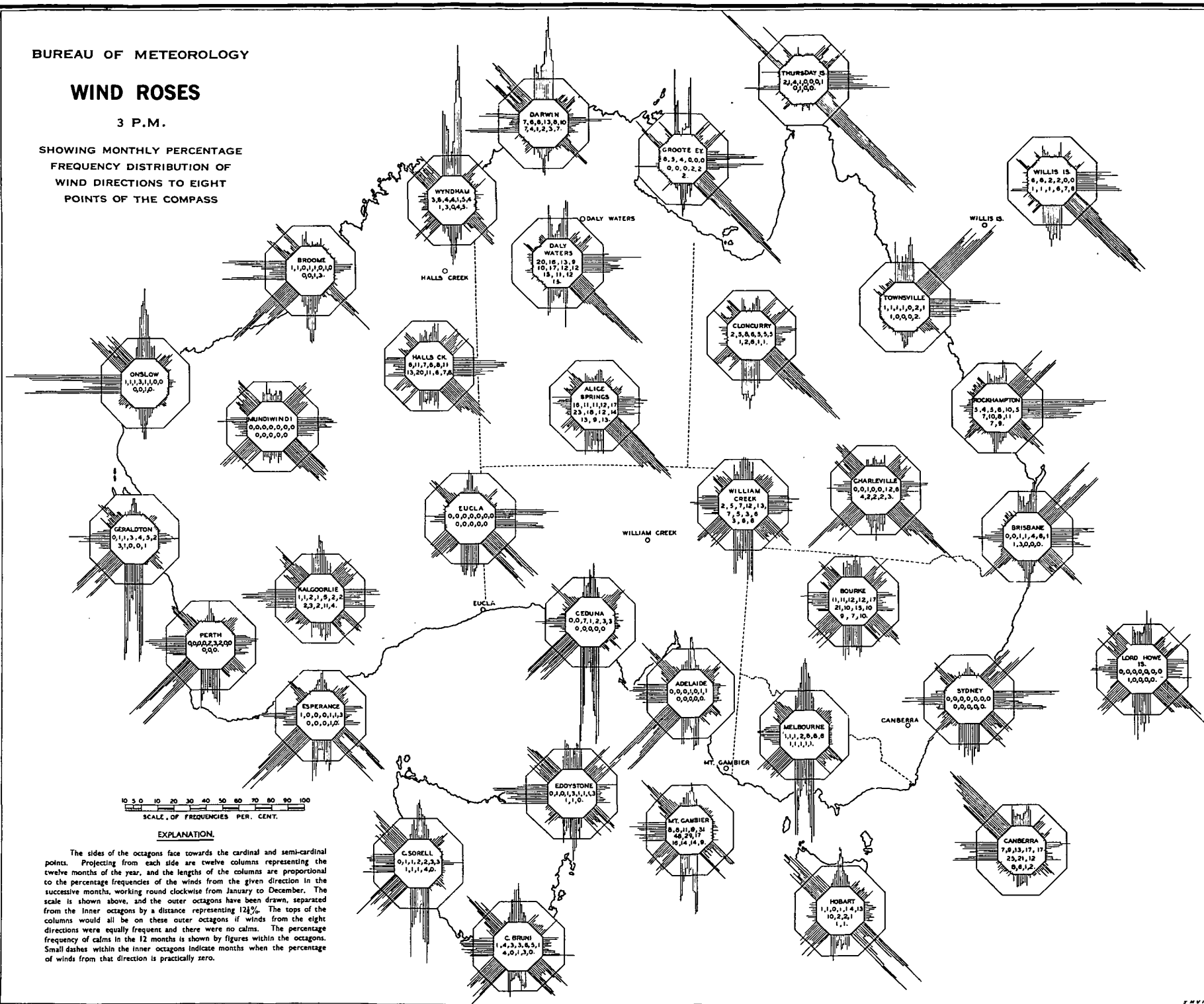


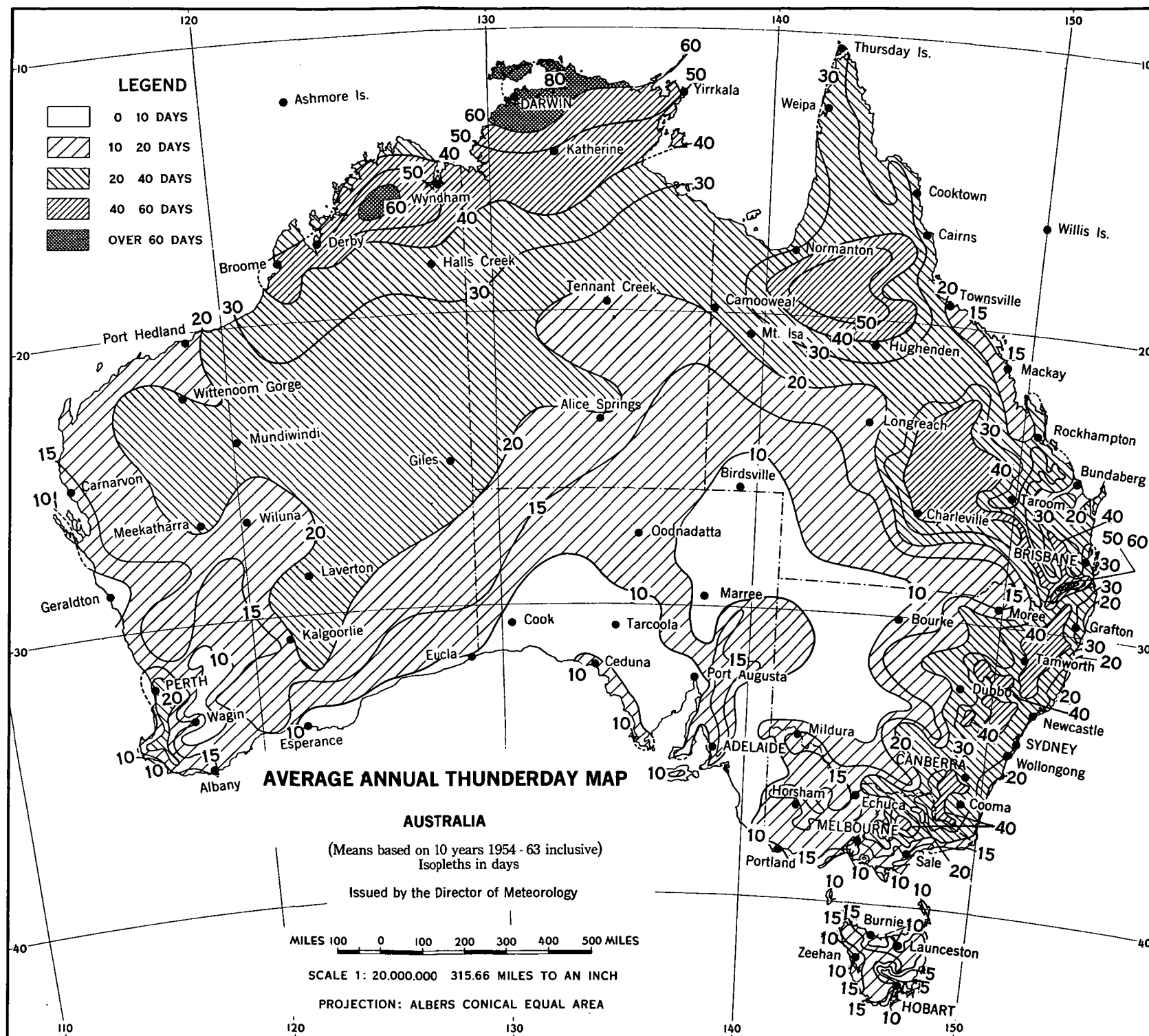
BUREAU OF METEOROLOGY

WIND ROSES

3 P.M.

SHOWING MONTHLY PERCENTAGE  
FREQUENCY DISTRIBUTION OF  
WIND DIRECTIONS TO EIGHT  
POINTS OF THE COMPASS





of New South Wales. The chief rivers in this area are the Tweed, Richmond, Clarence, McLeay, Nepean, Hawkesbury, Hunter, and Shoalhaven, all of which experience quite frequent and considerable flooding. These floods occur chiefly in summer but may occur at any time of the year.

The great Fitzroy and Burdekin river systems in Queensland are also subject to floods during the summer wet season, while much of the heavy monsoon rain in northern Queensland flows southward through the normally dry channels of the network of rivers draining into Lake Eyre. This water may cause extensive floods over a vast area, but it is soon lost by seepage and evaporation and rarely reaches the lake in any quantity. The Condamine and the other tributaries of the Darling also carry considerable volumes of water south through western New South Wales to the Murray, and flooding along their courses occurs from time to time.

Flooding also occurs from time to time, usually in autumn, winter, and spring, in the Murray-Murrumbidgee system of New South Wales and Victoria and on the smaller coastal streams of southern Victoria. In Tasmania, flooding of the north coast streams, particularly the South Esk system, is common in the same seasons. In South Australia some flooding has occurred in the lower reaches of the Murray owing to rainfall as far away as Queensland and south-eastern New South Wales. In the north of Western Australia and the Northern Territory, flooding of the coastal streams occurs frequently in summer but is not of such economic importance as the flooding of the eastern coastal streams of the continent, where many localities are more vulnerable to damage.

### Temperature

Conditions vary greatly for a particular individual even in a fixed location, so that it is difficult to describe general comfort variability uniquely throughout a region as varied climatically as Australia. A number of indexes which attempt to incorporate some of the factors concerned\* have been used experimentally from time to time, and further research continues on this very difficult problem. Generally speaking, there is an increase in discomfort northwards within the tropical regions of Australia in summer, owing to the heat and high absolute humidity which reach a maximum in the extreme north of the continent. Such conditions are, however, ameliorated to a large extent in highland areas such as the Atherton Tableland in Queensland. No part of Australia is uncomfortably hot in winter, and only in a small area of the Australian Alps and highland Tasmania does bodily strain due to cold exist in winter. The history of the settlement of the northern regions of Queensland and the Northern Territory indicates that with accelerating development of studies and experience in the arrangement of living and working accommodation, clothing, and general way of life, the effects of extremes of climate can be minimised.

For some further discussion of the problems of temperature and comfort conditions reference may be made to Ashton, H. T., *Meteorological Data for Air Conditioning in Australia*, Bureau of Meteorology Bulletin No. 47 (1964).

*Average seasonal temperature distribution.* Plates 5 to 8 show the normal daily maximum and minimum temperatures for January and July, which may be taken as indicative respectively of the summer and winter seasons in Australia. Further detailed temperature data are presented on pages 39-48 for the capital cities and more important country towns of the Commonwealth.

On the basis of average annual mean temperatures, and latitude for latitude, Australia is somewhat cooler than the other land masses of the southern hemisphere and considerably cooler than the same latitudes in the large continental areas of the northern hemisphere. This is due to the insular nature of Australia and the stronger general circulation of the atmosphere in the southern hemisphere resulting in the transport of higher latitude (cooler) air into the subtropical regions.

July is the month with the lowest mean temperature in all parts of the continent, while the month with the highest mean temperature varies from February in Tasmania and southern Victoria to December in the northern part of the continent and November in Darwin. The lateness of the month of highest average temperature in the extreme south of the continent is due in part to the effect of the Southern Ocean, where the sea surface temperature reaches its maximum in February. The cooler period of the late summer in the north is due largely to increased cloudiness associated with the inflow of north-west winds with the onset of the monsoon season.

In January average maximum temperatures exceed 95° F. over a vast area of the interior of the continent, and over large areas exceed 100° F. The hottest part of Australia is situated in the north of Western Australia around the Marble Bar and Nullagine area, where the daily maximum screen temperature during the summer frequently exceeds 100° F. for weeks at a time.

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\* See Year Book No. 53, page 35.

The marked change of maximum temperature in summer with distance from the sea, in areas close to the coasts, particularly along the Great Australian Bight and the Indian Ocean coast of Western Australia, is due to the penetration inland of the vigorous sea breezes which are initiated by the considerable temperature contrast between land and sea surface temperatures. The 75° F. isotherm of January mean maximum temperature skirts the southern coast of the continent from south-western Western Australia to Gippsland.

In January the mean minimum temperatures in the tropics, except for some highland regions, exceed 72° F., with a gradual decrease southward to values of 55° F. in Victoria and 50° F. in Tasmania. Highland regions in the south have mean values of 45° F. and lower. In July a more regular latitudinal distribution of mean maximum temperature is evident, only the extreme north of the continent having mean maxima higher than 80° F. Values lower than 60° F. are general over the south-eastern part of the continent, with mean maxima falling below 40° F. in small alpine areas. Average night minimum temperatures in July fall below 45° F. in areas south of the tropics and away from the coast. Alpine regions again record the lowest temperatures with some areas experiencing means lower than 25° F.

*Extreme variation and daily range.* Only at a few inland places in Australia does the absolute range of temperature (i.e. the range from the highest maximum to the lowest minimum) exceed 100° F. Generally it is in the range 70° F. to 90° F. in the inland areas and somewhat less on the coasts. The highest temperature recorded in Australia was 127.5° F. at Cloncurry (Queensland) on 16 January 1889 and the lowest -8° F. at Charlotte Pass in the southern Alps on 14 July 1945 and again on 22 August 1947. The world record maximum temperature is 136° F. at Azizia (Tripoli) on 13 August 1922 and the world record minimum temperature -126.9° F. at Vostok on the Antarctic plateau on 24 August 1960.

*High temperatures.* Heat waves with a number of successive days higher than 100° F. are relatively common in many parts of Australia. With the exception of the north-western coast of Western Australia, however, most coastal areas do not usually experience more than a few days in succession of such conditions. The frequency of such conditions increases inland, and periods of up to twenty days have been recorded over most of the settled areas. This figure increases in western Queensland and north-western Western Australia to more than sixty days in places. The central part of the Northern Territory and the Marble Bar-Nullagine area of Western Australia have recorded the most prolonged heat waves for the Australian region. The longest consecutive period of daily maxima greater than 100° F. was 160 consecutive days recorded in Marble Bar during the summer of 1923-24.

*Frosts.* Injury to the tissues of growing plants is not caused until the temperature has fallen considerably below the freezing point of water (32° F.), and a ground frost is regarded as having occurred when the grass thermometer has fallen below 30.4° F. However, as terrestrial minima are not recorded at all stations, it is usual for statistical purposes to regard the registration of a screen thermometer of 36° F. as indicating a 'light' frost. A map showing frequency of days with screen minima higher than 36° F. (i.e. the frost free period) is reproduced in plate 9. A 'heavy' frost is taken as a screen reading of less than 32° F. A 'black' frost occurs with a combination of low temperature and low humidity, and, although frost crystals are not observed on the ground, damage takes place to the plant cells by the freezing and expansion of the moisture they contain.

The frequency of frost depends largely on altitude, latitude, and proximity to the sea, and locally, to a very large extent, on even minor variations in contour of the land. The parts of Australia which are most subject to frost are the eastern highlands from north-eastern Victoria to the western Darling Downs in southern Queensland. Most stations in this region experience more than ten nights a month with readings of 32° F. or under for three to five months of the year. On Tasmania's Central Plateau similar conditions occur for three to six months of the year. Heavy frosts are comparatively infrequent in Western Australia, except in parts of the south and south-west. In South Australia frosts are most frequent in the agricultural areas of the south-east.

Frosts may occur within a few miles of the coast over the whole continent except the Northern Territory and most of north Queensland. Regions in which frosts may occur at any time of the year comprise most of Tasmania, large areas of the tablelands of New South Wales, much of inland Victoria, particularly the north-east, and a small part in the extreme south-west of Western Australia. Over most of the interior of the continent, and on the highlands of Queensland as far north as the Atherton Plateau, frosts commence in April and end in September, but they are infrequent in these months. Minimum temperatures below 32° F. are experienced in most of the sub-tropical interior in June and July.

For further details of frost conditions in Australia reference should be made to Foley, J. C., *Frost in the Australian Region*, Bureau of Meteorology Bulletin No. 32 (1945).

#### Humidity and saturation deficit

The annual variation of vapour pressure\* for regions outside the tropics closely follows that of temperature. However, the mean relative humidity\* in the temperate regions is generally highest in winter and lowest during the summer. In northern Australia the highest relative humidity occurs during the rainy summer season. The relative humidity variation during the day closely follows the diurnal variation of temperature, being highest with low temperatures and lowest with high temperatures. The relative humidity at 9 a.m. for Australian conditions may be considered as a close approximation to the mean for the whole day. In the tables for the capital cities, pages 39–46, the mean monthly vapour pressure and relative humidity for 9 a.m., together with the monthly extremes, are listed. The order of the stations in descending values of mean annual vapour pressure at 9 a.m. is Darwin, Brisbane, Sydney, Perth, Melbourne, Adelaide, Canberra, and Hobart, while the annual mean of the 9 a.m. relative humidities diminishes in the order Darwin, Sydney, Canberra, Melbourne, Brisbane, Hobart, Perth, and Adelaide.

In January the mean saturation deficit\* at the mean temperature for the month has a maximum value of over 0.90 inches in the central parts of Western Australia and in south-eastern Queensland. Gradual decreases occur towards the coast, where values close to the north, east, and south coastlines are around 0.20 inches. On the western coast values are somewhat higher, and a strong gradient exists in the saturation deficit in the narrow region bordering the Indian Ocean. In July the variation is less, with maxima of 0.40 inches in the dry north of the Northern Territory and Western Australia, slowly decreasing generally to the south, with values over most of the south-east and extreme south-west of the continent being less than 0.10 inches. Extremely low values (less than 0.025 inches) exist in July over the highlands of south-eastern Australia and Tasmania.

#### Evaporation

In Australia the study of evaporation is of great importance, since in its drier regions water conservation must be practised by the use of tanks and dams. The magnitude of the economic loss by evaporation may be appreciated from plate 10, which shows that the yearly amount varies from 20 inches over the highland areas of central Tasmania to more than 130 inches in the northern and north-western part of South Australia.

Over an area of some 70 per cent of the continent, comprising most inland districts and extending to the coast in the north-west of Western Australia and to the head of the Great Australian Bight, the rainfall does not exceed the evaporation loss in any month of the year. The central and north-western portions of the continent experience evaporation far in excess of their rainfall. Vegetation over these areas is characterised by acacia, scrub steppe, and arid scrub, while many areas are merely sand hills and stony desert. Over many of the drier areas, however, particularly in the inland areas of south-eastern Australia, the loss of rainfall by evaporation is made good to some extent by the development of irrigation schemes. Some of these schemes, such as those at the Murrumbidgee Irrigation Area in New South Wales and at Mildura in Victoria and Renmark in South Australia, have been very successful. The Snowy Mountains Hydro-electric Scheme will also result in the large-scale supply of water from the south-eastern highlands of Australia for use in the drier areas to the west of the ranges in New South Wales and Victoria. The future development of such schemes as these holds promise for the reclamation of many marginal areas in Australia, which because of low rainfall and high evaporation are at present of little economic value.

Since the loss by evaporation depends largely on the net radiation absorbed and consequently on the extent of the exposed area, tanks and dams so designed that the surface area shall be a minimum are advantageous. Further, the more protected they are from the direct rays of the sun and from winds by means of suitable tree planting the less will be the evaporation loss. The Mansfield process for the treatment of tanks and dams by a mono-molecular chemical film which materially reduces evaporation is a recent development which is already giving beneficial results, particularly on large water storage areas. Such improvements are of considerable importance to the pastoralists of the drier regions of Australia and to water supply authorities.

Further information on evaporation may be found in Hounam, C. E., *Evaporation in Australia*, Bureau of Meteorology Bulletin No. 44 (1961).

\* *Vapour pressure*—the pressure exerted by the water vapour of the atmosphere; *relative humidity*—the ratio of the existing vapour pressure to the saturated vapour pressure at the existing temperature, expressed as a percentage; *saturation deficit*—the difference between the saturation vapour pressure and the actual vapour pressure. See Year Book No. 53, page 37 for further information.

### Sunshine and cloud

The proportion of the sky covered by cloud is of considerable meteorological and climatological importance. A cloud cover inhibits both incoming and outgoing radiation and thus profoundly affects the temperature distribution and other factors at the earth's surface. Cloud amount is measured in eighths of the sky covered.

In Australia the seasonal changes in cloudiness correspond closely to that of rainfall. In the southern or more temperate parts of the continent, particularly in the coastal and low lying areas, the winter months are generally more cloudy than the summer. This is due to the formation of extensive areas of stratiform cloud and fog during the colder months, when the structure of the lower layers of the atmosphere favours the physical processes resulting in this type of cloud. A particularly strong annual periodicity exists in the monsoonal regions of northern Australia, where it is heavily clouded during the summer wet season and practically cloudless during the winter 'dry'. Cloudiness is higher near coasts and on the windward slopes of the mountains of eastern Australia and is least over the dry interior parts of the continent.

A close relationship exists between cloud amount and number of sunshine hours, and it is possible to estimate from cloud data the equivalent number of sunshine hours over a given period. These data can be incorporated with records of direct measurement of sunshine hours, and approximate distribution maps produced for Australia. Maps of the mean sunshine distribution for January and July are reproduced in plates 11 and 12 and indicate the main features of the variation over Australia in these months.

Except for Tasmania and a narrow fringe bordering the southern, eastern, and northern coasts, the greater part of the continent receives more than 3,000 hours of sunshine each year, and in Central Australia and the mid-western coast of Western Australia totals in excess of 3,500 hours occur. The extreme south coast receives in the main 2,000 to 2,500 hours annually, while the east coast regions of New South Wales and Queensland receive 2,500 to 3,000 hours. A minimum of less than 1,750 hours occurs on the west coast and highlands of Tasmania.

Mean amounts of cloud for each month at the capital cities are included in the tables on pages 39-46, as are the mean daily hours of sunshine. The latter figure is a good single measure of the relative climatic characteristics of the individual cities for different months of the year.

### Wind

Australia lies in those latitudes of the southern hemisphere where it is influenced largely by two wind systems:

- (a) the south-east trade winds blowing on the equatorial side of the mid-latitude anticyclones; and
- (b) the westerlies south of the mid-latitude anticyclones in which successive low pressure systems move eastward over the Southern Ocean.

The only pronounced seasonal variations of atmospheric pressure in the middle and high latitudes of the southern hemisphere are related to the latitudinal shift in the axes of the sub-tropical high pressure systems and to the change in the tracks of the migratory anticyclones. The latter systems move generally from west to east in the Australian region between the semi-permanent oceanic anticyclones of the Indian and Pacific Oceans. The mean path of these systems lies over southern Australia during the summer but moves northwards during the winter with the thermal equator. The movement is only of a few degrees of latitude but it is of very great importance to the climate of the Australian continent. During the summer months, when the anti-cyclones move on a more southerly track, the south-east trades affect the whole coast of eastern Australia north of around latitude 30° S., the westerlies retreating to higher latitudes, and conditions are more settled over southern Australia which then lies close to the axis of the anticyclones. In winter the anticyclones move further north, the trades affect only the northern parts of the continent, and southern Australia is exposed to the westerlies of the Southern Ocean.

In summer, with the retreat of the anticyclones to the south, the whole of northern and north-western Australia is exposed initially to light wind systems, and then during the period from December to April to the effects of the north-west monsoon. This process, which is associated with an inflow of north-west winds and intensive rains, is not as regular or persistent as the south-west monsoon of south-east Asia. However, it is a sufficiently regular feature of the climate of northern Australia to be designated as the north-west season, or, as it is best known in the area, 'the wet'. Its influence affects

areas as far south as central Queensland, but southern Queensland and the area east of the Great Dividing Range are largely still under the influence of the south-east trades. Fringe or marginal areas on the southern limits of the monsoonal penetration over the continent have a shorter and more uncertain 'wet' season, which in some years fails to appear at all. With the northward advance of the anticyclones in autumn, the monsoon gives way again to the trades, and 'the dry' of northern and north-western Australia commences.

The general features of these wind patterns may be seen in the wind rose diagrams of plates 13 and 14. It is important, however, to note the dynamic nature of the atmosphere, and that the continual growth, decay, and motion of the pressure systems result in a wide diversity of wind-flow types. Descriptions of wind conditions for particular geographical areas and seasons can thus be only of a very generalised kind. Further, local features can also be imposed on the overall wind pattern—channelling of winds due to topography (e.g. the high frequency of north-west winds in Hobart) and the marked summer sea breeze characteristics of most of the Australian coast, particularly near the Great Australian Bight as shown in the diagrams of 3 p.m. wind frequencies.

### Storms and tropical cyclones

In general there are two types of weather systems in Australia which produce very strong winds and heavy rainfalls over large areas of the continent:

- (a) the active depressions which move westwards over the Southern Ocean; and
- (b) the tropical cyclones or hurricanes of north-eastern and north-western Australia.

During the winter the southern shores of the continent are subject to the deep depressions of the southern low pressure belt. They are felt most severely over the south-west of Western Australia, the south-east of South Australia, southern Victoria, and Tasmania, and may move inland in all these regions bringing strong winds and heavy rainfall. Further extensions of this type of system frequently develop close to the coast of New South Wales, often bringing severe weather to this region and to southern Queensland. These are generally known as 'east coast lows'.

The frontal systems (i.e. the narrow zones characterised by cloud and bad weather separating two air masses of different density) which are associated with these depressions vary widely in character. A common type in south-east Australia is a cold front located in a  $\wedge$  shaped trough. Such a system usually brings very strong north to north-west winds in advance of the front with a very abrupt backing of the wind to colder west to south-westerly winds after the frontal passage. Such frontal passages are, in their most severe form, associated with thunderstorms and line squalls, heavy rain, and a change to cold winds and showers. These violent changes with the passage of a cold front and strong southerly winds frequently affect the New South Wales coast as far north as Newcastle during the winter, and are popularly known as 'southerly busters'.

The most extensive rains of inland Australia occur when moist tropical air which has moved inland is lifted by convergence ahead of a slow moving colder air mass moving from the southern Ocean. The coast of Queensland, particularly the section from Cooktown to Mackay and the adjacent waters, is subject to visitations by tropical cyclones (the 'hurricanes' of the Caribbean and 'typhoons' of the China Sea). These destructive systems can affect this region from December to April, normally forming in the Coral Sea, moving south-west close to the coast and then passing away to the south-east into the Pacific. They may, however, cross the coast from time to time and bring torrential rain and violent winds (often more than 100 mph) to the coastal regions.

Similar systems affect the north-west coast of Western Australia where they bear the local name of 'willy willies', a name which is, however, often used generally in Australia for minor local whirlwinds or dust devils. The season in this region generally lasts from November to April, the storms originating in the Timor or Arafura Seas travelling usually south-west and approaching the coast most commonly between latitudes 20° S. and 22° S. Thence the systems may move southwards following the coast, or sometimes cross inland bringing high rainfalls to the otherwise dry interior of the continent. A further region which is affected somewhat less frequently by tropical cyclones is the coast of Arnhem Land in the Northern Territory and the waters and coasts of the Gulf of Carpentaria.

Tropical cyclones, in general, soon lose their intensity on crossing from sea to land, but, although the wind force rapidly abates, they are still capable of producing the heavy rainfall which leads to flooding of coastal rivers, damage to stock and property, and general disruption of transport.



Thunderstorms which bring local heavy rain and strong winds are common to most of Australia. They are also of particular importance because of the lightning damage which they cause to power transmission lines, and have been extensively studied for the purpose of siting electrical installations as far as possible in areas of low thunderstorm occurrence. Plate 15 shows the number of days annually on which thunder is heard, which is a better observational criterion than lightning observed. The region of maximum thunderstorm activity is the extreme north-west of the continent and the region south-east of the Gulf of Carpentaria. In the more settled areas maximum thunderstorm occurrence is in central western and south-eastern Queensland and the highland areas of New South Wales. The minimum number of storms occur over the interior of South Australia, western New South Wales, and eastern Tasmania.

#### **Climatological tables**

The averages and extremes for a number of elements which have been determined from long series of observations at the Australian capitals up to and including the year 1966 (data for Canberra up to 1967) are given in the following pages, together with more limited data for the larger country towns of the Commonwealth.

Barometric and vapour pressure data, which were expressed in inches of mercury in years before 1966, are now expressed in millibars (1 millibar = 0.02953 inches of mercury).

The data for Canberra show the number of days of thunder; the other tables show the number of days of lightning.

The following points apply, except where otherwise stated. Where records are available, prevailing winds have been determined over a standard period of thirty years from 1911 to 1940. Other averages and extremes, including evaporation, temperature, and rainfall records for which thirty years normals have been published for a number of years past, have, since 1965, been extracted from all available years of actual record, but the number of years quoted does not include intervening periods when observations were temporarily discontinued.

## CLIMATOLOGICAL DATA: PERTH, WESTERN AUSTRALIA

(Lat. 31° 57' S., Long. 115° 51' E. Height above M.S.L. 210 ft)

## BAROMETER, WIND, EVAPORATION, LIGHTNING, CLOUDS, AND CLEAR DAYS

Month	Bar. corrected to 32° F. mn sea level and standard gravity from 9 a.m. and 3 p.m. readings (m.bars)	Wind (height of anemometer 71 ft)					Mean amt evapo- ration (in)	No. days light- ning	Mean amt clouds 9 a.m., 3 p.m., 9 p.m. (a)	No. clear days	
		Average miles per hour	Highest mean speed in one day (mph)	High- est gust speed (mph)	Prevailing direction						
					9 a.m.	3 p.m.					
No. of years of obser- vations . . . . .	82	30(b)	67	54	30(b)	30(b)	68	70	30(b)	30(b)	
January . . . . .	1,012.8	10.9	26.3	27/98	50	E	SSW	10.33	2	2.3	14
February . . . . .	1,012.8	10.7	21.5	6/08	54	ENE	SSW	8.70	1	2.5	13
March . . . . .	1,015.2	10.1	21.5	6/13	70	E	SSW	7.59	2	2.8	12
April . . . . .	1,017.9	8.5	31.5	25/00	63	ENE	SSW	4.65	1	3.4	9
May . . . . .	1,017.9	8.4	27.3	29/32	74	NE	WSW	2.79	3	4.3	6
June . . . . .	1,017.6	8.4	30.2	17/27	80	N	NW	1.85	2	4.7	5
July . . . . .	1,018.9	8.8	33.5	20/26	85	NNE	W	1.78	2	4.5	5
August . . . . .	1,018.6	9.4	31.9	15/03	97	N	WNW	2.43	1	4.5	6
September . . . . .	1,018.3	9.4	28.5	11/05	68	ENE	SSW	3.50	1	3.9	8
October . . . . .	1,016.9	10.0	26.7	6/16	65	SE	SW	5.39	1	3.8	8
November . . . . .	1,015.6	10.7	25.7	18/97	63	E	SW	7.57	1	3.1	9
December . . . . .	1,013.5	11.0	25.6	6/22	64	E	SSW	9.66	2	2.6	13
Year { Totals . . . . .	..	..	..	..	..	..	..	66.24	19	..	108
Averages . . . . .	1,016.3	9.7	..	..	E	SSW	..	..	..	3.5	..
Extremes . . . . .	..	..	33.5	97	..	..	..	..	..	..	..
20/7/26											

(a) Scale 0-8. (b) Standard thirty years normal (1911-1940).

## TEMPERATURE AND SUNSHINE

Month	Mean temperature (°Fahr.)			Extreme shade temperature (°Fahr.)		Extreme temperature (°Fahr.)		Mean daily hours sun- shine				
	Mean max.	Mean min.	Mean	Highest	Lowest	Highest in sun	Lowest on grass					
No. of years of observations	70	70	70	70	70	63(a)	68	69				
January . . . . .	85.1	63.6	74.3	110.7	29/56	48.6	20/25	177.3	22/14	39.5	20/25	10.4
February . . . . .	85.4	63.8	74.6	112.2	8/33	47.7	1/02	177.7	4/34	39.8	1/13	9.9
March . . . . .	81.9	61.6	71.7	106.4	14/22	45.8	8/03	167.0	19/18	36.7	8/03	8.8
April . . . . .	76.1	57.2	66.6	99.7	9/10	39.3	20/14	157.0	8/16	30.8	26/60	7.2
May . . . . .	69.1	52.7	60.9	90.4	2/07	34.3	11/14	146.0	4/25	25.0	31/64	5.8
June . . . . .	64.4	49.7	57.0	81.7	2/14	34.9	22/55	135.5	9/14	25.9	27/46	4.8
July . . . . .	62.9	47.9	55.4	76.4	21/21	34.2	7/16	133.2	13/15	25.1	30/20	5.2
August . . . . .	64.1	48.2	56.1	82.0	21/40	35.4	31/08	145.1	29/21	26.6	18/66	6.1
September . . . . .	66.7	50.1	58.4	90.9	30/18	36.7	6/56	153.6	29/16	27.2	(b)	7.1
October . . . . .	69.8	52.4	61.1	99.0	26/61	40.0	16/31	161.2	19/54	29.8	16/31	8.1
November . . . . .	76.1	56.7	66.4	104.6	24/13	42.0	1/04	167.0	30/25	35.0	3/47	9.5
December . . . . .	81.1	60.7	70.9	107.9	20/04	47.5	29/57	168.8	11/27	38.0	29/57	10.4
Year { Averages . . . . .	73.6	55.4	64.4	..	..	..	..	..	..	..	..	7.8
Extremes . . . . .	..	..	..	112.2	..	34.2	..	177.3	..	25.0	..	..
8/2/33 7/7/16 22/1/14 31/5/64												

(a) Records discontinued 1963. (b) 8/1952 and 6/1956.

## HUMIDITY, RAINFALL, AND FOG

Month	Vapour pres- sure mean 9 a.m. (m.bars)	Rel. hum. (%) at 9 a.m.			Rainfall (inches)					Fog Mean No. days			
		Mean	Highest mean	Lowest mean	Mean mthly	Mean No. of days of rain	Greatest monthly	Least monthly	Greatest in one day				
No. of years of observations	30(a)	30(a)	70	70	91	91	91	91	91	70			
January . . . . .	14.8	51	63	41	0.33	3	2.17	1879	Nil	(b)	1.74	27/79	0
February . . . . .	14.7	51	65	43	0.43	3	6.55	1955	Nil	(b)	3.43	17/55	0
March . . . . .	14.7	57	66	46	0.79	4	5.71	1934	Nil	(b)	3.03	9/34	1
April . . . . .	13.4	61	75	51	1.79	8	5.85	1926	Nil	1920	2.62	30/04	1
May . . . . .	12.4	70	81	61	4.94	14	12.13	1879	0.77	1949	3.00	17/42	1
June . . . . .	11.4	75	85	68	7.30	17	18.75	1945	2.16	1877	3.90	10/20	2
July . . . . .	10.9	76	88	69	6.89	18	16.73	1958	2.42	1876	3.00	4/91	1
August . . . . .	10.7	71	83	62	5.57	18	12.53	1945	0.46	1902	2.91	14/45	1
September . . . . .	11.6	66	75	58	3.18	14	7.84	1923	0.34	1916	1.86	18/66	0
October . . . . .	11.7	60	75	52	2.18	12	7.87	1890	0.15	1946	1.73	3/33	0
November . . . . .	12.7	52	66	41	0.83	6	2.78	1916	Nil	1891	1.54	29/56	0
December . . . . .	13.9	51	63	39	0.59	4	3.17	1951	Nil	(b)	1.84	3/51	0
Year { Totals . . . . .	..	..	..	..	34.82	121	..	..	..	..	..	..	7
Averages . . . . .	12.7	62	..	..	..	..	18.75	..	..	..	..	..	..
Extremes . . . . .	..	..	88	39	..	..	6/1945	..	Nil	(c)	3.90	10/6/20	..

(a) Standard thirty years normal (1911-1940). (b) Various years. (c) November to April, various years.  
Dates in italics relate to nineteenth century.

## CLIMATOLOGICAL DATA: DARWIN, NORTHERN TERRITORY

(Lat. 12° 28' S., Long. 130° 51' E. Height above M.S.L. 97 ft)

## BAROMETER, WIND, EVAPORATION, LIGHTNING, CLOUDS, AND CLEAR DAYS

Month	Bar. corrected to 32° F. mn sea level and standard gravity from 9 a.m. and 3 p.m. readings (m.bars)	Wind		Highest mean speed in one day (mph)	High- est gust speed (mph)	Prevailing direction		Mean amt evapora- tion (in)	No. days light- ning	Mean amt clouds		No. clear days
		Average miles per hour				9 a.m.	3 p.m.			9 a.m., 3 p.m., (a)		
No. of years of obser- vations	85	15	..	16(b)	..	..	..	9	30	30	30	
January	1,006.1	6.1	..	66	NW & S	W & NW	6.04	16	5.7	1		
February	1,006.3	6.7	..	63	W & S	W & NW	5.61	16	5.6	1		
March	1,007.2	5.3	..	98	SE	W & NW	6.14	14	5.0	3		
April	1,009.2	6.1	..	42	SE	E	6.49	6	2.8	11		
May	1,010.9	6.5	..	39	SE	E	7.27	1	1.7	19		
June	1,012.2	6.5	..	40	SE	E & SE	6.97	0	1.3	22		
July	1,012.7	6.2	..	39	SE	E & SE	7.05	0	1.1	23		
August	1,012.6	5.9	..	45	SE	NW & N	7.73	0	1.0	23		
September	1,011.7	6.2	..	40	SE & S	NW & N	8.07	1	1.6	18		
October	1,010.5	6.2	..	53	S	NW & N	9.17	8	2.6	10		
November	1,008.7	5.5	..	58	W & S	NW & N	8.20	17	3.8	4		
December	1,006.9	6.2	..	66	NW & S	NW & N	7.18	17	4.8	2		
Year { Totals	..	..	..	..	..	..	..	85.92	96	..	137	
Year { Averages	1,009.6	6.1	..	..	98	SE	NW	..	..	3.1	..	
Year { Extremes	..	..	..	..	..	..	..	..	..	..	..	

(a) Scale 0-8. (b) Several incomplete years.

## TEMPERATURE AND SUNSHINE

Month	Mean temperature (°Fahr.)			Extreme shade temperature (°Fahr.)		Extreme temperature (°Fahr.)		Mean daily hours sun- shine
	Mean max.	Mean min.	Mean	Highest	Lowest	Highest in sun	Lowest on grass	
No. of years of observations	85	85	85	85(a)	85(a)	25(b)	..	15
January	89.9	77.0	83.5	100.0	2/82	68.0	20/92	5.8
February	89.5	76.6	83.1	100.9	20/87	63.0	25/49	6.2
March	90.4	76.6	83.5	102.0	(d)	66.6	31/45	6.9
April	91.7	75.5	83.6	104.0	7/83	60.8	11/43	8.3
May	90.2	72.2	81.2	102.3	8/84	59.1	14/64	9.5
June	87.7	68.9	78.3	98.6	17/37	53.8	23/63	9.8
July	86.9	67.2	77.1	98.0	17/88	50.7	29/42	9.8
August	88.7	69.3	79.0	98.0	19/00	56.4	11/63	10.4
September	90.9	73.6	82.3	102.0	20/82	62.1	9/63	9.9
October	92.6	77.0	84.8	104.8	17/92	66.9	8/66	9.5
November	92.9	77.6	85.3	103.3	9/84	66.8	4/50	8.2
December	91.7	77.6	84.7	102.0	9/83	65.0	4/60	6.9
Year { Averages	90.3	74.1	82.2	..	..	170.4	..	8.4
Year { Extremes	..	..	..	104.8	50.7	170.4	..	..
				17/10/1892	29/7/42	14/11/37		

(a) Years 1882-1941 at Post Office, 1942-1966 at Aerodrome; sites not strictly comparable. (b) Records discontinued 1942.  
(c) 5/1938 and 23/1938. (d) 26/1883 and 27/1883. (e) 28/1916 and 3/1921.

## HUMIDITY, RAINFALL, AND FOG

Month	Vapour pres- sure mean 9 a.m. (m.bars)	Rel. hum. (%) at 9 a.m.			Rainfall (inches)				Fog Mean No. days
		Mean	Highest mean	Lowest mean	Mean mthly	No. of days of rain	Greatest monthly	Least monthly	
No. of years of observations	85	85	57(a)	57(a)	98	69	98(b)	98(b)	30
January	31.1	80	89	69	15.09	19	27.86	1896	0.0
February	31.1	81	88	71	12.81	18	28.23	1956	0.0
March	30.7	80	84	69	10.52	17	23.42	1965	0.0
April	27.0	72	80	60	3.98	8	23.74	1891	0.0
May	21.8	65	76	49	0.52	1	10.27	1882	0.0
June	18.7	63	75	52	0.11	0	1.53	1902	0.4
July	17.6	62	71	47	0.05	0	2.56	1900	1.1
August	20.6	66	73	53	0.10	0	3.30	1947	0.7
September	24.7	68	73	54	0.57	2	4.26	1942	0.2
October	27.7	68	72	60	2.15	5	13.34	1954	0.0
November	29.3	70	75	62	5.20	11	15.72	1938	0.0
December	30.5	75	83	65	9.60	16	22.94	1965	0.0
Year { Totals	..	..	..	..	60.70	97	..	..	2.4
Year { Averages	25.9	71	..	..	..	..	28.23	..	..
Year { Extremes	..	..	89	47	..	..	..	Nil (d)	..
							2/1956	7/1/1897	..

(a) 1882 to 1938 at Post Office. (b) The figures below are the highest or lowest recorded at either the Post Office or Aerodrome sites.  
(c) Various years. (d) April to October, various years.

Dates in italics relate to nineteenth century.

## CLIMATOLOGICAL DATA: ADELAIDE, SOUTH AUSTRALIA

(Lat. 34° 56' S., Long. 138° 35' E. Height above M.S.L. 140 ft)

## BAROMETER, WIND, EVAPORATION, LIGHTNING, CLOUDS, AND CLEAR DAYS

Month	Bar. corrected to 32° F. mn sea level and standard gravity from 9 a.m. and 3 p.m. readings (m.bars)	Wind (height of anemometer 75 ft)					Mean amt evapora- tion (in)	No. days light- ning	Mean amt clouds 9 a.m., 3 p.m., 9 p.m. (a)	No. clear days
		Average miles per hour	Highest mean speed in one day (mph)	High- est gust speed (mph)	Prevailing direction					
					9 a.m.	3 p.m.				
No. of years of observa- tions	110	15(b)	15(b)	50	30(c)	30(c)	95	95	99	52
January	1,013.2	7.8	18.2	3/55	72	SW	9.29	2.2	2.9	12.4
February	1,014.3	7.4	17.7	1/64	66	NE	SW	7.52	1.7	2.9
March	1,017.2	6.9	19.1	24/64	78	S	SW	6.26	1.8	3.2
April	1,019.9	6.9	23.2	10/56	81	NE	SW	3.78	1.5	4.1
May	1,020.0	7.0	23.5	19/53	70	NE	NW	2.30	1.5	4.7
June	1,019.7	7.3	18.4	12/53	67	NE	N	1.47	1.5	5.0
July	1,019.9	7.2	20.4	13/64	92	NE	NW	1.47	1.5	4.8
August	1,019.1	7.8	23.7	8/55	75	NE	SW	2.09	1.8	4.2
September	1,017.6	8.0	21.7	16/65	69	NNE	SW	3.13	1.8	4.2
October	1,015.9	8.3	21.9	6/62	75	NNE	SW	5.03	2.7	4.2
November	1,015.1	8.4	20.6	8/52	81	SW	SW	6.78	3.0	3.9
December	1,013.3	8.2	17.9	6/52	75	SW	SW	8.62	2.2	3.3
Year { Totals							57.74	23.2		85.8
Year { Averages	1,017.0	7.6			NE	SW			3.9	
Year { Extremes			23.7							
			8/8/55							

(a) Scale 0-8. (b) Records taken from a Munro Anemometer 1952-1966. (c) Standard thirty years' normal (1911-1940).

## TEMPERATURE AND SUNSHINE

Month	Mean temperature (°Fahr.)			Extreme shade temperature (°Fahr.)		Extreme temperature (°Fahr.)		Mean daily hours sun- shine				
	Mean max.	Mean min.	Mean	Highest	Lowest	Highest in sun	Lowest on grass					
No. of years of observations	110	110	110	110	110	54(a)	106	85				
January	85.5	61.4	73.4	117.7	12/39	45.1	21/84	180.0	18/82	36.5	14/79	9.9
February	85.0	61.7	73.3	113.6	12/99	45.5	23/18	170.5	10/00	35.8	23/26	9.3
March	80.6	59.0	69.8	110.5	9/34	43.9	21/33	174.0	17/83	32.1	21/33	7.8
April	72.8	54.5	63.7	98.6	5/38	39.6	15/59	155.0	1/83	28.0	14/63	5.9
May	65.7	50.4	58.0	89.5	4/21	36.9	(b)	148.2	12/79	25.6	19/28	4.7
June	60.5	46.8	53.7	78.1	4/57	32.5	(c)	138.8	18/79	21.0	24/44	4.1
July	58.9	44.9	51.9	74.0	11/06	32.0	24/08	134.5	26/90	22.1	30/29	4.3
August	61.7	46.0	53.8	85.0	31/11	32.3	17/59	140.0	31/92	22.8	11/29	5.2
September	66.2	48.1	57.2	95.1	30/61	32.7	4/58	160.5	23/82	25.0	25/27	6.1
October	71.8	51.5	61.7	102.9	21/22	36.1	20/58	162.0	30/21	27.8	(d)	7.1
November	77.6	55.2	66.5	113.5	21/65	40.8	2/09	166.9	20/78	31.5	2/09	8.5
December	82.3	58.8	70.6	114.6	29/31	43.0	(e)	175.7	7/99	32.5	4/84	9.4
Year { Averages	72.4	53.2	62.8	..	..	..	..	180.0	..	..	..	6.9
Year { Extremes	..	..	..	117.7	..	32.0	..	180.0	..	21.0	..	..
				12/1/39		24/7/08		18/1/1882		24/6/44		

(a) Records incomplete 1931-1934. Discontinued 1934. (b) 26/1895 and 24/1904. (c) 27/1876 and 24/1944. (d) 4/1931 and 2/1918. (e) 16/1861 and 4/1906.

## HUMIDITY, RAINFALL, AND FOG

Month	Vapour pres- sure mean 9 a.m. (m.bars)	Rel. hum. (%) at 9 a.m.			Rainfall (inches)					Fog Mean No. days		
		Mean	Highest mean	Lowest mean	Mean mthly	Mean No. of days of rain	Greatest monthly	Least monthly	Greatest in one day			
No. of years of observations	99	99	99	99	128	128	128	128	128	67		
January	11.6	39	59	29	0.76	4	3.31	1941	Nil (a)	2.30	2/89	0.0
February	12.4	43	57	30	0.76	4	6.09	1925	Nil (a)	5.57	7/25	0.0
March	11.9	47	58	29	0.95	5	4.59	1878	Nil (a)	3.50	5/78	0.0
April	11.4	56	72	37	1.72	10	5.81	1938	Nil 1945	3.15	5/60	0.0
May	10.9	67	76	49	2.71	13	7.75	1875	0.10 1934	2.75	1/53	0.4
June	9.8	75	84	63	2.90	15	8.58	1916	0.23 1958	2.11	1/20	1.1
July	9.4	76	87	66	2.61	16	5.44	1890	0.39 1899	1.75	10/65	1.3
August	9.7	70	78	54	2.44	16	6.20	1852	0.33 1944	2.23	19/51	0.6
September	10.0	60	72	44	2.01	13	5.83	1923	0.27 1951	1.59	20/23	0.2
October	10.3	50	67	29	1.74	11	5.24	1949	0.17 1914	2.24	16/08	0.0
November	10.4	44	58	31	1.22	8	4.45	1839	0.08 1922	2.96	12/60	0.0
December	11.2	40	56	31	1.04	6	3.98	1861	Nil 1904	2.42	23/13	0.0
Year { Totals					20.86	121						3.6
Year { Averages	10.7	53										
Year { Extremes			87	29			8.58		Nil (b)	5.57		
							6/1916				7/2/25	

(a) Various years. (b) December to April, various years.  
Dates in italics relate to nineteenth century.

## CLIMATOLOGICAL DATA: BRISBANE, QUEENSLAND

(Lat. 27° 28' S., Long. 153° 2' E. Height above M.S.L. 134 ft)

## BAROMETER, WIND, EVAPORATION, LIGHTNING, CLOUDS, AND CLEAR DAYS

Month	Bar. corrected to 32° F. mn sea level and standard gravity from 9 a.m. and 3 p.m. readings (m.bars)	Wind (height of anemometer 105 ft)							Mean amt evapora- tion (in)	No. days light- ning	Mean amt clouds		No. clear days
		Average miles per hour	Highest mean speed in one day (mph)	High- est gust speed (mph)	Prevailing direction		9 a.m., 3 p.m.	9 a.m., 3 p.m. (a)					
					9 a.m.	3 p.m.							
No. of years of observa- tions	80	51	51	51	30(b)	30(b)	58	80	76(c)	59			
January	1,012.7	7.7	19.7	23/47	58	SE	NE	6.91	6.5	4.6	3.3		
February	1,012.4	7.5	23.2	21/54	67	SE	NE	5.47	5.3	4.7	2.4		
March	1,014.6	7.2	20.3	1/29	66	S	E	5.23	4.0	4.3	5.6		
April	1,017.4	6.5	16.7	3/25	64	S	E	4.30	3.3	3.6	7.6		
May	1,018.5	6.2	17.9	17/26	49	SW	SE	3.41	3.0	3.3	10.0		
June	1,018.4	6.3	19.0	14/28	59	SW	W & SW	2.74	2.0	3.3	10.4		
July	1,018.7	6.1	22.0	13/54	69	SW	W & SW	2.95	2.0	2.9	13.3		
August	1,018.9	6.3	14.8	4/35	62	SW	NE	3.76	3.2	2.6	13.5		
September	1,017.6	6.5	16.1	1/48	63	SW	NE	4.58	4.8	2.7	12.6		
October	1,015.8	6.9	15.7	1/41	62	S	NE	5.81	6.1	3.4	8.4		
November	1,014.2	7.3	15.5	10/28	69	SE & N	NE	6.49	7.6	3.9	5.8		
December	1,012.0	7.5	19.5	15/26	79	SE	NE	7.19	8.9	4.3	4.2		
Year { Totals								58.84	56.7		97.1		
Year { Averages	1,015.9	6.8	..	..	..	SW	NE	..	..	3.6	..		
Year { Extremes	..	..	23.2	..	79	..	..	..	..	..	..		
			21/2/54										

(a) Scale 0-8.

(b) Standard thirty years normal (1911-1940).

(c) July to December inclusive, seventy-four years.

## TEMPERATURE AND SUNSHINE

Month	Mean temperature (°Fahr.)			Extreme shade temperature (°Fahr.)			Extreme temperature (°Fahr.)		Mean daily hours sun- shine	
	Mean max.	Mean min.	Mean	Highest	Lowest	Highest in sun	Lowest on grass			
No. of years of observations	80	80	80	79	79	50(a)	78	58		
January	84.9	68.9	76.9	109.8	26/40	58.8	4/93	169.0	2/37	7.6
February	84.1	68.7	76.4	105.7	21/25	58.5	23/31	165.2	6/10	7.1
March	82.1	66.6	74.3	101.8	13/65	52.4	29/13	162.5	6/39	6.8
April	78.8	61.6	70.2	95.2	(b)	44.4	25/25	153.8	11/16	7.1
May	73.6	55.5	64.5	90.3	21/23	40.6	30/51	147.0	1/10	6.9
June	69.3	51.2	60.3	88.9	19/18	36.3	29/08	136.0	3/18	6.5
July	68.4	48.8	58.6	84.3	23/46	36.1	(c)	146.1	20/15	7.1
August	71.1	50.0	60.5	91.0	14/46	36.9	13/64	141.9	20/17	7.9
September	75.2	54.7	64.9	100.9	22/43	40.7	1/96	155.5	26/03	8.3
October	79.0	60.1	69.5	105.3	30/58	43.3	3/99	157.4	31/18	8.3
November	81.9	64.3	73.1	106.1	18/13	48.5	2/05	162.3	7/89	8.2
December	84.6	67.3	75.9	105.9	26/93	56.3	5/55	165.9	28/42	8.2
Year { Averages	77.8	59.8	68.8	109.8	..	36.1	..	169.0	..	7.5
Year { Extremes	..	..	..	109.8	26/1/40	36.1	(c)	169.0	23.9	..
								2/1/37	11/7/1890	

(a) From 1887 to March 1947, excluding 1927 to 1936.

(b) 9/1896 and 5/1903.

(c) 12/7/1894 and 2/7/1896.

## HUMIDITY, RAINFALL, AND FOG

Month	Vapour pres- sure mean 9 a.m. (m.bars)	Rel. hum. (%) at 9 a.m.			Rainfall (inches)				Fog Mean No. days
		Mean	Highest mean	Lowest mean	Mean mthly	No. of days of rain	Greatest monthly	Least monthly	
No. of years of observations	64(a)	80	79	79	115	107	114(b)	114(b)	80
January	21.7	66	79	53	6.19	13	27.72	1895	0.5
February	22.0	69	82	55	6.39	14	40.39	1893	0.6
March	20.9	71	85	56	5.78	15	34.04	1870	1.3
April	17.5	71	80	56	3.51	12	15.28	1867	2.3
May	14.3	71	85	59	2.68	9	13.85	1876	3.3
June	12.1	72	84	54	2.65	8	14.03	1873	3.1
July	11.1	70	88	53	2.20	7	9.10	1965	3.2
August	11.7	67	80	53	1.85	7	14.67	1879	3.7
September	13.8	63	76	47	1.96	8	5.43	1886	2.7
October	16.0	60	72	48	2.70	9	11.41	1949	1.2
November	18.1	60	72	45	3.68	10	12.40	1917	0.5
December	20.1	62	70	51	5.09	12	17.36	1942	0.4
Year { Totals					44.67	124			22.8
Year { Averages	16.6	67					40.39		
Year { Extremes			88	45			2/1893	Nil	
								(e)	
								18.31	
								21/1/1887	

(a) All records up to and including 1950. (b) Records incomplete for various years between 1846 and 1859. (c) 1841 and 1951. (d) 1862, 1869, and 1880. (e) Various months in various years.

Dates in italics relate to nineteenth century.

## CLIMATOLOGICAL DATA: SYDNEY, NEW SOUTH WALES

(Lat. 33° 52' S., Long. 151° 12' E. Height above M.S.L. 138 ft)

## BAROMETER, WIND, EVAPORATION, LIGHTNING, CLOUDS, AND CLEAR DAYS

Month	Bar. corrected to 32° F. mn sea level and standard gravity from 9 a.m. and 3 p.m. readings (m.bars)	Wind (height of anemometer 58 ft)						Mean amt evaporation (in)	No. days lightning	Mean amt clouds 9 a.m., 3 p.m., 9 p.m. (a)	No. clear days
		Average miles per hour	Highest mean speed in one day (mph)	High-est gust speed (mph)	Prevailing direction						
					9 a.m.	3 p.m.					
No. of years of observations	57	25(b)	25(b)	25(b)	25(b)	25(b)	86	107	105	56	
January	1,012.9	7.6	18.8	10/49	93	NE	NE	5.32	4.7	4.7	5.1
February	1,013.6	7.2	18.8	18/57	63	NE	ENE	4.20	4.1	4.8	4.6
March	1,016.4	6.5	20.7	10/44	58	WNW	ENE	3.65	3.6	4.4	5.9
April	1,018.1	6.3	22.5	24/44	72	W	ENE	2.71	3.4	4.1	7.1
May	1,018.6	6.5	21.0	18/55	63	W	ENE	1.93	2.7	3.9	7.9
June	1,018.8	7.2	22.4	10/47	84	W	WSW	1.49	2.0	4.0	8.3
July	1,018.4	7.1	21.3	20/51	66	W	WSW	1.56	2.1	3.5	10.4
August	1,018.0	7.5	24.6	9/51	68	WNW	WNW	2.02	2.8	3.3	10.5
September	1,017.1	7.2	21.8	23/42	70	WNW	NE	2.75	3.6	3.5	9.1
October	1,015.0	7.6	24.5	1/57	95	WNW	ENE	3.91	4.4	4.1	6.7
November	1,013.4	7.7	19.8	21/54	71	WNW	ENE	4.70	5.2	4.5	5.4
December	1,012.0	7.6	22.5	11/52	75	NE	ENE	5.38	5.6	4.6	5.0
Year { Totals	..	..	..	..	..	..	..	39.62	44.2	..	86.0
Year { Averages	1,016.0	7.2	..	..	..	WNW	ENE	..	..	4.2	..
Year { Extremes	..	..	24.6	95	..	..	..	..	..	..	..
9/8/51											

(a) Scale 0-8. (b) Years 1938-1962 inclusive.

## TEMPERATURE AND SUNSHINE

Month	Mean temperature (°Fahr.)			Extreme shade temperature (°Fahr.)		Extreme temperature (°Fahr.)		Mean daily hours sun- shine				
	Mean max.	Mean min.	Mean	Highest	Lowest	Highest in sun	Lowest on grass					
No. of years of observations	108	108	108	108	108	84(a)	108	46				
January	78.2	65.0	71.6	113.6	14/39	51.1	18/49	164.3	26/15	43.7	6/25	7.3
February	77.8	65.2	71.5	107.8	8/26	49.3	28/63	168.3	14/39	42.8	22/33	6.8
March	76.0	63.2	69.6	102.6	3/69	48.8	14/86	158.3	10/26	39.9	17/13	6.3
April	71.7	58.0	64.9	91.4	1/36	44.6	27/64	144.1	10/77	33.3	24/09	6.1
May	66.2	52.2	59.2	86.0	1/19	40.2	22/59	129.7	1/96	29.3	25/17	5.8
June	61.8	48.4	55.1	80.4	11/31	35.7	22/32	125.5	2/23	28.0	22/32	5.3
July	60.3	46.1	53.3	78.3	22/26	35.9	12/90	124.7	19/77	24.0	4/93	6.1
August	63.3	47.7	55.5	86.8	24/54	36.8	3/72	149.0	30/78	26.1	4/09	6.8
September	67.3	51.4	59.3	94.2	26/65	40.8	2/45	142.2	12/78	30.1	17/05	7.1
October	71.4	55.9	63.7	99.4	4/42	42.2	6/27	152.2	20/33	32.7	9/05	7.3
November	74.3	59.6	66.9	104.5	6/46	45.8	1/05	158.5	28/99	36.0	6/06	7.6
December	76.9	62.9	69.9	108.0	20/57	48.4	3/24	164.5	27/89	41.4	3/24	7.3
Year { Averages	70.4	56.3	63.3	..	..	..	..	..	..	..	..	6.7
Year { Extremes	..	..	..	113.6	35.7	..	..	168.3	..	24.0	..	..
				14/1/39	22/6/32			14/2/39		4/7/1893		

(a) Records discontinued 1946.

## HUMIDITY, RAINFALL, AND FOG

Month	Vapour pres- sure mean 9 a.m. (m.bars)	Rel. hum. (%) at 9 a.m.			Rainfall (inches)					Fog Mean No. days			
		Mean	Highest mean	Lowest mean	Mean mthly	Mean No. of days of rain	Greatest monthly	Least monthly	Greatest in one day				
No. of years of observa- tions . . . . .	91	91	91	91	108	108	108	108	108	46			
January . . . . .	18.8	68	78	58	3.70	13	15.26	1911	0.25	1932	7.08	13/11	0.3
February . . . . .	19.3	70	81	60	4.40	13	22.22	1956	0.12	1939	8.90	25/73	0.7
March . . . . .	18.3	74	85	62	5.02	14	20.52	1942	0.42	1876	11.05	28/42	1.6
April . . . . .	15.1	74	87	63	5.10	13	24.49	1861	0.06	1868	7.52	29/60	2.3
May . . . . .	12.2	77	90	63	4.99	14	23.03	1919	0.14	1957	8.36	28/89	3.3
June . . . . .	10.3	75	89	63	5.18	12	25.30	1950	0.16	1962	5.17	16/84	2.7
July . . . . .	9.4	74	88	59	4.32	11	13.23	1950	0.10	1946	7.80	7/31	2.3
August . . . . .	9.7	69	84	54	3.14	11	14.89	1899	0.04	1885	5.33	2/60	1.9
September . . . . .	11.2	65	79	49	2.75	12	14.05	1879	0.08	1882	5.69	10/79	1.0
October . . . . .	13.1	62	77	46	2.99	12	11.13	(a)	0.21	1867	6.37	13/02	0.5
November . . . . .	15.0	62	79	42	3.00	12	20.36	1961	0.07	1915	5.24	27/55	0.5
December . . . . .	17.4	65	77	51	3.12	13	15.82	1920	0.23	1913	4.75	13/10	0.4
Year { Totals . . . . .	..	..	..	..	47.70	150	..	..	..	..	..	..	17.6
Year { Averages . . . . .	14.1	69	..	..	..	..	..	..	..	..	..	..	..
Year { Extremes . . . . .	..	..	90	42	..	..	25.30	..	0.04	..	11.05	..	..
							6/1950		8/1885		28/3/42		

(a) 1916 and 1959.

Dates in italics relate to nineteenth century.

## CLIMATOLOGICAL DATA: CANBERRA, AUSTRALIAN CAPITAL TERRITORY

(Lat. 35° 18' S., Long. 149° 6' E. Height above M.S.L., 1,906 ft)

## BAROMETER, WIND, EVAPORATION, THUNDER, CLOUDS, AND CLEAR DAYS

Month	Bar. corrected to 32° F. mn sea level and standard gravity from 9 a.m. and 3 p.m. readings (m.bars)	Wind (height of anemometer 20 ft)						Mean amt clouds 9 a.m., and 3 p.m., (a)	No. days thunder	No. clear days
		Average miles per hour	Highest mean speed in one day (mph)	Highest gust speed (mph)	Prevailing direction		Mean amt evaporation (in)			
					9 a.m.	3 p.m.				
No. of years of observations	28	37(b)	37(b)	28(c)	28(c)	28(c)	38(d)	28	28	37
January	1,011.1	4.4	14.9	23/33	65	NW	W	7.89	2.4	4.0
February	1,012.5	3.9	15.3	24/33	65	SSE	WNW	6.15	1.9	4.3
March	1,016.2	3.4	18.2	28/42	69	SSE	NW	5.04	1.1	4.1
April	1,018.0	3.2	18.6	8/45	61	S	NW	3.26	0.7	4.2
May	1,020.3	2.9	13.2	27/58	65	NW	NW	1.90	0.4	4.5
June	1,020.2	3.1	16.1	2/30	60	NW	NW	1.22	0.2	4.6
July	1,020.3	3.2	23.4	7/31	63	NNW	NW	1.22	0.1	4.5
August	1,018.3	3.7	15.7	25/36	70	NW	NW	1.73	0.5	4.2
September	1,017.6	4.0	17.4	28/34	61	NW	NW	2.78	1.0	4.0
October	1,014.5	4.1	14.7	12/57	74	NW	NW	4.31	1.7	4.3
November	1,012.0	4.5	17.2	28/42	79	NW	NW	5.76	2.7	4.6
December	1,010.4	4.4	16.1	11/38	66	NW	W	7.23	3.0	4.3
Year { Totals							48.49	15.7		62.2
Averages	1,016.3	3.7	..	..	..	NW	NW	..	..	4.3
Extremes	..	..	23.4	7/7/31	79	..	..	..	..	..

(a) Scale 0-8. (b) Recorded at Forestry and Timber Bureau, Yarralumla, where a cup anemometer is installed. (c) Recorded at Meteorological Office, R.A.A.F. Fairbairn, where a Dines Pressure Tube anemometer is installed. (d) Recorded at Forestry and Timber Bureau, Yarralumla.

## TEMPERATURE AND SUNSHINE

Month	Mean temperature (° Fahr.)			Extreme shade temperature (° Fahr.)		Extreme temperature (° Fahr.)		Mean daily hours sunshine
	Mean max.	Mean min.	Mean	Highest	Lowest	Highest in sun	Lowest on grass	
No. of years of observations	28	28	28	28	28	..	16	30
January	81.7	54.9	68.3	(a) 103.4	25/45	35.3	1/56	9.1
February	79.6	54.4	67.0	100.8	1/43	37.4	16/62	8.3
March	75.8	50.5	63.1	97.6	9/40	30.1	24/67	7.3
April	67.1	43.6	55.3	84.3	1/44	27.2	(c)	6.9
May	58.7	36.8	47.7	76.1	10/67	18.8	16/67	5.6
June	53.6	33.7	43.7	68.2	3/57	16.7	8/57	4.6
July	51.7	31.7	41.7	61.4	(d)	16.3	5/57	5.1
August	54.7	33.4	44.1	71.0	24/54	18.3	9/41	6.0
September	60.6	36.9	48.7	83.4	26/65	22.0	5/40	6.8
October	66.2	42.3	54.3	90.8	13/46	26.0	4/57	7.0
November	72.3	46.6	59.5	101.8	19/44	28.8	28/67	8.8
December	78.6	51.9	65.3	101.9	21/53	34.0	18/64	9.0
Year { Averages	66.7	43.1	54.9	..	..	..	..	7.0
Extremes	..	..	..	103.4	16.3	..	9.8	..
				25/1/45	5/7/57	..	16/6/59	..

(a) A temperature of 109.0 was recorded at the former Acton station on 11.1.39. (b) 30/58 and 24/67. (c) 16/63 and 14/65. (d) 2/46 and 9/54.

## HUMIDITY, RAINFALL, AND FOG

Month	Vapour pressure mean 9 a.m. (m.bars)	Rel. hum. (%) at 9 a.m.			Rainfall (inches)				Fog Mean No. days
		Mean	Highest mean	Lowest mean	Mean mthly	No. of days of rain	Greatest monthly	Least monthly	
No. of years of observations	38(a)	28	28	28	28	28	28	28	28
January	12.91	58	69	39	2.35	7	6.46	1941	0.5
February	13.71	64	71	40	2.10	7	5.70	1948	0.7
March	13.00	67	82	48	2.13	7	12.29	1950	2.5
April	10.80	74	81	54	1.93	8	6.06	1940	2.8
May	8.70	81	89	67	2.02	9	5.62	1948	6.3
June	7.31	84	90	71	1.60	9	4.96	1956	6.3
July	6.81	83	91	73	1.55	10	4.07	1960	6.6
August	7.25	78	88	60	1.65	11	4.18	1955	3.9
September	8.16	72	78	51	1.93	10	4.48	1962	2.0
October	9.65	63	72	46	2.72	12	5.81	1959	1.7
November	10.49	56	67	38	2.38	9	5.31	1961	1.0
December	11.85	54	70	37	2.31	8	6.31	1960	0.1
Year { Totals	..	..	..	..	24.60	107	..	..	34.4
Averages	10.06	69	..	37	..	..	12.29	3/50	..
Extremes	..	..	91	..	..	..	Nil	12/67	..
								4.13	..
								21/10/59	..

(a) Recorded at Forestry and Timber Bureau, Yarralumla. (b) 1943 and 1965.

Data shown in the above tables relate to the Meteorological Office, R.A.A.F., Fairbairn, except where otherwise indicated, and cover years up to 1967.

## CLIMATOLOGICAL DATA: MELBOURNE, VICTORIA

(Lat. 37° 49' S., Long. 144° 58' E. Height above M.S.L., 114 ft)

## BAROMETER, WIND, EVAPORATION, LIGHTNING, CLOUDS, AND CLEAR DAYS

Month	Bar. corrected to 32° F. mn sea level and standard gravity from 9 a.m. and 3 p.m. readings (m.bars)	Wind (height of anemometer 93 ft)					Mean amt evapora- tion (in)	No. days light- ning	Mean amt clouds 9 a.m., 3 p.m., 9 p.m. (a)	No. clear days	
		Average miles per hour	Highest mean speed in one day (mph)	High- est gust speed (mph)	Prevailing direction						
					9 a.m.	3 p.m.					
No. of years of observa- tions	110	27(b)	54	57	48	48	94	59	109	59	
January	1,012.8	8.5	21.1	27/41	66	S	S	6.49	1.8	4.1	6.6
February	1,014.3	8.2	19.0	13/47	74	S & SW	S	5.08	2.3	4.1	5.9
March	1,016.8	7.5	18.0	3/61	66	N	S	4.12	1.5	4.4	5.3
April	1,019.2	7.1	19.9	16/43	67	N	S	2.50	1.1	4.8	4.2
May	1,019.0	7.4	20.5	4/61	72	N	N & S	1.55	0.5	5.2	2.9
June	1,018.7	7.6	22.8	16/47	64	N	N	1.15	0.4	5.3	2.7
July	1,018.6	8.2	22.7	22/60	68	N	N	1.13	0.4	5.2	2.6
August	1,017.7	8.0	21.3	20/42	65	N	N & S	1.52	0.7	5.0	2.7
September	1,015.9	8.2	21.1	15/64	69	N	S	2.36	1.0	4.8	3.6
October	1,014.7	8.3	18.6	12/52	69	N	S	3.40	1.6	4.9	3.4
November	1,013.9	8.6	21.2	13/58	71	SW	S	4.52	2.2	4.9	3.2
December	1,012.4	8.6	21.0	12/52	61	S & SW	S	5.78	2.2	4.5	4.4
Year { Totals								39.59	15.7		47.6
Year { Averages	1,016.2	8.0				N	S			4.8	
Year { Extremes			22.8		74						
			16/6/47								

(a) Scale 0-8. (b) Early records not comparable.

## TEMPERATURE AND SUNSHINE

	Mean temperature (° Fahr.)			Extreme shade temperature (° Fahr.)			Extreme temperature (° Fahr.)		Mean daily hours sun- shine
Month	Mean max.	Mean min.	Mean	Highest		Lowest	Highest in sun	Lowest on grass	
No. of years of observations	111	111	111	111		111	86(a)	107	51
January	78.4	56.9	67.7	114.1	13/39	42.0 28/85	178.5 14/62	30.2 28/85	8.7
February	78.0	57.3	67.6	109.5	7/01	40.2 24/24	167.5 15/70	30.9 6/91	7.7
March	74.7	54.9	64.8	107.0	11/40	37.1 17/84	164.5 11/68	28.9 (b)	6.6
April	68.1	50.7	59.4	94.8	5/38	34.8 24/88	152.0 8/61	25.0 23/97	5.1
May	61.6	46.8	54.3	83.7	7/05	29.9 29/16	142.6 2/59	21.1 26/16	3.7
June	56.9	43.9	50.4	72.3	2/57	28.0 11/66	129.0 1/61	19.9 30/29	3.3
July	55.8	42.1	48.9	69.3	22/26	27.0 21/69	125.8 27/80	20.5 12/03	3.6
August	58.7	43.4	51.0	77.0	20/85	28.3 11/63	137.4 29/69	21.3 14/02	4.7
September	62.9	45.6	54.3	88.6	28/28	31.0 3/40	142.1 20/67	22.8 8/18	5.5
October	67.1	48.4	57.8	98.4	24/14	32.1 3/71	154.3 28/68	24.8 22/18	6.0
November	71.4	51.3	61.3	105.7	27/94	36.5 2/96	159.6 29/65	24.6 2/96	6.5
December	75.5	54.5	65.0	110.7	15/76	40.0 4/70	170.3 20/69	33.2 1/04	7.7
Year { Averages	67.4	49.6	58.6	..		..	..	..	5.5
Year { Extremes	..	..	..	114.1	..	27.0	178.5	19.9	..
				13/1/39	21/7/1869	14/1/1862	30/6/29		

(a) Records discontinued 1946. (b) 17/1884 and 20/1897.

## HUMIDITY, RAINFALL, AND FOG

Month	Vapour pres- sure mean 9 a.m. (m.bars)	Rel. hum. (%) at 9 a.m.			Rainfall (inches)					Fog Mean No. days			
		Mean	Highest mean	Lowest mean	Mean mthly	Mean No. of days of rain	Greatest monthly	Least monthly	Greatest in one day				
No. of years of observations	59	59	59	59	111	111	111	111	111	109			
January	13.0	58	68	50	1.87	8	6.92	1963	0.01	1932	4.25	29/63	0.1
February	14.1	63	77	48	1.90	7	7.72	1939	0.02	1965	3.44	26/46	0.3
March	13.3	65	79	50	2.09	9	7.50	1911	0.14	1934	3.55	5/19	0.8
April	11.9	72	82	66	2.33	11	7.67	1960	Nil	1923	3.15	23/60	1.9
May	10.4	79	88	70	2.21	14	5.60	1942	0.14	1934	1.85	7/91	3.8
June	9.3	83	92	73	2.01	14	4.51	1859	0.61	1958	1.74	21/04	4.7
July	8.9	81	86	75	1.93	15	7.02	1891	0.57	1902	2.71	12/91	4.5
August	9.0	76	82	65	1.93	15	4.35	1939	0.48	1903	1.94	26/24	2.4
September	9.5	68	76	60	2.35	14	7.93	1916	0.52	1907	2.62	12/80	0.9
October	10.4	62	71	52	2.69	14	7.61	1869	0.29	1914	3.00	17/69	0.4
November	11.3	60	69	52	2.32	12	8.11	1954	0.25	1895	2.86	21/54	0.2
December	12.3	59	69	48	2.30	10	7.18	1863	0.11	1904	3.92	4/54	0.2
Year { Totals	..	..	..	..	25.95	143	..	..	..	..	..	..	20.1
Year { Averages	11.1	69	..	..	..	..	8.11	..	..	..	..	..	..
Year { Extremes	..	..	92	48	..	..	11/1954	Nil	4/1923	4.25	29/1/63	..	..

Dates in italics relate to nineteenth century.



## PHYSICAL GEOGRAPHY AND CLIMATE

## CLIMATOLOGICAL DATA: HOBART, TASMANIA

(Lat. 42° 53' S., Long. 147° 20' E. Height above M.S.L. 177 ft)

## BAROMETER, WIND, EVAPORATION, LIGHTNING, CLOUDS, AND CLEAR DAYS

Month	Bar. corrected to 32° F. mn sea level and standard gravity from 9 a.m. and 3 p.m. readings (m.bars)	Wind (height of anemometer 40 ft)					Mean amt evapora- tion (in)	No. days light- ning	Mean amt clouds		
		Average miles per hour	Highest mean speed in one day (mph)	High- est gust speed (mph)	Prevailing direction				No. 9 a.m., 3 p.m., 9 p.m. (a)	No. clear days	
					9 a.m.	3 p.m.					
No. of years of observa- tions	81	56	56	77	30(b)	30(b)	54	30(b)	81	30(b)	
January	1,010.5	7.8	20.8	30/16	76	NNW	SSE	4.86	0.9	5.0	1.9
February	1,012.8	7.1	25.2	4/27	67	NNW	SSE	3.73	1.0	4.9	2.3
March	1,014.2	6.8	21.4	13/38	79	NW	SSE	3.18	1.2	4.8	2.4
April	1,015.6	6.7	24.1	9/52	74	NW	W	2.05	0.7	5.0	1.7
May	1,015.6	6.4	22.0	21/65	84	NNW	NW	1.38	0.4	5.0	2.4
June	1,015.2	6.3	23.7	27/20	82	NW	NW	0.93	0.4	5.0	2.4
July	1,014.2	6.5	22.9	22/53	80	NNW	NNW	0.92	0.3	4.8	2.0
August	1,012.8	6.8	25.5	19/26	87	NNW	NW	1.30	0.4	4.9	2.1
September	1,011.5	7.7	26.7	28/65	93	NNW	NW	1.99	0.7	4.9	1.5
October	1,010.1	7.8	20.2	3/65	87	NNW	SW	2.92	0.6	5.2	1.0
November	1,009.8	7.9	21.2	18/15	84	NNW	S	3.75	0.7	5.2	1.3
December	1,009.5	7.6	23.4	1/34	76	NNW	SSE	4.39	0.5	5.3	1.1
Year { Totals							31.40	7.8		22.1	
Year { Averages	1,012.7	7.1				NNW	W			5.0	
Year { Extremes			26.7	93							
			28/9/65								

(a) Scale 0-8. (b) Standard thirty years normal (1911-1940).

## TEMPERATURE AND SUNSHINE

Month	Mean temperature (°Fahr.)			Extreme shade temperature (°Fahr.)			Extreme temperature (°Fahr.)		Mean daily hours sun- shine
	Mean max.	Mean min.	Mean	Highest	Lowest	Highest in sun	Lowest on grass		
No. of years of observations	83	83	83	83	83	57(a)	79	71	
January	70.5	52.6	61.5	105.0 (b)	40.1 (c)	160.0 (d)	30.6 19/97	7.4	
February	70.6	52.9	61.7	104.4 12/99	39.0 20/87	165.0 24/98	28.3 —/87	6.7	
March	67.9	50.8	59.3	99.1 13/40	35.1 15/66	150.9 26/44	27.5 30/02	6.0	
April	62.5	47.5	55.0	87.1 1/41	33.2 14/63	142.0 18/93	25.0 —/86	4.8	
May	57.5	44.0	50.7	77.8 5/21	29.2 20/02	128.0 (e)	20.0 19/02	4.2	
June	53.0	41.2	47.1	69.2 1/07	29.2 28/44	122.0 12/94	18.1 24/63	3.7	
July	52.5	39.9	46.2	66.1 14/34	27.7 11/95	121.0 12/93	18.7 16/86	4.1	
August	55.1	41.0	48.1	71.6 28/14	28.8 5/62	129.0 —/87	20.1 7/09	4.8	
September	58.9	43.1	51.0	81.7 23/26	31.0 16/97	138.0 23/93	18.3 16/26	5.5	
October	62.2	45.5	53.9	92.0 24/14	32.0 12/89	156.0 9/93	23.8 (f)	5.9	
November	65.4	48.1	56.7	98.3 26/37	35.0 16/41	154.0 19/92	26.0 1/08	6.8	
December	68.3	50.9	59.6	105.2 30/97	38.0 3/06	161.5 10/39	27.2 —/86	6.9	
Year { Averages	62.0	46.4	54.2	..	27.7 ..	165.0 ..	18.1 ..	5.6	
Year { Extremes	..	..	..	105.2 30/12/1897	27.7 11/7/1895	165.0 24/2/1898	24/6/63	..	

(a) Period 1934-1938 not comparable; records discontinued 1946. (b) 1/1900 and 19/1959. (c) 9/1937 and 11/1937. (d) 5/1886 and 13/1905. (e) —/1899 and —/1893. (f) 1/1886 and 1/1899.

## HUMIDITY, RAINFALL, AND FOG

Month	Vapour pressure mean 9 a.m. (m.bars)	Rel. hum. (%) at 9 a.m.			Rainfall (inches)				Fog Mean No. days				
		Mean	Highest mean	Lowest mean	Mean mthly	Mean No. of days of rain	Greatest monthly	Least monthly					
										Greatest in one day			
No. of years of observations	73	73	73	73	84	84	(a)84	(a)84	(a)84	30(b)			
January	11.0	58	81	45	1.94	11	5.91	1893	0.17	(c)	2.96	30/16	0.0
February	11.8	62	83	49	1.60	10	6.72	1964	0.11	1914	2.20	1/54	0.0
March	11.1	65	78	52	1.87	11	10.05	1946	0.29	1943	3.47	17/46	0.3
April	10.0	70	84	57	2.19	13	9.75	1960	0.07	1904	5.25	23/60	0.2
May	8.8	75	86	61	1.92	14	8.43	1958	0.14	1913	1.75	2/93	0.9
June	7.9	78	91	61	2.39	15	9.38	1954	0.28	1886	5.80	7/54	0.8
July	7.6	76	87	72	2.07	15	6.02	1922	0.17	1950	2.51	18/22	1.0
August	8.0	73	86	59	1.89	16	6.32	1946	0.30	1892	2.28	14/90	0.4
September	8.3	66	81	52	2.10	15	7.93	1957	0.38	1951	6.15	15/57	0.1
October	9.3	62	74	52	2.53	17	7.60	1947	0.39	1914	2.58	4/06	0.0
November	9.5	58	73	49	2.14	14	7.39	1885	0.33	1921	3.70	30/85	0.1
December	10.6	58	73	42	2.22	13	7.72	1916	0.17	1931	3.33	5/41	0.0
Year { Totals	..	..	..	..	24.87	164	..	..	..	..	..	..	3.8
Year { Averages	9.5	67	..	..	..	..	..	..	..	..	..	..	..
Year { Extremes	..	..	91	42	..	..	10.05	..	0.07	..	6.15	..	..
							3/1946		4/1904		15/9/57		

(a) Records prior to 1883 not comparable. (b) 1922-1951. (c) 1915 and 1958.

Dates in italics relate to nineteenth century.

**Rainfall and temperatures, various cities**

Year Book No. 34, page 28, shows rainfall and temperature, and No. 38, page 42, temperature, for various important cities throughout the world and for the Australian capitals.

**Climatological data for selected Australian country towns**

The following table shows some of the more important climatological data for selected Australian country towns, based on standard thirty years normals (1911-1940).

**CLIMATOLOGICAL DATA FOR SELECTED AUSTRALIAN COUNTRY TOWNS**

Town	Rainfall		Temperature				Relative humidity			
	Average annual rainfall (inches)	Average number of wet days	Mean maximum, January (°F.)	Mean maximum, July (°F.)	Mean minimum, January (°F.)	Mean minimum, July (°F.)	Average index of mean relative humidity(a), January	Average index of mean relative humidity(a), July	Mean 3p.m., January (%)	Mean 3p.m., July (%)
WESTERN AUSTRALIA										
Albany . . .	39.67	172	73.8	60.9	58.5	46.3	73	76	65	70
Broome . . .	22.87	38	91.3	81.8	79.2	57.0	75	52	67	43
Bunbury . . .	33.22	125	82.1	62.5	59.1	47.1	66	78	57	71
Carnarvon . .	9.01	35	87.2	71.7	72.1	51.6	64	66	61	57
Esperance . .	26.73	124	76.6	62.1	59.9	45.4	70	77	63	65
Geraldton . .	18.58	80	84.5	67.7	66.3	51.7	61	68	60	60
Kalgoorlie . .	9.46	62	93.2	62.5	64.2	42.9	43	66	27	50
Meekatharra .	9.17	36	100.4	67.5	73.1	44.0	31	59	21	44
Narrogin . . .	21.38	108	87.3	57.9	56.3	41.3	..	..	..	..
Port Hedland .	11.01	20	94.3	79.3	79.4	55.6	67	49	63	47
Wyndham . . .	25.15	55	95.9	85.0	80.2	66.2	66	38	54	35
NORTHERN TERRITORY										
Alice Springs .	9.93	31	95.3	66.9	69.8	38.9	33	49	26	32
Tennant Creek .	13.85	30	98.5	75.4	75.9	51.1	41	36	27	25
SOUTH AUSTRALIA										
Ceduna . . .	10.50	68	81.5	62.6	58.8	43.8	..	..	..	..
Mount Gambier .	26.86	192	74.2	56.2	53.5	42.4	65	79	50	69
Oodnadatta . .	4.44	20	99.0	66.4	72.1	42.7	27	49	17	34
Port Augusta . .	9.28	62	89.5	62.8	65.3	43.9	50	66	33	52
Port Lincoln . .	18.24	119	77.4	60.2	58.5	46.4	64	76	53	70
Port Pirie . . .	12.99	78	89.2	61.7	62.6	45.4	51	72	..	..
QUEENSLAND										
Atherton . . .	53.99	116	83.8	70.9	65.0	50.0	78	79	..	..
Bundaberg . . .	42.37	84	86.1	71.6	69.7	49.2	74	72	63	55
Cairns . . .	86.35	140	89.7	78.1	74.2	61.0	77	74	69	63
Charleville . .	17.97	49	97.6	68.3	70.8	40.1	44	61	28	39
Charters Towers	23.26	59	92.9	76.0	71.3	51.6	65	64	46	47
Cloncurry . . .	16.89	35	98.7	76.4	76.5	51.5	40	40	30	27
Ipswich . . .	28.97	76	90.4	70.0	67.8	43.8	65	65	..	..
Longreach . . .	15.54	37	99.6	73.2	73.3	44.3	49	56	29	35
Mackay . . .	63.16	116	86.2	71.0	73.6	53.4	80	77	..	..
Maryborough . .	45.43	122	87.9	71.5	68.8	47.6	73	74	..	..
Normanton . . .	37.56	56	94.3	84.0	77.0	58.6	70	48	52	34
Rockhampton . .	37.36	93	90.0	73.7	72.3	51.2	68	65	55	45
Roma . . .	20.43	52	94.4	67.4	68.3	39.3	51	64	32	40
Toowoomba . . .	35.19	105	82.7	61.1	61.2	40.7	73	79	..	..
Townsville . . .	43.06	75	87.3	76.0	76.2	59.8	75	64	69	59

For footnote see next page.

## CLIMATOLOGICAL DATA FOR SELECTED AUSTRALIAN COUNTRY TOWNS—continued

Town	Rainfall		Temperature				Relative humidity			
	Average annual rainfall (inches)	Average number of wet days	Mean maximum, January (°F.)	Mean maximum, July (°F.)	Mean minimum, January (°F.)	Mean minimum, July (°F.)	Average index of mean relative humidity(a), January	Average index of mean relative humidity(a), July	Mean 3p.m., January (%)	Mean 3p.m., July (%)
NEW SOUTH WALES										
Albury . .	27.66	99	89.9	56.4	59.8	38.2	47	74	29	64
Armidale . .	28.98	107	80.8	54.0	56.5	33.8	60	61	44	57
Bega . .	35.92	80	81.2	62.9	57.3	34.5	72	70	..	..
Bourke . .	11.74	44	98.0	63.8	69.3	40.8	37	64	24	48
Broken Hill . .	9.20	46	90.5	59.5	64.5	41.2	36	67	24	49
Cooma . .	18.85	88	78.8	50.4	52.2	30.2	55	67	38	56
Dubbo . .	20.91	72	92.1	59.7	63.8	37.5	48	74	32	56
Goulburn . .	24.27	112	81.5	52.4	56.2	35.8	59	74	43	67
Grafton . .	34.68	105	89.1	70.6	67.2	43.9	..	..	..	..
Katoomba . .	53.17	126	73.9	48.4	54.6	36.7	61	71	54	68
Leeton . .	15.76	78	88.9	56.8	63.2	38.9	44	76	..	..
Moree . .	21.43	56	96.0	64.8	67.4	39.0	..	..	..	..
Newcastle . .	41.36	132	77.7	61.4	66.6	47.7	74	70	69	61
Orange . .	31.52	95	83.9	51.6	53.7	31.4	..	..	..	..
Tamworth . .	24.41	67	91.0	60.4	63.4	36.8	..	..	..	..
Taree . .	47.48	110	83.9	64.5	62.0	42.7	..	..	..	..
Wagga . .	21.42	86	89.8	57.1	61.5	37.8	50	77	31	65
Wollongong . .	44.04	112	78.4	61.7	62.6	47.1	78	71	..	..
VICTORIA										
Ballarat . .	27.38	170	75.7	49.8	50.5	38.4	60	81	41	75
Bendigo . .	20.27	111	83.0	54.2	56.5	39.4	47	75	30	64
Geelong . .	21.32	133	76.2	56.5	55.4	42.0	65	81	52	70
Horsham . .	17.57	104	85.1	56.0	55.2	38.8	50	77	33	67
Mildura . .	10.37	61	89.8	59.5	61.0	40.5	48	71	..	..
Sale . .	23.70	128	77.5	56.8	54.4	38.6	65	79	51	68
Seymour . .	22.17	94	84.7	55.2	54.6	37.4	56	79	..	..
Shepparton . .	19.94	103	86.3	55.7	58.8	39.3	49	77	32	63
Wangaratta . .	25.57	104	86.7	55.2	58.5	38.1	41	75	26	66
Warrnambool . .	25.79	153	69.9	55.6	54.7	43.6	73	83	69	77
TASMANIA										
Burnie . .	38.99	170	67.6	53.7	51.9	41.7	70	82	65	74
Launceston . .	28.56	149	75.8	53.7	52.1	36.9	60	77	..	..
Zeehan . .	94.06	246	66.3	51.6	48.0	38.2	73	81	61	74

(a) The average index of mean relative humidity has been derived from the ratio of the average 9 a.m. vapour pressure to the saturation vapour pressure at the average mean temperature of the month. Being thus related to the mean temperature this value of relative humidity is a good approximation to the daily mean.

The table on the next page gives the latitude, longitude, and altitude of the weather recording station at each of the above towns.

## LOCATION CO-ORDINATES FOR SELECTED AUSTRALIAN COUNTRY TOWNS

Station	Lat.	Long.	Altitude (ft)	Station	Lat.	Long.	Altitude (ft)
Western Australia—				Queensland— <i>contd</i>			
Albany . . .	34° 57'	117° 48'	226	Toowoomba . . .	27° 33'	151° 57'	1,921
Broome . . .	17° 57'	122° 13'	39	Townsville . . .	19° 15'	146° 46'	10
Bunbury . . .	33° 19'	115° 38'	3	New South Wales—			
Carnarvon . . .	24° 53'	113° 39'	12	Albury . . .	36° 06'	146° 54'	600
Esperance . . .	33° 51'	121° 53'	14	Armidale . . .	30° 32'	151° 38'	3,215
Geraldton . . .	28° 48'	114° 42'	92	Bega . . .	36° 40'	149° 50'	50
Kalgoorlie . . .	30° 46'	121° 27'	1,180	Bourke . . .	30° 05'	145° 58'	350
Meekatharra . . .	26° 36'	118° 29'	1,697	Broken Hill . . .	31° 57'	141° 28'	978
Narrogin . . .	32° 54'	117° 09'	1,150	Cooma . . .	36° 13'	149° 08'	2,749
Port Hedland . . .	20° 23'	118° 37'	20	Dubbo . . .	32° 10'	148° 37'	861
Wyndham . . .	15° 31'	128° 09'	20	Goulburn . . .	34° 45'	149° 43'	2,074
Northern Territory—				Grafton . . .	29° 41'	152° 56'	21
Alice Springs . . .	23° 48'	133° 53'	1,790	Katoomba . . .	33° 43'	150° 19'	3,280
Tennant Creek . . .	19° 38'	134° 11'	1,229	Leeton . . .	34° 33'	146° 24'	496
South Australia—				Moree . . .	29° 28'	149° 51'	680
Ceduna . . .	32° 08'	133° 42'	57	Newcastle . . .	32° 55'	151° 49'	122
Mount Gambier . . .	37° 45'	140° 47'	206	Orange . . .	33° 18'	149° 06'	2,850
Oodnadatta . . .	27° 33'	135° 29'	371	Tamworth . . .	31° 05'	150° 56'	1,279
Port Augusta . . .	32° 33'	137° 47'	14	Taree . . .	31° 54'	152° 28'	30
Port Lincoln . . .	34° 47'	135° 53'	13	Wagga . . .	35° 08'	147° 25'	719
Port Pirie . . .	33° 11'	138° 01'	10	Wollongong . . .	34° 25'	150° 56'	150
Queensland—				Victoria—			
Atherton . . .	17° 17'	145° 27'	2,466	Ballarat . . .	37° 35'	143° 50'	1,433
Bundaberg . . .	24° 52'	152° 21'	6	Bendigo . . .	36° 46'	144° 17'	730
Cairns . . .	16° 35'	145° 44'	10	Geelong . . .	38° 07'	144° 22'	57
Charleville . . .	26° 25'	146° 17'	950	Horsham . . .	36° 40'	142° 12'	437
Charters Towers . . .	20° 03'	146° 08'	1,004	Mildura . . .	34° 14'	142° 05'	156
Cloncurry . . .	20° 40'	140° 30'	621	Sale . . .	38° 06'	147° 08'	15
Ipswich . . .	27° 38'	152° 44'	64	Seymour . . .	37° 02'	145° 08'	464
Longreach . . .	23° 26'	144° 15'	612	Shepparton . . .	36° 23'	145° 24'	372
Mackay . . .	21° 07'	149° 10'	9	Wangaratta . . .	36° 22'	146° 19'	493
Maryborough . . .	25° 32'	152° 42'	20	Warrnambool . . .	38° 24'	142° 29'	33
Normanton . . .	17° 39'	141° 05'	34	Tasmania—			
Rockhampton . . .	23° 23'	150° 29'	26	Burnie . . .	41° 04'	145° 54'	13
Roma . . .	26° 36'	148° 42'	1,000	Launceston . . .	41° 33'	147° 13'	546
				Zeehan . . .	41° 54'	145° 23'	592

## The weather of 1967 (December 1966 to November 1967)

The following is a brief summary of weather experienced during the four seasons ended in November 1967. Plate 3 (between pages 32 and 33) shows the rainfall distribution for 1967.

*Summer, 1966-67.* Rainfall during summer was normal or above in most of Australia, the main exceptions being in central and south-western Queensland, north-western New South Wales, and Tasmania. In two wide belts of country extending from Arnhem Land to the Bight and from the north-west coast to the Bight the summer rainfall was very much above average; but in large areas of central and south-west Queensland the rainfall was very much below average.

At the end of summer an area comprising south-western Queensland, far western New South Wales, and adjacent South Australia was either suffering from drought or was close to the commencement of drought. The south-east of Tasmania was critically short of rain.

Three tropical cyclones produced copious rain over parts of Australia; two in the east affected coastal areas; and one in the west moved inland from North West Cape producing widespread rains over most of Western Australia through to the coast of the Bight. Flooding was extensive in the inland of Northern Territory, South Australia, and Western Australia. Wind squalls, mainly associated with thunderstorms, caused areas of damage in New South Wales, Victoria, and Tasmania.

The temperatures of summer were free of marked extremes.

The pastoral situation was poor in the areas of western Queensland, western New South Wales, and the north-eastern corner of South Australia. Harvests ranged from good to excellent. Most water storages held adequate water.

*Autumn, 1967.* Early in March cyclone *Gwen* moved across the continent from Broome to Lismore (N.S.W.); about the middle of the month there were three cyclone centres in a line from the Gulf of Carpentaria to the southern Coral Sea and from late March to early April a cyclone moved from the Solomons to the south-eastern Tasman Sea. Depressions affected the south of Western Australia but weakened in their eastward movement and produced little effect in the south-east of the continent. Otherwise the circulation of the season was free of marked abnormalities.

The wet season ended in the north between late March in the Kimberleys, and late April in Arnhem Land. The rainfall over inland Australia was variable; there was a belt of above-average rain near the base of Cape York and in Arnhem Land and another from central Northern Territory across northern South Australia, northern New South Wales, and southern Queensland. In the south of Western Australia the opening rains were received in May and were an excellent start to the growing season. Elsewhere, and particularly in the south, autumn was dry with rainfall near or below the lowest on record at many places in Tasmania, Victoria, and parts of southern New South Wales.

A succession of months with low rainfall led to a recurrence of drought or near-drought conditions over parts of south-eastern Australia and most of Tasmania.

There were no marked extremes of temperature in autumn.

*Winter, 1967.* Rainfall was considerably below normal in South Australia, southern New South Wales, Victoria, and western Tasmania. There were also dry conditions in the rest of inland New South Wales and Western Australia. The northern part of the New South Wales coast and much of Queensland had more than normal winter rains. In inland Queensland the rains, which were mainly in June, were the heaviest for that month on record, and they transformed the seasonal situation there. Not all Queensland received these rains, and near the Northern Territory border it remained very dry, as it did in isolated pockets elsewhere. There were property losses from floods in coastal rivers in Queensland and northern New South Wales.

Although rainfalls in July and August were useful, they did little to relieve serious deficiencies in water storages in Tasmania, Victoria, and south-eastern New South Wales. These deficiencies were the result of extremely low rainfall totals since the beginning of the year; the totals to the middle of August were close to the lowest on record at many places in Tasmania, Victoria, and New South Wales.

Low rainfall had persisted in western Tasmania since November 1966, in Victoria since the beginning of 1967, in southern New South Wales since February 1967, and in South Australia since March 1967. The most noticeable effects of these low rainfall conditions were the low water levels in irrigation and hydro-electric storages.

Temperature means did not differ greatly from the average, and there were no lengthy periods of unusually cold conditions.

*Spring, 1967.* Rainfall in spring was mostly below normal except near the New South Wales coast and over a few scattered areas. Rainfall was very much below normal over most of Victoria, western New South Wales, South Australia, and the south-west of Western Australia.

The rainfall for the twelve months 1 December 1966 to 30 November 1967 was very much below normal in nearly all of Victoria and Tasmania, these States suffering most from drought conditions. In the south-east of South Australia, the south-west of New South Wales, and western Queensland the rainfall for the year was also very much below normal, and conditions were either at the drought or near-drought stage.

Day temperatures in spring in many areas were higher than normal, but minimum temperatures, because of clear nights, were generally near normal. In the south the bushfire danger became high during spring and was approaching dangerous levels at the end of spring.

In the south-east of the continent, except for the extreme east of Victoria, the condition of stock was deteriorating.

## CHAPTER 3

# GENERAL GOVERNMENT

## Parliamentary government

### Scheme of parliamentary government

Under section 1 of the Commonwealth of Australia Constitution the legislative power of the Commonwealth is vested in the Parliament of the Commonwealth, which consists of the Sovereign, the Senate, and the House of Representatives. The Sovereign is represented throughout the Commonwealth by the Governor-General who, subject to the Constitution of the Commonwealth, has such powers and functions as the Sovereign is pleased to assign to him. In each State there is a State Governor who is the representative of the Sovereign for the State and who exercises such powers within the State as are conferred upon him by the Letters Patent which constitute his office and by the instructions which detail the manner in which his duties are to be fulfilled. The Legislature in each State was bicameral until 1922, when the Queensland Upper House was abolished and the Parliament became unicameral. In the bicameral Parliaments the Upper House is known in the Commonwealth Parliament as the Senate, and in the State Parliaments as the Legislative Council, while the Lower House is known in the Commonwealth Parliament as the House of Representatives, in the State Parliaments of New South Wales, Victoria, and Western Australia as the Legislative Assembly, and in the State Parliaments of South Australia and Tasmania as the House of Assembly. In Queensland the sole legislative chamber is known as the Legislative Assembly. The extent of the legislative powers of the Parliaments is defined by the Commonwealth and State Constitutions. In those States that have a bicameral legislature the Legislative Assembly or House of Assembly is the larger House. The members of the Legislative Assembly or House of Assembly, as the case may be, of each State are elected by the people, the franchise extending to adult British subjects with certain residential qualifications. With the exception of the New South Wales Legislative Council, the members of State Legislative Councils are, in common with members of the Lower Houses, elected by the people of the respective States. In New South Wales a quarter of the members of the Legislative Council retire each three years, and the continuing members of the Council and the members of the Legislative Assembly, voting as an electoral body, elect members to fill the vacant positions. In Victoria and Western Australia members of the Legislative Council are elected by adult suffrage, while the franchise is limited in South Australia to the holders of certain property or service qualifications, and in Tasmania to the holders of certain property, educational, professional, or service qualifications. In the Commonwealth Parliament the qualifications for the franchise are identical for both Houses, extending to adult British subjects who have lived in Australia for six months continuously.

### The Sovereign

On 7 February 1952 the Governor-General and members of the Federal Executive Council proclaimed Princess Elizabeth Queen Elizabeth the Second, Queen of this Realm and of all Her other Realms and Territories, Head of the Commonwealth, Defender of the Faith, Supreme Liege Lady in and over the Commonwealth of Australia. The coronation of Her Majesty in Westminster Abbey took place on 2 June 1953.

### The Governor-General

*Powers and functions.* As the Queen's representative in Australia, the Governor-General exercises certain prerogative powers and functions assigned to him by the Queen. Other powers and functions are conferred on him by the Constitution. Powers which have been so assigned or conferred include, among others, the power to grant pardons and to remit fines for offences against the laws of the Commonwealth; to appoint certain officers in the Diplomatic or Consular Service of the Commonwealth; to appoint times for holding the sessions of the Parliament, prorogue Parliament, and dissolve the House of Representatives; to cause writs to be issued for general elections of members of the House of Representatives; to assent in the Queen's name to a proposed law passed by both Houses of the Parliament or withhold assent, or to reserve the law for the Queen's pleasure, or to return the proposed law to the House in which it originated and transmit therewith any amendments which he may recommend; to exercise the executive power of the Commonwealth; to choose and summon Executive Councillors, who hold office during his pleasure; and to appoint Ministers of State for the Commonwealth. In addition, the command-in-chief of the defence forces of the Commonwealth is vested in the Governor-General as the Queen's representative.

Many Acts of the Commonwealth Parliament provide that the Governor-General may make regulations to give effect to the Act. The Governor-General may also be authorised by statute to issue proclamations—for example, to declare an Act in force or a state of things to exist, e.g. the calling out of the Citizen Military Forces in time of war or defence emergency. He has been given power by statute to legislate for certain Territories of the Commonwealth. Under the conventions of responsible government obtaining in British Commonwealth countries, the Governor-General's functions are exercised generally on the advice of Ministers of State.

*Holders of office.* The following list shows the names of the Governors-General since the inception of the Commonwealth.

#### GOVERNORS-GENERAL

Rt Hon. JOHN ADRIAN LOUIS, EARL OF HOPETOUN (afterwards MARQUIS OF LINLITHGOW), P.C. K.T., G.C.M.G., G.C.V.O. From 1 January 1901 to 9 January 1903.

Rt Hon. HALLAM, BARON TENNYSON, P.C., G.C.M.G. From 17 July 1902 to 9 January 1903 (Acting).

Rt Hon. HALLAM, BARON TENNYSON, P.C., G.C.M.G. From 9 January 1903 to 21 January 1904.

Rt Hon. HENRY STAFFORD, BARON NORTHCOTE, P.C., G.C.M.G., G.C.I.E., C.B. From 21 January 1904 to 9 September 1908.

Rt Hon. WILLIAM HUMBLE, EARL OF DUDLEY, P.C., G.C.B., G.C.M.G., G.C.V.O. From 9 September 1908 to 31 July 1911.

Rt Hon. THOMAS, BARON DENMAN, P.C., G.C.M.G., K.C.V.O. From 31 July 1911 to 18 May 1914.

Rt Hon. SIR RONALD CRAUFURD MUNRO FERGUSON (afterwards VISCOUNT NOVAR OF RAITH), G.C.M.G. From 18 May 1914 to 6 October 1920.

Rt Hon. HENRY WILLIAM, BARON FORSTER OF LEPE, P.C., G.C.M.G. From 6 October 1920 to 8 October 1925.

Rt Hon. JOHN LAWRENCE, BARON STONEHAVEN (afterwards 1ST VISCOUNT STONEHAVEN), P.C., G.C.M.G., D.S.O. From 8 October 1925 to 22 January 1931.

Rt Hon. SIR ISAAC ALFRED ISAACS, G.C.B., G.C.M.G., K.C. From 22 January 1931 to 23 January 1936.

Brigadier-General the Rt Hon. ALEXANDER GORE ARKWRIGHT, BARON GOWRIE (afterwards 1ST EARL OF GOWRIE), V.C., P.C., G.C.M.G., C.B., D.S.O., K.St.J. From 23 January 1936 to 30 January 1945.

His Royal Highness PRINCE HENRY WILLIAM FREDERICK ALBERT, DUKE OF GLOUCESTER, EARL OF ULSTER AND BARON CULLODEN, K.G., P.C., K.T., K.P., G.C.B., G.C.M.G., G.C.V.O., General in the Army, Air Chief Marshal in the Royal Air Force, One of His Majesty's Personal Aides-de-Camp. From 30 January 1945 to 11 March 1947.

Rt Hon. SIR WILLIAM JOHN MCKELL, G.C.M.G., Q.C. From 11 March 1947 to 8 May 1953.

Field Marshal SIR WILLIAM JOSEPH SLIM (afterwards VISCOUNT SLIM OF YARRALUMLA), K.G., G.C.B., G.C.M.G., G.C.V.O., G.B.E., D.S.O., M.C., K.St.J. From 8 May 1953 to 2 February 1960.

Rt Hon. WILLIAM SHEPHERD, VISCOUNT DUNROSSIL, P.C., G.C.M.G., M.C., K.St.J., Q.C. From 2 February 1960 to 3 February 1961.

Rt Hon. WILLIAM PHILIP, VISCOUNT DE LISLE, V.C., P.C., G.C.M.G., G.C.V.O., K.St.J. From 3 August 1961 to 22 September 1965.

Rt Hon. RICHARD GARDINER, BARON CASEY, P.C., G.C.M.G., C.H., D.S.O., M.C., K.St.J. From 22 September 1965.

*Administrators.* In addition to the holders of the office of Governor-General listed above, certain persons have, from time to time, been appointed as Administrator of the Government of the Commonwealth. Administrators are appointed in the event of the death, illness, or absence from Australia of the Governor-General, or for the period between the departure of a Governor-General and the arrival of his successor. The following is a list of such appointments.

#### ADMINISTRATORS

Rt Hon. FREDERIC JOHN NAPIER, BARON CHELMSFORD (afterwards 1ST VISCOUNT CHELMSFORD), K.C.M.G. From 21 December 1909 to 27 January 1910.

Lieut.-Colonel the Rt. Hon. ARTHUR HERBERT TENNYSON, BARON SOMERS, K.C.M.G., D.S.O., M.C. From 3 October 1930 to 22 January 1931.

Captain the Rt Hon. WILLIAM CHARLES ARCEDECKNE, BARON HUNTINGFIELD, K.C.M.G., K.St.J. From 29 March 1938 to 24 September 1938.

Major-General SIR WINSTON JOSEPH DUGAN (afterwards 1ST BARON DUGAN OF VICTORIA), G.C.M.G., C.B., D.S.O. From 5 September 1944 to 30 January 1945; 19 January 1947 to 11 March 1947.

ADMINISTRATORS—*continued*

General\* SIR JOHN NORTHCOTT, K.C.M.G., C.B., M.V.O.† From 19 July 1951 to 14 December 1951; 30 July 1956 to 22 October 1956.

General SIR REGINALD ALEXANDER DALLAS BROOKS, K.C.B., K.C.M.G.‡, K.C.V.O., D.S.O., K.St.J. From 8 January 1959 to 16 January 1959; 4 February 1961 to 3 August 1961; 5 June 1962 to 3 October 1962; 21 November 1962 to 18 December 1962.

General SIR ERIC WINSLOW WOODWARD, K.C.M.G., K.C.V.O., C.B., C.B.E., D.S.O., K.St.J. From 16 June 1964 to 30 August 1964.

Colonel SIR HENRY ABEL SMITH, K.C.M.G., K.C.V.O., D.S.O., K.St.J. From 7 May 1965 to 22 September 1965.

General SIR EDRIC MONTAGUE BASTYAN, K.C.M.G., K.C.V.O., K.B.E., C.B., K.St.J. From 24 April 1967 to 1 June 1967.

Governors of the States

*Powers and functions.* The Queen is represented in each of the States by a Governor, the office having been constituted by Letters Patent under the Great Seal of the United Kingdom of various dates. The Governors of the States exercise prerogative powers conferred on them by these Letters Patent, their Commissions of appointment, and the Governor's Instructions given them under the Royal Sign Manual and Signet or other instrument as specified in the Letters Patent. In addition, they have been invested with various statutory functions by State Constitutions and other Imperial Acts or by Acts of the Parliaments of the States.

A Governor of a State assents in the Queen's name to Bills passed by the Parliament of the State, except those reserved for the Royal assent. The latter include certain classes of Bills which are regulated by the Constitution Acts and by the Governor's Instructions. He administers the prerogative of mercy by the reprieve or pardon of criminal offenders within his jurisdiction, and may remit fines and penalties due to the Crown. In the performance of his functions generally, particularly those conferred by Statute, the Governor of a State acts on the advice of Ministers of State for the State.

*Holders of office.* The names of the present (December 1967) State Governors are as follows:

STATE GOVERNORS, DECEMBER 1967

*New South Wales*—SIR ARTHUR RODEN CUTLER, V.C., K.C.M.G., C.B.E., K.St.J.

*Victoria*—MAJOR-GENERAL SIR ROHAN DELACOMBE, K.C.M.G., K.B.E., C.B., D.S.O., K.St.J.

*Queensland*—SIR ALAN JAMES MANSFIELD, K.C.M.G.

*South Australia*—LIEUT.-GENERAL SIR EDRIC MONTAGUE BASTYAN, K.C.M.G., K.C.V.O., K.B.E., C.B.

*Western Australia*—MAJOR-GENERAL SIR DOUGLAS ANTHONY KENDREW, K.C.M.G., C.B., C.B.E., D.S.O.

*Tasmania*—LIEUT.-GENERAL SIR CHARLES HENRY GAIRDNER, K.C.M.G., K.C.V.O., K.B.E., C.B.

The Cabinet and executive government

Both in the Commonwealth and in the States, executive government is based on the system which was evolved in Britain in the 18th century, and which is generally known as 'Cabinet' or 'responsible' government. Its essence is that the head of the State (Her Majesty the Queen, and her representative, the Governor-General or Governor) should perform governmental acts on the advice of her Ministers; that she should choose her principal Ministers of State from members of Parliament belonging to the party, or coalition of parties, commanding a majority in the popular House; that the Ministry so chosen should be collectively responsible to that House for the government of the country; and that the Ministry should resign if it ceases to command a majority there.

The Cabinet system operates chiefly by means of constitutional conventions, customs, or understandings, and through institutions that do not form part of the legal structure of the government at all. The Constitutions of the Commonwealth and the States make fuller legal provision for the Cabinet system than the British Constitution does—for example, by requiring that Ministers shall either be, or within a prescribed period become, members of the Legislature. In general, however, the legal structure of the executive government remains the same as it was before the establishment of the Cabinet system.

The executive power of the Commonwealth is exercisable by the Governor-General, and that of the States by the Governor. In each case he is advised by an Executive Council, which, however, meets only for certain formal purposes, as explained on page 54. The whole policy of a Ministry

\* Lieutenant-General Sir John Northcott was granted honorary rank of General while administering the Government of the Commonwealth. † K.C.V.O., 1954. ‡ G.C.M.G., 1963.



is, in practice, determined by some or all of the Ministers of State, meeting without the Governor-General or Governor under the chairmanship of the Prime Minister or Premier. This group of Ministers is known as the Cabinet.

*The Cabinet.* This body does not form part of the legal mechanism of government. Its meetings are private and deliberative. The actual Ministers of the day alone are present, no records of the meetings are made public, and the decisions taken have, in themselves, no legal effect. In Australia until January 1956 all Ministers were members of the Cabinet. Since then, however, although in the States all Ministers are members of the Cabinet, the Commonwealth ministry is made up of twelve senior Ministers, who constitute the Cabinet, and other Ministers\* of non-Cabinet rank who attend meetings of the Cabinet only when required, as, for example, when the business of the Cabinet concerns their departments. As Ministers are the leaders of the party or parties commanding a majority in the popular House, the Cabinet substantially controls, in ordinary circumstances, not only the general legislative programme of Parliament, but the whole course of Parliamentary proceedings. In effect, though not in form, the Cabinet, by reason of the fact that all Ministers are members of the Executive Council, is also the dominant element in the executive government of the country. Even in summoning, proroguing, or dissolving Parliament, the Governor-General or Governor is usually guided by the advice tendered him by the Cabinet, through the Prime Minister or Premier, though legally the discretion is vested in the Governor-General or Governor himself.

*The Executive Council.* This body is usually presided over by the Governor-General or Governor, the members thereof holding office during his pleasure. All Ministers of State must be members of the Executive Council. In the Commonwealth, and also in the States of Victoria and Tasmania, Ministers remain members of the Executive Council on leaving office, but are not summoned to attend its meetings, for it is an essential feature of the Cabinet system that attendance should be limited to the Ministers of the day. The meetings of the Executive Council are formal and official in character, and a record of proceedings is kept by the Secretary or Clerk. At Executive Council meetings the decisions of the Cabinet are, where necessary, given legal form, appointments made, resignations accepted, proclamations issued, and regulations and the like approved.

*The appointment of Ministers.* Legally, Ministers hold office during the pleasure of the Governor-General or Governor. In practice, however, the discretion of the Queen's representative in the choice of Ministers is limited by the conventions on which the Cabinet system rests. When a Ministry resigns, the Crown's custom is to send for the leader of the party which commands, or is likely to be able to command, a majority in the Lower House, and to commission him, as Prime Minister or Premier, to 'form a Ministry'—that is, to nominate other persons to be appointed as Ministers of State and to serve as his colleagues in the Cabinet.

*Ministers in Upper and Lower Houses.* The following table shows the distribution of Ministers in the Houses of each Parliament in December 1967.

AUSTRALIAN PARLIAMENTS: MINISTERS IN UPPER OR LOWER HOUSES  
DECEMBER 1967

<i>Ministers with seats in—</i>	<i>Cwlth(a)</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>Total</i>
The Upper House	5	2	4	(b)	3	3	1	18
The Lower House	20	14	11	13	6	9	8	81
<b>Total</b>	<b>25</b>	<b>16</b>	<b>15</b>	<b>13</b>	<b>9</b>	<b>12</b>	<b>9</b>	<b>99</b>

(a) There were twenty-six portfolios, but on the presumed death of the former Prime Minister, the Rt Hon. H. E. Holt, who disappeared while swimming off Portsea, Victoria, on 17 December, 1967, the Rt Hon. J. McEwen, Deputy Prime Minister and Minister for Trade and Industry, was appointed to the Prime Ministership on 19 December 1967. (b) Abolished in 1922.

#### Commonwealth Ministries

*Names and tenure of office, 1901 to 1967.* The following list shows the name of each Commonwealth Ministry to hold office since 1 January 1901, and the limits of its term of office.

#### COMMONWEALTH MINISTRIES, 1901 TO JANUARY 1968

- (i) BARTON MINISTRY, 1 January 1901 to 24 September 1903.
- (ii) DEAKIN MINISTRY, 24 September 1903 to 27 April 1904.
- (iii) WATSON MINISTRY, 27 April 1904 to 17 August 1904.
- (iv) REID-MCLEAN MINISTRY, 18 August 1904 to 5 July 1905.
- (v) DEAKIN MINISTRY, 5 July 1905 to 13 November 1908.

\* Fourteen from 27 February 1967.

COMMONWEALTH MINISTRIES, 1901 TO JANUARY 1968—*continued*

- (vi) FISHER MINISTRY, 13 November 1908 to 1 June 1909.
- (vii) DEAKIN MINISTRY, 2 June 1909 to 29 April 1910.
- (viii) FISHER MINISTRY, 29 April 1910 to 24 June 1913.
- (ix) COOK MINISTRY, 24 June 1913 to 17 September 1914.
- (x) FISHER MINISTRY, 17 September 1914 to 27 October 1915.
- (xi) HUGHES MINISTRY, 27 October 1915 to 14 November 1916.
- (xii) HUGHES MINISTRY, 14 November 1916 to 17 February 1917.
- (xiii) HUGHES MINISTRY, 17 February 1917 to 10 January 1918.
- (xiv) HUGHES MINISTRY, 10 January 1918 to 9 February 1923.
- (xv) BRUCE-PAGE MINISTRY, 9 February 1923 to 22 October 1929.
- (xvi) SCULLIN MINISTRY, 22 October 1929 to 6 January 1932.
- (xvii) LYONS MINISTRY, 6 January 1932 to 7 November 1938.
- (xviii) LYONS MINISTRY, 7 November 1938 to 7 April 1939.
- (xix) PAGE MINISTRY, 7 April 1939 to 26 April 1939.
- (xx) MENZIES MINISTRY, 26 April 1939 to 14 March 1940.
- (xxi) MENZIES MINISTRY, 14 March 1940 to 28 October 1940.
- (xxii) MENZIES MINISTRY, 28 October 1940 to 29 August 1941.
- (xxiii) FADDEN MINISTRY, 29 August 1941 to 7 October 1941.
- (xxiv) CURTIN MINISTRY, 7 October 1941 to 21 September 1943.
- (xxv) CURTIN MINISTRY, 21 September 1943 to 6 July 1945.
- (xxvi) FORDE MINISTRY, 6 July 1945 to 13 July 1945.
- (xxvii) CHIFLEY MINISTRY, 13 July 1945 to 1 November 1946.
- (xxviii) CHIFLEY MINISTRY, 1 November 1946 to 19 December 1949.
- (xxix) MENZIES MINISTRY, 19 December 1949 to 11 May 1951.
- (xxx) MENZIES MINISTRY, 11 May 1951 to 11 January 1956.
- (xxxi) MENZIES MINISTRY, 11 January 1956 to 10 December 1958.
- (xxxii) MENZIES MINISTRY, 10 December 1958 to 18 December 1963.
- (xxxiii) MENZIES MINISTRY, 18 December 1963 to 26 January 1966.
- (xxxiv) HOLT MINISTRY, 26 January 1966 to 14 December 1966.
- (xxxv) HOLT MINISTRY, 14 December 1966 to 19 December 1967.
- (xxxvi) McEWEN MINISTRY, 19 December 1967 to 10 January 1968.
- (xxxvii) GORTON MINISTRY, 10 January 1968.

*Names of members of each Ministry to 31 January 1968.* In Year Book No. 17, 1924, the names are given of each Ministry up to the Bruce-Page Ministry (9 February 1923 to 22 October 1929), together with the names of the successive holders of portfolios therein, and issue No. 39 contains a list, commencing with the Bruce-Page Ministry, which covers the period between the date on which it assumed power, 9 February 1923, and 31 July 1951, showing the names of all persons who held office in each Ministry during that period. The names of members of subsequent Ministries are listed in successive issues of the Year Book after No. 39.

This issue shows only particulars of the McEwen Ministry and the first Gorton Ministry.

**McEWEN MINISTRY—19 DECEMBER 1967 TO 10 JANUARY 1968**

(The State in which each Minister's electorate is situated and party affiliation are shown in parenthesis. Party affiliation is indicated by the use of the following abbreviations: C.P.—Australian Country Party, Lib.—Liberal Party of Australia.)

**\*Prime Minister and Minister for Trade and Industry—**

THE RT HON. J. McEWEN, M.P. (Vic.) (C.P.)

**\*Treasurer—**

THE RT HON. WILLIAM McMAHON, M.P. (N.S.W.) (Lib.)

**\*Minister for External Affairs—**

THE RT HON. PAUL HASLUCK, M.P. (W.A.) (Lib.)

**\*Minister for Defence—**

THE HON. ALLEN FAIRHALL, M.P. (N.S.W.) (Lib.)

**\*Minister for Primary Industry—**

THE HON. J. D. ANTHONY, M.P. (N.S.W.) (C.P.)

**\*Minister for Education and Science and Leader of the Government in the Senate—**

SENATOR THE HON. J. G. GORTON (Vic.) (Lib.)

**\*Postmaster-General and Vice-President of the Executive Council—**

THE HON. A. S. HULME, M.P. (Qld) (Lib.)

**\*Minister for National Development—**

THE HON. DAVID FAIRBAIRN, D.F.C., M.P. (N.S.W.) (Lib.)

**\*Minister for Supply—**

SENATOR THE HON. N. H. D. HENTY (Tas.) (Lib.)

**\*Minister for Labour and National Service—**

THE HON. L. H. E. BURY, M.P. (N.S.W.) (Lib.)

MCEWEN MINISTRY—19 DECEMBER 1967 TO 10 JANUARY 1968—*continued*

*\*Minister for Social Services and assisting the Minister for Trade and Industry—*

THE HON. IAN SINCLAIR, M.P. (N.S.W.) (C.P.)

*Minister for Shipping and Transport—*

THE HON. GORDON FREETH, M.P. (W.A.) (Lib.)

*Minister for Territories—*

THE HON. C. E. BARNES, M.P. (Qld) (C.P.)

*Minister for Civil Aviation—*

THE HON. R. W. C. SWARTZ, M.B.E., E.D., M.P. (Qld) (Lib.)

*Minister for Immigration and Leader of the Government in the House of Representatives—*

THE HON. B. M. SNEDDEN, Q.C., M.P. (Vic.) (Lib.)

*Minister for Health—*

THE HON. A. J. FORBES, M.C., M.P. (S.A.) (Lib.)

*Minister for Air and assisting the Treasurer—*

THE HON. PETER HOWSON, M.P. (Vic.) (Lib.)

*Minister for Customs and Excise—*

SENATOR THE HON. KEN ANDERSON (N.S.W.) (Lib.)

*Minister for Repatriation—*

SENATOR THE HON. G. COLIN MCKELLAR (N.S.W.) (C.P.)

*Minister for Housing—*

SENATOR THE HON. DAME ANNABELLE RANKIN, D.B.E. (Qld) (Lib.)

*Minister for the Army—*

THE HON. MALCOLM FRASER, M.P. (Vic.) (Lib.)

*Minister for Works—*

THE HON. C. R. KELLY, M.P. (S.A.) (Lib.)

*Attorney-General—*

THE HON. N. H. BOWEN, Q.C., M.P. (N.S.W.) (Lib.)

*Minister for the Navy, and under the Minister for Trade and Industry, Minister-in-Charge of Tourist Activities—*

THE HON. DON CHIPP, M.P. (Vic.) (Lib.)

*Minister for the Interior—*

THE HON. P. J. NIXON (Vic.) (C.P.)

\* Minister in the Cabinet.

## GORTON MINISTRY—FROM 10 JANUARY 1968

On 10 January 1968 the Governor-General:

determined the appointment of the Right Honourable John McEwen, M.P., as Prime Minister; and

appointed Senator the Honourable John Grey Gorton to hold the office of Prime Minister.

On the occasion of the administration of the Oath of Office to Senator Gorton as Prime Minister of Australia, His Excellency made the following statement—

‘Whereas on the 17th day of December 1967 I was advised by the Right Honourable John McEwen, M.P., Deputy Prime Minister, that the Right Honourable Harold Edward Holt, M.P., then Prime Minister of Australia, was unavailable to perform the duties of his office and was in all probability dead;

‘And whereas, upon the information available to me, it appeared to me that, notwithstanding exhaustive and adequate search by land, sea and air (which was continued until 5th January, 1968) the body of the said Harold Edward Holt was lost in the sea and remained undiscovered, and that, having regard to the circumstances of his disappearance on the 17th day of December 1967 and to the searches so made, he was in all probability dead;

‘And whereas, upon the said advice and information, I decided on the 19th day of December 1967 to determine the Commission formerly granted by me to the said Harold Edward Holt to hold the office of Prime Minister and to grant a Commission to the said John McEwen to execute the duties of such office;

‘And whereas on the 19th day of December 1967 Harold Edward Holt’s Commission was determined and a Commission was issued to John McEwen;

‘And whereas on the 10th day of January 1968 the said John McEwen tendered to me and I accepted his resignation as Prime Minister of Australia;

‘Now, I address you, John Grey Gorton, having been advised by John McEwen, Prime Minister of Australia that you command the necessary political support—I have decided to grant a Commission to you, John Grey Gorton to hold the office of Prime Minister of Australia. I now invite you to make the Oath of Office.’

(See Section 64 of the Constitution of the Commonwealth, page 14.)

With the installation of Senator Gorton as Prime Minister and Minister for Education and Science, Mr McEwen again became Minister for Trade and Industry and Mr J. M. Fraser was appointed as Assistant Minister for Education and Science. Other portfolios remained the same. For subsequent changes, see Appendix.

*Names of Ministers of State.* Year Book No. 38 contains a statement listing the Commonwealth Departments in existence during the period 1 April 1925 to 31 December 1949 and the names of the Ministers of State who had administered them (pages 74-9). This is in continuation of a similar statement covering the period from the inauguration of the Commonwealth Government to 1925 which appears in Year Book No. 18.

**State Ministries, December 1967**

The names of the members of the Ministries in each State in December 1967 are shown in the following statement. For subsequent changes, *see* Appendix. Party affiliation is indicated in parenthesis after each name. For full party titles *see* page 67.

**STATE MINISTRIES, DECEMBER 1967**

**NEW SOUTH WALES**

*Ministry (from 13 May 1965)*

*Premier and Treasurer—*

THE HON. R. W. ASKIN, M.L.A. (Lib.)

*Deputy Premier, Minister for Education, and Minister for Science—*

THE HON. C. B. CUTLER, E.D., M.L.A. (C.P.)

*Minister for Labour and Industry, Chief Secretary, and Minister for Tourist Activities—*

THE HON. E. A. WILLIS, M.L.A. (Lib.)

*Minister for Child Welfare, Minister for Social Welfare, Advisory Minister for Transport, and Vice-President of the Executive Council—*

THE HON. A. D. BRIDGES, M.L.C. (Lib.)

*Minister for Agriculture—*

THE HON. W. A. CHAFFEY, M.L.A. (C.P.)

*Attorney-General—*

THE HON. K. M. McCAW, M.L.A. (Lib.)

*Minister for Local Government and Minister for Highways—*

THE HON. P. H. MORTON, M.L.A. (Lib.)

*Minister for Public Works—*

THE HON. D. HUGHES, M.L.A. (C.P.)

*Minister for Transport—*

THE HON. M. A. MORRIS, M.L.A. (Lib.)

*Minister for Decentralisation and Development—*

THE HON. J. B. M. FULLER, M.L.C. (C.P.)

*Minister for Lands—*

THE HON. T. L. LEWIS, M.L.A. (Lib.)

*Minister for Conservation—*

THE HON. J. G. BEALE, M.L.A. (Lib.)

*Minister for Housing and Minister for Co-operative Societies—*

THE HON. S. T. STEPHENS, M.L.A. (C.P.)

*Minister of Justice—*

THE HON. J. C. MADDISON, M.L.A. (Lib.)

*Minister for Health—*

THE HON. A. H. JAGO, M.L.A. (Lib.)

*Minister for Mines—*

THE HON. W. C. FIFE, M.L.A. (Lib.)

**VICTORIA**

*Ministry (from 7 June 1955)*

*(Portfolios as from 9 May 1967)*

*Premier, and Treasurer—*

THE HON. SIR HENRY BOLTE, K.C.M.G., M.P. (Lib.)

*Chief Secretary—*

THE HON. A. G. RYLAH, C.M.G., E.D., M.P. (Lib.)

*Minister of Agriculture—*

THE HON. G. L. CHANDLER, C.M.G., M.L.C. (Lib.)

*Minister of Education—*

THE HON. L. H. S. THOMPSON, M.L.C. (Lib.)

*Attorney-General, and Minister of Immigration—*

THE HON. G. O. REID, M.P. (Lib.)

*Minister of Public Works—*

THE HON. M. V. PORTER, M.P. (Lib.)

*Minister of Housing, Minister of Forests, and Minister for Aboriginal Affairs—*

THE HON. E. R. MEAGHER, M.B.E., E.D., M.P. (Lib.)

*Minister for Local Government—*

THE HON. R. J. HAMER, E.D., M.L.C. (Lib.)

*Minister for Fuel and Power, and Minister of Mines—*

THE HON. J. C. M. BALFOUR, M.P. (Lib.)

*Minister for Labour and Industry—*

THE HON. J. F. ROSSITER, M.P. (Lib.)

*Minister of Transport—*

THE HON. V. F. WILCOX, M.P. (Lib.)

*Minister of Health—*

THE HON. V. O. DICKIE, M.L.C. (Lib.)

*Minister of State Development—*

THE HON. J. W. MANSON, M.P. (Lib.)

*Minister of Lands, Minister of Soldier Settlement, and Minister of Conservation—*

THE HON. SIR WILLIAM McDONALD, M.P. (Lib.)

*Minister of Water Supply—*

THE HON. W. A. BORTHWICK, M.P. (Lib.)

STATE MINISTRIES, 1967—*continued*  
QUEENSLAND

*Ministry (from 10 June 1966)*

*(Portfolios as from 20 June 1967)*

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|---|---|
| <i>Premier and Minister for State Development, and Vice-President of the Executive Council—</i><br>THE HON. G. F. R. NICKLIN, M.M., M.L.A. (C.P.) | <i>Minister for Primary Industries—</i><br>THE HON. J. A. ROW, M.L.A. (C.P.)          |
| <i>Treasurer—</i><br>THE HON. G. W. W. CHALK, M.L.A. (Lib.)   | <i>Minister for Works and Housing—</i><br>THE HON. J. BJELKE-PETERSEN, M.L.A. (C.P.)  |
| <i>Minister for Education—</i><br>THE HON. J. C. A. PIZEY, M.L.A. (C.P.)  | <i>Minister for Health—</i><br>THE HON. S. D. TOOTH, M.L.A. (Lib.)                    |
| <i>Minister for Justice and Attorney-General—</i><br>THE HON. P. R. DELAMOTHE, O.B.E., M.L.A. (Lib.)  | <i>Minister for Labour and Tourism—</i><br>THE HON. J. D. HERBERT, M.L.A. (Lib.)      |
| <i>Minister for Lands—</i><br>THE HON. A. R. FLETCHER, M.L.A. (C.P.)  | <i>Minister for Mines and Main Roads—</i><br>THE HON. R. E. CAMM, M.L.A. (C.P.)       |
| <i>Minister for Local Government and Conservation—</i><br>THE HON. H. RICHTER, M.L.A. (C.P.)  | <i>Minister for Transport—</i><br>THE HON. W. E. KNOX, M.L.A. (Lib.)                  |
|   | <i>Minister for Industrial Development—</i><br>THE HON. F. A. CAMPBELL, M.L.A. (Lib.) |

SOUTH AUSTRALIA

*Ministry (from 1 June 1967)*

- |  |  |
|--|--|
| <i>Premier, Treasurer, Attorney-General, and Minister of Housing—</i><br>THE HON. D. A. DUNSTAN, Q.C., M.P. (A.L.P.) | <i>Minister of Local Government, Minister of Roads, and Minister of Mines—</i><br>THE HON. S. C. BEVAN, M.L.C. (A.L.P.)  |
| <i>Chief Secretary and Minister of Health—</i><br>THE HON. A. J. SHARD, M.L.C. (A.L.P.)                              | <i>Minister of Labour and Industry and Minister of Transport—</i><br>THE HON. A. F. KNEEBONE, M.L.C. (A.L.P.)  |
| <i>Minister of Works and Minister of Marine—</i><br>THE HON. C. D. HUTCHENS, M.P. (A.L.P.)                           | <i>Minister of Agriculture and Minister of Forests—</i><br>THE HON. G. A. BYWATERS, M.P. (A.L.P.)  |
| <i>Minister of Social Welfare—</i><br>THE HON. F. H. WALSH, M.P. (A.L.P.)  | <i>Minister of Lands, Minister of Repatriation, Minister of Irrigation, and Minister of Immigration and Tourism—</i><br>THE HON. J. D. CORCORAN, M.P. (A.L.P.) |
| <i>Minister of Education and Minister of Aboriginal Affairs—</i><br>THE HON. R. R. LOVEDAY, M.P. (A.L.P.)            |  |

WESTERN AUSTRALIA

*Ministry (from 17 August 1965)*

*(Portfolios as from 16 February 1967)*

- |   |  |
|---|--|
| <i>Premier, Treasurer, and Minister for Tourists—</i><br>THE HON. D. BRAND, M.L.A. (L.C.L.)   | <i>Minister for Works and Minister for Water Supplies—</i><br>THE HON. R. HUTCHINSON, D.F.C., M.L.A. (L.C.L.)                              |
| <i>Deputy Premier, Minister for Agriculture, and Minister for Electricity—</i><br>THE HON. C. D. NALDER, M.L.A. (C.P.)                                | <i>Minister for Local Government, Minister for Town Planning, and Minister for Child Welfare—</i><br>THE HON. L. A. LOGAN, M.L.C. (L.C.L.) |
| <i>Minister for Industrial Development and Minister for the North-West—</i><br>THE HON. C. W. M. COURT, O.B.E., M.L.A. (L.C.L.)                       | <i>Chief Secretary, Minister for Police, and Minister for Traffic—</i><br>THE HON. J. F. CRAIG, M.L.A. (L.C.L.)                            |
| <i>Minister for Education and Minister for Native Welfare—</i><br>THE HON. E. H. M. LEWIS, M.L.A. (C.P.)  | <i>Minister for Housing and Minister for Labour—</i><br>THE HON. D. H. O'NEIL, M.L.A. (L.C.L.)   |
| <i>Minister for Mines, Minister for Justice, and Leader of the Government in the Legislative Council—</i><br>THE HON. A. F. GRIFFITH, M.L.C. (L.C.L.) | <i>Minister for Transport and Minister for Railways—</i><br>THE HON. R. J. O'CONNOR, M.L.A. (L.C.L.)                                       |
| <i>Minister for Lands, Minister for Forests, and Minister for Immigration—</i><br>THE HON. W. S. BOVELL, M.L.A. (L.C.L.)                              | <i>Minister for Health, and Minister for Fisheries and Fauna—</i><br>THE HON. G. C. MACKINNON, M.L.C. (L.C.L.)                             |

STATE MINISTRIES, 1967—*continued*

TASMANIA

*Ministry (from 13 May 1964)*

<i>Premier, Treasurer, and Minister for Mines—</i> THE HON. E. E. REECE, M.H.A. (A.L.P.)	<i>Chief Secretary—</i> THE HON. B. K. MILLER, M.L.C. (A.L.P.)
<i>Deputy Premier and Attorney-General—</i> THE HON. R. F. FAGAN, M.H.A. (A.L.P.)	<i>Minister for Housing and Forests—</i> THE HON. S. V. WARD, M.H.A. (A.L.P.)
<i>Minister for Education—</i> THE HON. W. A. NEILSON, M.H.A. (A.L.P.)	<i>Minister for Health—</i> THE HON. M. G. EVERETT, Q.C., M.H.A. (A.L.P.)
<i>Minister for Lands and Works—</i> THE HON. D. A. CASHION, M.H.A. (A.L.P.)	<i>Minister for Transport and Police—</i> THE HON. H. J. McLoughlin, M.H.A. (A.L.P.)
<i>Minister for Agriculture and Tourists—</i> THE HON. A. C. ATKINS, M.H.A. (A.L.P.)	

**Leaders of the Opposition, Commonwealth and State Parliaments, December 1967**

The Leader of the Opposition plays an important part in the Party system of government which operates in the Australian Parliaments. The following list gives the names of the holders of this position in each of the Parliaments in December 1967.

**LEADERS OF THE OPPOSITION, DECEMBER 1967**

<i>Commonwealth—</i> E. G. Whitlam, Q.C., M.P. (A.L.P.)
<i>New South Wales—</i> J. B. Renshaw, M.L.A. (A.L.P.)
<i>Victoria—</i> A. C. Holding, M.P. (A.L.P.)
<i>Queensland—</i> J. W. Houston, M.L.A. (A.L.P.)
<i>South Australia—</i> R. S. Hall, M.P. (L.C.L.)
<i>Western Australia—</i> The Hon. J. T. Tonkin, M.L.A. (A.L.P.)
<i>Tasmania—</i> The Hon. W. A. Bethune, M.H.A. (Lib.)

**Numbers and salaries of Commonwealth Ministers**

Under sections 65 and 66, respectively, of the Constitution of the Commonwealth the number of Ministers of State was not to exceed seven, and the annual sum payable for their salaries was not to exceed £12,000 (\$24,000), each provision to operate, however, 'until the Parliament otherwise provides'.

Subsequently the number and salaries have been increased from time to time, and from 1967 the annual sum payable for salaries has been fixed at \$197,300 and the number of Ministers at twenty-six. An additional ministerial allowance of \$8,000 a year has been payable to the Prime Minister since 1964, and an additional ministerial allowance of \$3,600 a year for senior Ministers and \$3,000 a year for junior Ministers.

All amounts payable in the foregoing paragraphs are in addition to amounts payable as Parliamentary allowances (*see page 68*).

**Parliaments and elections**

**The Commonwealth Parliaments**

The first Parliament of the Commonwealth was convened by proclamation dated 29 April 1901 by His Excellency the Marquis of Linlithgow, then Earl of Hopetoun, Governor-General. It was opened on 9 May 1901 by H.R.H. the Duke of Cornwall and York. The Rt Hon. Sir Edmund Barton, G.C.M.G., K.C., was Prime Minister.

The following table shows the number and duration of Parliaments since federation.

## COMMONWEALTH PARLIAMENTS

<i>Number of Parliament</i>	<i>Date of opening</i>	<i>Date of dissolution</i>
First . . . . .	9 May 1901 . . . . .	23 November 1903
Second . . . . .	2 March 1904 . . . . .	5 November 1906
Third . . . . .	20 February 1907 . . . . .	19 February 1910
Fourth . . . . .	1 July 1910 . . . . .	23 April 1913
Fifth . . . . .	9 July 1913 . . . . .	30 July 1914(a)
Sixth . . . . .	8 October 1914 . . . . .	26 March 1917
Seventh . . . . .	14 June 1917 . . . . .	3 November 1919
Eighth . . . . .	26 February 1920 . . . . .	6 November 1922
Ninth . . . . .	28 February 1923 . . . . .	3 October 1925
Tenth . . . . .	13 January 1926 . . . . .	9 October 1928
Eleventh . . . . .	6 February 1929 . . . . .	16 September 1929
Twelfth . . . . .	20 November 1929 . . . . .	27 November 1931
Thirteenth . . . . .	17 February 1932 . . . . .	7 August 1934
Fourteenth . . . . .	23 October 1934 . . . . .	21 September 1937
Fifteenth . . . . .	30 November 1937 . . . . .	27 August 1940
Sixteenth . . . . .	20 November 1940 . . . . .	7 July 1943
Seventeenth . . . . .	23 September 1943 . . . . .	16 August 1946
Eighteenth . . . . .	6 November 1946 . . . . .	31 October 1949
Nineteenth . . . . .	22 February 1950 . . . . .	19 March 1951(a)
Twentieth . . . . .	12 June 1951 . . . . .	21 April 1954
Twenty-first . . . . .	4 August 1954 . . . . .	4 November 1955
Twenty-second . . . . .	15 February 1956 . . . . .	14 October 1958
Twenty-third . . . . .	17 February 1959 . . . . .	2 November 1961
Twenty-fourth . . . . .	20 February 1962 . . . . .	1 November 1963
Twenty-fifth . . . . .	25 February 1964 . . . . .	31 October 1966
Twenty-sixth . . . . .	21 February 1967 . . . . .	

(a) A dissolution of both the Senate and the House of Representatives was granted by the Governor-General, acting on the advice of the Cabinet and under section 57 of the Constitution.

There have been twenty-five complete Parliaments since Federation. Until 1927 the Parliament met in Melbourne; it now meets in Canberra, the first meeting at Parliament House, Canberra, being opened by the Duke of York on 9 May 1927.

The twenty-fifth Parliament opened on 25 February 1964 and ended on 31 October 1966 when the House of Representatives was dissolved. Elections for the House of Representatives were held on 26 November 1966. Elections were also held on the same date to fill casual vacancies in the Senate for each of the States of New South Wales, Victoria, Queensland, and Western Australia. Particulars of electors and voting are given on page 62. For particulars of electors enrolled and of electors who voted in the several States and Territories at previous Commonwealth elections, *see* Year Book No. 52 and earlier issues.

A special article describing the Commonwealth Parliament, its functions and procedure, prepared by the Clerk of the Senate and the Clerk of the House of Representatives, appears in Year Book No. 49, pages 65–71.

#### Qualifications for membership and for franchise—Commonwealth Parliament

Qualifications necessary for membership of either House of the Commonwealth Parliament are possessed by any British subject, twenty-one years of age or over, who has resided in the Commonwealth for at least three years and who is, or is qualified to become, an elector of the Commonwealth. Qualifications for Commonwealth franchise are possessed by any British subject, not under twenty-one years of age and not disqualified on other grounds, who has lived in Australia for six months continuously. Residence in a subdivision for a period of one month prior to enrolment is necessary to enable a qualified person to enrol. Enrolment and voting are compulsory except that the compulsory enrolment provisions do not relate to an Aboriginal native of Australia. A member of the Defence Force on service outside Australia who is a British subject not less than 21 years of age and has lived in Australia for six months continuously is entitled to vote at Commonwealth elections, whether enrolled or not. In 1966 the franchise was extended to entitle a person who is less than twenty-one years of age, who has lived in Australia for six months continuously and who is, or has been, on 'special service' outside Australia as a member of the Defence Force, to vote at elections as if his name appeared on the roll. 'Special service' takes the same meaning as that term in the Repatriation (Special Overseas Service) Act and means, in relation to a person, service during a period when he is outside Australia and he or his unit is allotted for special duty in a special area.

The principal reasons for disqualification of persons otherwise eligible as members of either Commonwealth House are: membership of the other House, allegiance to a foreign power, being attainted of treason, being convicted and under sentence for any offence punishable by imprisonment for one year or longer, being an undischarged bankrupt or insolvent, holding office of profit under the Crown (with certain exceptions), or having pecuniary interest in any agreement with the public service of the Commonwealth except as a member of an incorporated company of more than twenty-five persons. Persons of unsound mind, attainted of treason, convicted and under sentence for any offence punishable by imprisonment for one year or longer, or persons who are holders of temporary entry permits under the *Migration Act* 1958–1966 or are prohibited immigrants under that Act are excluded from the franchise. In the main, these or similar grounds for disqualification apply also to State Parliament membership and franchise. Aborigines are entitled to vote at both Commonwealth and State elections in all States.

#### Commonwealth Parliaments and elections

From the establishment of the Commonwealth until 1949 the Senate consisted of thirty-six members, six being returned by each of the original federating States. The Constitution empowers Parliament to increase or decrease the size of the Parliament, and, as the population of the Commonwealth had more than doubled since its inception, the Parliament passed the *Representation Act* 1948 which provided that there should be ten Senators from each State instead of six, increasing the total to sixty Senators, thus enlarging both Houses of Parliament and providing a representation ratio nearer to the proportion which existed at Federation.

In accordance with the Constitution the total number of members of the House of Representatives must be as nearly as practicable double that of the Senate.\* Consequently, in terms of the Constitution and the Representation Act, from the date of the 1949 elections the number of members in the House of Representatives was increased from 74 to 121 (excluding the members for the internal Territories). As the States are represented in the House of Representatives on a population basis, the numbers were increased as follows: New South Wales—from 28 to 47; Victoria—from 20 to 33; Queensland—from 10 to 18; South Australia—from 6 to 10; and Western Australia—from 5 to 8. Tasmania's representation remained at 5 and the total was increased from 74 to 121. The increase in the number of members of Parliament necessitated a redistribution of seats and a redetermination of electoral boundaries. Redistributions are carried out by distribution commissioners appointed for each State. The redistributions are effected on a quota basis, but taking into account community interests, means of communication, physical features, existing boundaries, and other factors.

The population as disclosed by the Census taken on 30 June 1954 necessitated a further alteration in representation in the House of Representatives in respect of New South Wales, South Australia, and Western Australia. Representation as from the general election for the House of Representatives on 10 December 1955 has been: New South Wales 46, Victoria 33, Queensland 18, South Australia 11, Western Australia 9, Tasmania 5, the total number of members (excluding the members for the internal Territories) being increased from 121 to 122.

The population as disclosed by the Census taken on 30 June 1961 revealed that, under the provisions of the Representation Act, New South Wales, Queensland, and Western Australia would each lose one member in the House of Representatives, while Victoria would gain a member. The distribution commissioners' reports were duly laid before both Houses of Parliament, but the Government decided not to proceed with the proposals and announced that it would amend the Representation Act. In November 1964 the formula provided by Section 10 of the Representation Act for determining the number of members of the House of Representatives was amended so as to give a State an additional member for 'any portion of a quota'. The effect of that amendment would have been that at the next redistribution Victoria and South Australia would each gain one member while all other States would retain their existing representation. However, no fresh redistribution was effected prior to the 1966 Census. Resulting from the population disclosed by the 1966 Census the Chief Electoral Officer has determined that the number of members of the House of Representatives to be chosen in the several States shall be: New South Wales 45, Victoria 34, Queensland 18, South Australia 12, Western Australia 9, and Tasmania 5. This new representation will then become effective at the next general election of members of the House of Representatives following the next redistribution.

Since the general election of 1922 the Northern Territory has been represented by one member in the House of Representatives, and the Australian Capital Territory has had similar representation since the elections of 1949. The member for the Australian Capital Territory has had full voting rights since the first sitting of the twenty-sixth Parliament. However, while the member for the Northern Territory may join in the debates he is not entitled to vote except on any proposed law

\* See page 66 for results of referendum on proposal to alter the Constitution so that the numbers of members of the House of Representatives might be increased without necessarily increasing the number of Senators.



which relates solely to the Territory or on a motion for the disallowance of a regulation made under an Ordinance of the Territory and on any amendment of such a motion. In February 1968, however, a Bill was introduced designed to give full voting rights to the member for the Northern Territory after the next General Elections for Members of the House of Representatives.

The Constitution provides for a minimum of five members for each original State. Members of the House of Representatives are elected for the duration of the Parliament, which is limited to three years. At elections for Senators the whole State constitutes the electorate. For the purpose of elections for the House of Representatives the State is divided into single electorates corresponding in number to the number of members to which the State is entitled. Further information regarding the Senate and the House of Representatives is given in earlier issues of the Year Book.

The *Commonwealth Electoral Act* 1948, introduced with the *Representation Act* 1948 to enlarge the Commonwealth Parliament (see page 61), changed the system of scrutiny and counting of votes in Senate elections from the alternative vote to that of proportional representation. For a description of the system, see Year Book No. 38, pages 82-3. The system of voting for both the Senate and the House of Representatives is preferential.

Particulars of voting at Senate elections and elections for the House of Representatives up to 1964 appear in earlier issues of the Year Book, and additional information is available in the *Statistical Returns* issued by the Chief Electoral Officer following each election.

The numbers of electors and of primary votes cast for the major political parties in each State and Territory at the latest election for each House were as follows.

#### COMMONWEALTH ELECTIONS, 1966 AND 1967

State or Territory	Electors enrolled	Votes recorded				Others	Informal	Total
		Liberal Party of Australia	Aus- tralian Country Party	Aus- tralian Labor Party	Aus- tralian Demo- cratic Labor Party			
HOUSE OF REPRESENTATIVES ELECTION, 26 NOVEMBER 1966								
New South Wales	2,308,775	862,407	226,355	862,631	96,102	69,981	69,340	2,186,816
Victoria	1,702,864	622,708	130,468	548,743	197,026	66,619	60,779	1,626,343
Queensland	900,492	253,663	165,358	354,674	63,175	5,365	15,595	857,830
South Australia	585,465	296,923	..	222,828	19,281	8,089	16,220	563,341
Western Australia	433,097	160,894	32,524	168,257	28,502	2,875	16,518	409,570
Tasmania	197,666	78,684	..	96,246	11,132	289	2,849	189,200
Northern Territory	17,395	..	7,221	6,734	..	..	500	14,455
Australian Capital Territory	48,127	16,685	..	22,721	2,193	2,396	777	44,772
Australia	6,193,881	2,291,964	561,926	2,282,834	417,411	155,614	182,578	5,892,327
SENATE ELECTION, 25 NOVEMBER 1967								
New South Wales	2,328,345	891,751	..	989,552	96,927	69,395	151,700	2,199,325
Victoria	1,726,681	629,367	..	622,404	267,495	24,317	110,694	1,654,277
Queensland	899,836	348,939	..	369,304	110,310	..	26,440	854,993
South Australia	594,480	252,816	..	255,513	18,885	8,745	32,864	568,823
Western Australia	441,957	131,239	44,862	179,833	30,587	4,051	27,832	418,404
Tasmania	200,622	66,399	..	73,384	15,802	28,011	9,711	193,307
Australia	6,191,921	2,365,373	2,489,990	540,006	134,519	359,241	5,889,129	

Membership at the end of 1967 was: *Senate*—Liberal Party of Australia, 22; Australian Country Party, 7; Australian Labor Party, 28; Australian Democratic Labor Party, 2; Independent, 1; *House of Representatives*—Liberal Party of Australia, 59; Australian Country Party, 21 (including the Northern Territory member with restricted voting rights); Australian Labor Party, 42; Independent, 1; Vacant, 1.

**Members of the Commonwealth Parliament**

The following is a list of Senators and Members of the House of Representatives of the Commonwealth Parliament as at 1 January 1968. Changes since that date are set out in the Appendix to this volume. Party affiliation is indicated by the use of the following abbreviations:

A.D.L.P.—Australian Democratic Labour Party

A.L.P.—Australian Labor Party

C.P.—Australian Country Party

Ind.—Independent

Lib.—Liberal Party of Australia

**MEMBERS OF THE COMMONWEALTH PARLIAMENT, 1 JANUARY 1968(a)**

**THE SENATE**

*President:*

SENATOR THE HON. SIR ALISTER McMULLIN, K.C.M.G.

*Chairman of Committees:*

SENATOR T. C. DRAKE-BROCKMAN, D.F.C.

*Leader of the Government in the Senate:*

SENATOR THE HON. J. G. GORTON

*Leader of the Opposition in the Senate:*

SENATOR L. K. MURPHY, Q.C.

<i>Senator</i>	<i>State</i>	<i>Term expires 30 June</i>	<i>Senator</i>	<i>State</i>	<i>Term expires 30 June</i>
Anderson, Hon. K. M. (Lib.)	N.S.W.	1971	McKellar, Hon. G. C. (C.P.)	N.S.W.	1968
Benn, A. M. (A.L.P.)	Qld	1968	McKenna, Hon. N. E. (A.L.P.)	Tas.	1968
Bishop, R. (A.L.P.)	S.A.	1968	McManus, F. P. (A.D.L.P.)	Vic.	1971
Branson, G. H. (Lib.)	W.A.	1971	McMullin, Hon. Sir Alister, K.C.M.G. (Lib.)	N.S.W.	1971
Breen, Marie F., O.B.E. (Lib.)	Vic.	1968	Marriott, J. E. (Lib.)	Tas.	1971
Bull, T. L., O.B.E. (C.P.)	N.S.W.	1971	Mattner, E. W., M.C., D.C.M., M.M. (Lib.)	S.A.	1968
Cant, H. G. J. (A.L.P.)	W.A.	1971	Morris, Hon. K. J., C.M.G. (Lib.)	Qld	1968
Cavanagh, J. L. (A.L.P.)	S.A.	1968	Mulvihill, J. A. (A.L.P.)	N.S.W.	1971
Cohen, S. H., Q.C. (A.L.P.)	Vic.	1968	Murphy, L. K., Q.C. (A.L.P.)	N.S.W.	1968
Cooper, Hon. Sir Walter, M.B.E. (C.P.)	Qld	1968	Nicholls, T. M. (A.L.P.)	S.A.	1968
Cormack, M.C. (Lib.)	Vic.	1968	O'Byrne, J. (A.L.P.)	Tas.	1971
Cotton, R. C. (Lib.)	N.S.W.	1968	Ormonde, J. P. (A.L.P.)	N.S.W.	1971
Davidson, G. S. (Lib.)	S.A.	1971	Poke, A. G. (A.L.P.)	Tas.	1968
Devitt, D. M. (A.L.P.)	Tas.	1971	Poyser, A. G. (A.L.P.)	Vic.	1968
Dittmer, F. (A.L.P.)	Qld	1971	Prowse, E. W. (C.P.)	W.A.	1968
Drake-Brockman, T. C. D.F.C. (C.P.)	W.A.	1971	Rankin, Hon. Dame Anna- belle, D.B.E. (Lib.)	Qld	1968
Drury, A. J. (A.L.P.)	S.A.	1971	Ridley, C. F. (A.L.P.)	S.A.	1971
Fitzgerald, J. F. (A.L.P.)	N.S.W.	1968	Scott, M. F. (Lib.)	W.A.	1971
Gair, Hon. V. C. (A.D.L.P.)	Qld	1971	Sim, J. P. (Lib.)	W.A.	1968
Gorton, Hon. J. G. (Lib.)	Vic.	1971	Tangney, Dorothy M. (A.L.P.)	W.A.	1968
Heatley, W. C. (Lib.)	Qld	1968	Toohey, J. P. (A.L.P.)	S.A.	1971
Hendrickson, A. (A.L.P.)	Vic.	1971	Turnbull, R. J. D. (Ind.)	Tas.	1968
Henty, Hon. N. H. D. (Lib.)	Tas.	1968	Webster, J. J. (C.P.)	Vic.	1968
Keeffe, J. B. (A.L.P.)	Qld	1971	Wedgwood, Ivy E. (Lib.)	Vic.	1971
Kennelly, Hon. P. J. (A.L.P.)	Vic.	1971	Wheeldon, J. M. (A.L.P.)	W.A.	1971
Lacey, R. H. (A.L.P.)	Tas.	1971	Wilkinson, L. D. (A.L.P.)	W.A.	1968
Laucke, C. L. (Lib.)	S.A.	1968	Willesee, D. R. (A.L.P.)	W.A.	1968
Laught, K. A. (Lib.)	S.A.	1971	Wood, I. A. C. (Lib.)	Qld	1971
Lawrie, A. G. E. (C.P.)	Qld	1971	Wright, R. C. (Lib.)	Tas.	1968
Lillico, A. E. D. (Lib.)	Tas.	1971			
McClelland, D. (A.L.P.)	N.S.W.	1968			

(a) For later changes see Appendix.

## MEMBERS OF THE COMMONWEALTH PARLIAMENT

1 JANUARY 1968(a)—continued

## THE HOUSE OF REPRESENTATIVES

(Triennial Parliaments—Last General Election

26 November 1966)

*Speaker:*

THE HON. W. J. ASTON, M.P.

*Chairman of Committees:*

P. E. LUCOCK, M.P.

*Leader of the Opposition:*

E. G. WHITLAM, Q.C., M.P.

<i>Member</i>	<i>Division</i>	<i>Member</i>	<i>Division</i>
Adermann, Rt Hon. C. F. (C.P.)	Fisher (Q.)	Cope, J. F. (A.L.P.)	Watson (N.S.W.)
Allan, A. I. (C.P.)	Gwydir (N.S.W.)	Corbett, J. (C.P.)	Maranoa (Q.)
Anthony, Hon. J. D. (C.P.)	Richmond (N.S.W.)	Costa, D. E. (A.L.P.)	Banks (N.S.W.)
Armstrong, A. A., M.C. (C.P.)	Riverina (N.S.W.)	Courtney, F. (A.L.P.)	Darebin (V.)
Arthur, W. T. (Lib.)	Barton (N.S.W.)	Cramer, Hon. Sir John (Lib.)	Bennelong (N.S.W.)
Aston, W. J. (Lib.)	Phillip (N.S.W.)	Crean, F. (A.L.P.)	Melbourne Ports (V.)
Barnard, L. H. (A.L.P.)	Bass (T.)	Cross, M. D. (A.L.P.)	Brisbane (Q.)
Barnes, Hon. C. E. (C.P.)	McPherson (Q.)	Curtin, D. J. (A.L.P.)	Kingsford-Smith (N.S.W.)
Bate, H. J. (Lib.)	Macarthur (N.S.W.)	Daly, F. M. (A.L.P.)	Grayndler (N.S.W.)
Beaton, N. L. (A.L.P.)	Bendigo (V.)	Davies, R. (A.L.P.)	Braddon (T.)
Beazley, K. E. (A.L.P.)	Fremantle (W.A.)	Devine, L. T. (A.L.P.)	East Sydney (N.S.W.)
Benson, S. J., R.D. (Ind.)	Batman (V.)	Dobie, J. D. M. (Lib.)	Hughes (N.S.W.)
Birrell, F. R. (A.L.P.)	Port Adelaide (S.A.)	Drury, E. N. (Lib.)	Ryan (Q.)
Bonnett, R. N. (Lib.)	Herbert (Q.)	Duthie, G. W. A. (A.L.P.)	Wilmot (T.)
Bosman, L. L. (Lib.)	St. George (N.S.W.)	England, J. A., E.D. (C.P.)	Calare (N.S.W.)
Bowen, Hon. N. H., Q.C. (Lib.)	Parramatta (N.S.W.)	Erwin, G. D. (Lib.)	Ballaarat (V.)
Bridges-Maxwell, C. W. (Lib.)	Robertson (N.S.W.)	Everingham, D.N. (A.L.P.)	Capricornia (Q.)
Brownbill, Miss K. C. M. (Lib.)	Kingston (S.A.)	Failes, L. J. (C.P.)	Lawson (N.S.W.)
Bryant, G.M. (A.L.P.)	Wills (V.)	Fairbairn, Hon. D. E., D.F.C. (Lib.)	Farrer (N.S.W.)
Buchanan, A. A. (Lib.)	McMillan (V.)	Fairhall, Hon. A. (Lib.)	Paterson (N.S.W.)
Bury, Hon. L. H. E. (Lib.)	Wentworth (N.S.W.)	Forbes, Hon. A. J., M.C. (Lib.)	Barker (S.A.)
Cairns, J. F. (A.L.P.)	Yarra (V.)	Fox, E. M. C. (Lib.)	Henty (V.)
Cairns, K. M. K. (Lib.)	Lilley (Q.)	Fraser, Hon. J. M. (Lib.)	Wannon (V.)
Calder, S. E., D.F.C. (C.P.)	Northern Territory	Fraser, J. R. (A.L.P.)	Aust. Cap. Terr.
Calwell, Hon. A. A. (A.L.P.)	Melbourne (V.)	Freeth, Hon. G. (Lib.)	Forrest (W.A.)
Cameron, C. R. (A.L.P.)	Hindmarsh (S.A.)	Fulton, W. J. (A.L.P.)	Leichhardt (Q.)
Cameron, D. M. (Lib.)	Griffith (Q.)	Gibbs, W. T. (Lib.)	Bowman (Q.)
Chaney, Hon. F. C., A.F.C. (Lib.)	Perth (W.A.)	Gibson, A. (Lib.)	Denison (T.)
Chipp, Hon. D. L. (Lib.)	Higinbotham (V.)	Giles, G. O'H. (Lib.)	Angas (S.A.)
Clark, J. J. (A.L.P.)	Darling (N.S.W.)	Graham, B. W. (Lib.)	North Sydney (N.S.W.)
Cleaver, R. (Lib.)	Swan (W.A.)	Griffiths, C. E. (A.L.P.)	Shortland (N.S.W.)
Collard, F. W. (A.L.P.)	Kalgoorlie (W.A.)	Hallett, J. M. (C.P.)	Canning (W.A.)
Connor, R. F. X. (A.L.P.)	Cunningham (N.S.W.)	Hansen, B. P. (A.L.P.)	Wide Bay (Q.)
		Harrison, E. J. (A.L.P.)	Blaxland (N.S.W.)
		Hasluck, Rt Hon. P. M. C. (Lib.)	Curtin (W.A.)

(a) For later changes see Appendix.

MEMBERS OF THE COMMONWEALTH PARLIAMENT

1 JANUARY 1968(a)—continued

THE HOUSE OF REPRESENTATIVES—continued

<i>Member</i>	<i>Division</i>	<i>Member</i>	<i>Division</i>
Haworth, Hon. W. C. (Lib.)	Isaacs (V.)	Minogue, D. (A.L.P.)	West Sydney (N.S.W.)
Hayden, W. G. (A.L.P.)	Oxley (Q.)	Munro, D. R. R. (Lib.)	Eden-Monaro (N.S.W.)
Holten, R. McN. (C.P.)	Indi (V.)	Nicholls, M. H. (A.L.P.)	Bonython (S.A.)
Howson, Hon. P. (Lib.)	Fawkner (V.)	Nixon, P. J. (C.P.)	Gippsland (V.)
Hughes, T. E. F., Q.C. (Lib.)	Parkes (N.S.W.)	O'Connor, W. P. (A.L.P.)	Dalley (N.S.W.)
Hulme, Hon. A. S. (Lib.)	Petrie (Q.)	Patterson, R. A. (A.L.P.)	Dawson (Q.)
Irwin, L. H., M.B.E. (Lib.)	Mitchell (N.S.W.)	Peacock, A. S. (Lib.)	Kooyong (V.)
James, A. W. (A.L.P.)	Hunter (N.S.W.)	Pearsall, T. G. (Lib.)	Franklin (Tas.)
Jarman, A. W. (Lib.)	Deakin (V.)	Peters, E. W. (A.L.P.)	Scullin (V.)
Jess, J. D. (Lib.)	La Trobe (V.)	Pettitt, J. A. (C.P.)	Hume (N.S.W.)
Jessop, D. S. (Lib.)	Grey (S.A.)	Robinson, I. L. (C.P.)	Cowper (N.S.W.)
Jones, A. T. (Lib.)	Adelaide (S.A.)	Scholes, G. G. D. (A.L.P.)	Corio (V.)
Jones, C. K. (A.L.P.)	Newcastle (N.S.W.)	Sinclair, Hon. I. McC. (C.P.)	New England (N.S.W.)
Katter, R. C. (C.P.)	Kennedy (Q.)	Snedden, Hon. B. M., Q.C. (Lib.)	Bruce (V.)
Kelly, Hon. C. R. (Lib.)	Wakefield (S.A.)	Stewart, F. E. (A.L.P.)	Lang (N.S.W.)
Kent Hughes, Hon. Sir Wilfrid, K.B.E., M.V.O., M.C., E.D. (Lib.)	Chisholm (V.)	St. John, E. H., Q.C. (Lib.)	Warringah (N.S.W.)
Killen, D. J. (Lib.)	Moreton (Q.)	Stokes, P. W. C., E.D. (Lib.)	Maribyrnong (V.)
King, R. S. (C.P.)	Wimmera (V.)	Street, A. A. (Lib.)	Corangamite (V.)
Lee, M. W. (Lib.)	Lalor (Vic.)	Swartz, Hon. R. W. C., M.B.E., E.D. (Lib.)	Darling Downs (Q.)
Luchetti, A. S. (A.L.P.)	Macquarie (N.S.W.)	Turnbull, W. G. (C.P.)	Mallee (V.)
Lucock, P. E. (C.P.)	Lyne (N.S.W.)	Turner, H. B. (Lib.)	Bradfield (N.S.W.)
Lynch, P. R. (Lib.)	Flinders (Vic.)	Uren, T. (A.L.P.)	Reid (N.S.W.)
Mackay, M. G. (Lib.)	Evans (N.S.W.)	Webb, C. H. (A.L.P.)	Stirling (W.A.)
Maisey, D. W. (C.P.)	Moore (W.A.)	Wentworth, W. C. (Lib.)	Mackellar (N.S.W.)
McEwen, Rt Hon. J. (C.P.)	Murray (V.)	Whitlam, E. G., Q.C. (A.L.P.)	Werriwa (N.S.W.)
McIvor, H. J. (A.L.P.)	Gellibrand (V.)	Whittorn, R. H. (Lib.)	Balaclava (V.)
McLeay, J. E. (Lib.)	Boothby (S.A.)	Wilson, I. B. C. (Lib.)	Sturt (S.A.)
McMahon, Rt Hon. W. (Lib.)	Lowe (N.S.W.)		

(a) For later changes see Appendix.

NOTE. The constituency of Higgins (V.) was vacant at 1 January 1968 following the presumed death of the Rt Hon. H. E. Holt (Lib.), who disappeared while swimming off Portsea, Victoria, on 17 December 1967.

Commonwealth referendums

In accordance with section 128 of the Constitution any proposed law for the alteration of the Constitution, in addition to being passed by an absolute majority of each House of Parliament, must be submitted to a referendum of the electors in each State, and must be approved also by a majority of the electors in a majority of the States and by a majority of all the electors who voted, before it can be presented for Royal Assent. Twenty-six such proposals have so far been submitted to referendums and the consent of the electors has been received in five cases, the first in relation to the election of Senators in 1906, the second and third in respect of State Debts—one in 1910 and the other in 1928, the fourth in respect of Social Services in 1946, and the fifth in respect of Aborigines in 1967. In addition to referendums for alteration of the Constitution, other Commonwealth referendums have been held, two prior to Federation regarding the proposed Constitution and two regarding military service during the 1914–18 War. For details of earlier referendums see Year Book No. 52, pages 66–8.

On 1 March 1967 two Bills were introduced in the House of Representatives to alter the Constitution, one to enable the number of members of the House of Representatives to be increased without necessarily increasing the number of Senators, the other to enable the Aboriginal people to be counted in reckoning the population and to omit certain words relating to the Aboriginal race which some people felt were discriminatory. The proposed laws, after being passed by both Houses of Parliament, were submitted to the electors of the States at referendums held on 27 May 1967. At the referendums the electors voted in all States in favour of the proposal regarding Aboriginals, but rejected in all States but New South Wales the proposal for increasing the number of members of the House of Representatives.

A summary of the results of the voting on each of the proposals follows.

#### CONSTITUTION ALTERATION REFERENDUMS, 27 MAY 1967

State	Electors enrolled	Result of scrutiny		Informal	Total
		Number of votes in favour of proposed law	Number of votes not in favour of proposed law		
CONSTITUTION ALTERATION (PARLIAMENT) REFERENDUM					
New South Wales . . .	2,315,828	1,087,694	1,044,458	34,355	2,166,507
Victoria . . . . .	1,734,476	496,826	1,112,506	21,262	1,630,594
Queensland . . . . .	904,808	370,200	468,673	9,855	848,728
South Australia . . .	590,275	186,344	363,120	11,380	560,844
Western Australia . .	437,609	114,841	280,523	10,302	405,666
Tasmania . . . . .	199,589	42,764	142,660	3,821	189,245
Total . . . . .	6,182,585	2,298,669	3,411,940	90,975	5,801,584
CONSTITUTION ALTERATION (ABORIGINALS) REFERENDUM					
New South Wales . . .	2,315,828	1,949,036	182,010	35,461	2,166,507
Victoria . . . . .	1,734,476	1,525,026	85,611	19,957	1,630,594
Queensland . . . . .	904,808	748,612	90,587	9,529	848,728
South Australia . . .	590,275	473,440	75,383	12,021	560,844
Western Australia . .	437,609	319,823	75,282	10,561	405,666
Tasmania . . . . .	199,589	167,176	18,134	3,935	189,245
Total . . . . .	6,182,585	5,183,113	527,007	91,464	5,801,584

Consequent upon obtaining the approval of the electors, the Constitution Alteration (Aboriginals) was assented to on 10 August 1967. Section 51 of the Constitution is thereby altered by omitting from paragraph (xxvi) the words 'other than the aboriginal race in any State', and Section 127 of the Constitution is thereby repealed.

#### The Parliaments of the States and State elections

Pages 51, 60-1 and 68 of this chapter contain summarised information on the Parliaments of each State, the qualifications for members, the numbers of Houses and members, and salaries payable. For greater detail, including some historical material, reference should be made to Year Books No. 50, pages 69-72, No. 51, page 73, No. 52, page 68, No. 53, page 67, and earlier issues.

In Western Australia the *Electoral Act Amendment Act, 1967*, which came into operation by proclamation on 24 November 1967, provided that the residential qualifications for enrolment as an elector for the Western Australian Parliament shall be that a person shall have lived continuously in Australia for six months, in Western Australia for three months, and in the district for which he claims enrolment for one month immediately preceding the date of his claim.

*State elections.* Elections for both Houses of Parliament were held in Victoria on 29 April 1967. The numbers enrolled and votes cast at this election were as follows.

VICTORIAN ELECTIONS, 1967

	<i>Legislative Council</i>	<i>Legislative Assembly</i>
Electors enrolled . . . . .	1,723,981	1,723,981
Electors who voted . . . . .	1,625,371	1,625,239
Percentage of electors who voted . . . . .	94.28	94.27

In accordance with the *Electoral Provinces and Districts Act* 1965, the number of members elected were, for the first time, thirty-five for the Legislative Council, and seventy-three for the Legislative Assembly (*see* Year Book No. 53, page 67).

These were the only State elections held during 1967, except for the annual Tasmanian Legislative Council elections (three members each year, four in each sixth year).

*Membership of State Parliaments.* The following table shows the party distribution in each of the various State Parliaments at the end of 1967.

STATE PARLIAMENTS: MEMBERSHIP, BY PARTY AFFILIATION, 31 DECEMBER 1967

<i>Party</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>
UPPER HOUSE						
Australian Country Party (C.P.) . . . . .	12	8	..	..	8	..
Australian Labor Party (A.L.P.) . . . . .	28	9	..	4	10	4
Independent (Ind.) . . . . .	..	..	..	..	..	(a)15
Independent Labor (Ind. Lab.) . . . . .	6	..	..	..	..	..
Liberal and Country League (L.C.L.) . . . . .	..	..	..	16	12	..
Liberal Party of Australia (Lib.) . . . . .	14	18	..	..	..	..
<b>Total . . . . .</b>	<b>60</b>	<b>35</b>	<b>(b)</b>	<b>20</b>	<b>30</b>	<b>19</b>
LOWER HOUSE						
Australian Centre Party (A.C.P.) . . . . .	..	..	..	..	..	1
Australian Country Party (C.P.) . . . . .	18	12	27	..	8	..
Australian Labor Party (A.L.P.) . . . . .	44	16	26	21	21	19
Independent (Ind.) . . . . .	1	..	3	1	..	..
Independent Labor (Ind. Lab.) . . . . .	..	1	..	..	..	..
Liberal and Country League (L.C.L.) . . . . .	..	..	..	17	21	..
Liberal Party of Australia (Lib.) . . . . .	31	44	20	..	..	15
North Queensland Labor Party (N.Q.L.P.) . . . . .	..	..	1	..	..	..
Queensland Labor Party (Q.L.P.) . . . . .	..	..	1	..	..	..
<b>Total . . . . .</b>	<b>94</b>	<b>73</b>	<b>78</b>	<b>39</b>	<b>50</b>	<b>35</b>

(a) In Legislative Council elections only the A.L.P. normally endorses candidates. (b) Upper House abolished in 1922.

The Australian Country Party: Queensland and the Country Party of Western Australia are shown above as the Australian Country Party, since they are affiliated with the Federal body.

For corresponding particulars for the Commonwealth Parliament, *see* page 62.

## Number and salary of members of the legislatures, Australian Parliaments, December 1967

## AUSTRALIAN PARLIAMENTS: MEMBERS AND ANNUAL SALARIES, 31 DECEMBER 1967

Members in—	Cwth	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	Total
NUMBER OF MEMBERS								
Upper House . .	60	60	35	(a)	20	30	19	224
Lower House . .	124	94	73	78	39	50	35	493
Total . .	184	154	108	78	59	80	54	717
ANNUAL SALARY (\$)								
Upper House . .	(b)7,000	(c)2,040	(d)5,600	(a)	(e)6,500	(f)6,500	(g)4,600	..
Lower House . .	(b)7,000	(h)6,840	(d)5,600	(i)6,700	(e)6,500	(f)6,500	(g)4,600	..

(a) Abolished in 1922. (b) Plus expense allowances—Senators, \$2,100; Members of the House of Representatives, city electorates, \$2,200, country electorates, \$2,600. Certain additional allowances are also provided for holders of parliamentary offices, etc. (c) In addition, members who live outside the metropolitan area also receive a living away from home allowance of \$10 a day. (d) Plus allowances from \$1,700 for metropolitan to \$2,100 for urban, \$2,300 for inner country, and \$2,400 for outer country electorates. (e) Plus allowance of \$1,200 where electorate is less than 50 miles from Adelaide or if a Minister, \$1,600 if more than 50 miles but less than 200 miles, \$1,900 if more than 200 miles. (f) Plus expense reimbursement ranging from \$1,400 for a metropolitan member to \$2,800 for a north province member. (g) Plus allowance according to area of electorate and distance from the capital varying from \$600 to \$1,400 in the case of the Legislative Council, and from \$1,100 to \$2,100 in the case of the House of Assembly. (h) Plus allowance varying from \$1,620 to \$2,400 according to location of electorate. (i) Plus individual electoral allowances ranging from \$1,100 to \$2,630.

## Enactments of the Parliaments

In the Commonwealth all laws are enacted in the name of the Sovereign, the Senate, and the House of Representatives. The subjects with respect to which the Commonwealth Parliament is empowered to make laws are enumerated in the Constitution. In the States other than South Australia and Tasmania laws are enacted in the name of the Sovereign by and with the consent of the Legislative Council (except in Queensland) and Legislative Assembly. In South Australia and Tasmania laws are enacted in the name of the Governor of the State, with the advice and consent of the Parliament in the case of South Australia, and of the Legislative Council and House of Assembly in the case of Tasmania. Generally, assent to Bills passed by the legislatures is given by the Governor-General or State Governor acting on behalf of, and in the name of, the Sovereign. In certain special cases Bills are reserved for the Royal assent. The Parliaments of the States are empowered generally, subject to the Commonwealth Constitution, to make laws in and for their respective States in all cases whatsoever. Subject to certain limitations they may alter, repeal, or vary their Constitutions. Where a law of a State is inconsistent with a law of the Commonwealth the latter prevails, and the former is to the extent of the inconsistency invalid.

## The course of Commonwealth legislation

The actual legislation by the Commonwealth Parliament during 1967 is indicated in alphabetical order in *The Acts of the Parliament of the Commonwealth of Australia passed during the year 1967 in the First Session of the Twenty-sixth Parliament of the Commonwealth, with Appendix, Tables and Index*. A chronological table of Acts passed from 1901 to 1967 showing how they are affected by subsequent legislation or lapse of time is also given, and, further, a table of Commonwealth legislation passed from 1901 to 1967 in relation to the several provisions of the Constitution is furnished in the same volume. Reference should be made to these for complete information.

The Acts passed by the Commonwealth Parliament during the year 1967 are listed on pp. 69–73. In many cases the title of the Act indicates the general scope of the Act, but brief explanatory notes have been added where necessary. Appropriate chapters of this Year Book should be referred to for further information which may be available there.

The total enactments of the Commonwealth Parliament for a number of years at fairly even intervals since 1901 show a general increase. Seventeen Acts were passed in 1901, 36 in 1914, 38 in 1927, 87 in 1939, 109 in 1952, 156 in 1965, and 124 in 1967.

*Commonwealth legislation passed during 1967*

*Aged Persons Homes Act* 1967 (No. 83) amended the principal Act to make local governing bodies eligible to obtain financial assistance under the Act and to provide that funds received from such bodies shall be able to attract subsidy except when such local government moneys are received from the Commonwealth or State Governments.

*Air Navigation (Charges) Act* 1967 (No. 79) raised air navigation charges by ten per cent with effect from 1 January 1968.

*Appropriation Act* (No. 3) 1966-67 (No. 25); *Appropriation Act* (No. 4) 1966-67 (No. 26); *Appropriation Act* (No. 1) 1967-68 (No. 66); *Appropriation Act* (No. 2) 1967-68 (No. 67).

*Australian National Airlines Commission Equipment Act* 1967 (No. 49) approved the borrowing by the Commonwealth of \$A11.6m to assist in the financing of jet aircraft and related equipment being purchased by the Australian National Airlines Commission.

*Australian National University Act* 1967 (No. 65) empowers the University to remit fees to holders of its own scholarships, to forestry students awarded scholarships by a State or a State instrumentality, and to its own full-time staff.

*Australian Tourist Commission Act* 1967 (No. 27) established the Australian Tourist Commission to encourage visits to Australia and travel in Australia by people from other countries.

*Australian Universities Commission Act* 1967 (No. 35) repealed the sub-section of the Act referring to the Commonwealth Office of Education, now part of the Department of Education and Science.

*Banking Act* 1967 (No. 84) authorised the conduct of banking business by the Australian Resources Development Bank Ltd and the Papua and New Guinea Development Bank (*see* Chapter 18, Private Finance).

*Bankruptcy Validation Act* 1967 (No. 75) validated a defect in jurisdiction exercised in two cases in the Northern Territory in 1966.

*Brigalow Lands Agreement Act* 1967 (No. 48) provides for the development of a further area of brigalow lands in Queensland and the extension of the limit on Commonwealth financial assistance for this purpose to \$23m.

*Broadcasting and Television Act* 1967 (No. 47) increased the number of commissioners of the Australian Broadcasting Commission from seven to nine, and provides that persons in receipt of sheltered employment allowances shall be included in the definition of pensioner for consideration for a concessional broadcast listener's or television viewer's licence.

*Canberra College of Advanced Education Act* 1967 (No. 104) provides for the establishment in Canberra of the Canberra College of Advanced Education.

*Commonwealth Employees Compensation Act* 1967 (No. 96) increased the monetary benefits provided by the Act to a level approximately equal to similar State benefits.

*Commonwealth Employees Furlough Act* 1967 (No. 114) amended the principal Act to bring its provisions into line with the furlough provisions of the *Public Service Act* 1922-1967 and provides for the Public Service Board to be the administering authority under the Act.

*Commonwealth Prisoners Act* 1967 (No. 58) provides for the application, to persons sentenced to imprisonment for offences against laws of the Commonwealth, of State or Territory laws empowering a court to fix a minimum term of imprisonment which must be served by a prisoner before he is eligible to be released on parole. It also provides a system for the release on parole of such prisoners.

*Conciliation and Arbitration Act* 1967 (No. 101) set up a special tribunal, the Flight Crew Officers Industrial Tribunal, to deal with industrial disputes involving pilots, navigators, and flight engineers in the airlines industry (*see* Chapter 10, Labour, Wages, and Prices).

*Constitution Alteration (Aboriginals)* 1967 (No. 55) altered the Constitution by omitting certain words relating to the people of the Aboriginal race so as to empower the Commonwealth to make laws in their respect, and so that Aboriginals are to be counted in reckoning the population (*see* page 66).

*Customs Act* 1967 (No. 54) increased substantially a wide range of penalties for offences under the Act.

*Customs Tariff* 1967 (No. 7); *Customs Tariff* (No. 2) 1967 (No. 17)\*; *Customs Tariff* (No. 3) 1967 (No. 68); *Customs Tariff* (No. 4) 1967 (No. 69); *Customs Tariff* (No. 5) 1967 (No. 70).

*Customs Tariff Validation Act* 1967 (No. 45); *Customs Tariff Validation Act* (No. 2) 1967 (No. 99).



*Commonwealth legislation passed during 1967—continued*

*Dairying Industry Act* 1967 (No. 23) extended for a further five years ending on 30 June 1972 the period in respect of which bounty is payable on the production of butter, cheese, and other butter-fat products.

*Defence Forces Protection Act* 1967 (No. 57) makes it an offence to send or take money or goods to certain named bodies that support forces opposed to Australian troops in or near Vietnam or to similar bodies which may be proclaimed from time to time.

*Defence Forces Retirement Benefits (Pension Increases) Act* 1967 (No. 91) increased existing pensions payable to retired members of the defence forces by five-sevenths of the difference between the actual pension and the pension that would have been received had retirement occurred on 30 June 1967.

*Defence (Re-establishment) Act* 1967 (No. 89) provides for the administering authority to exercise discretion in granting re-establishment loans to national servicemen in deserving cases.

*Designs Act* 1967 (No. 108) provides that it will be an infringement of the Act for a person, without the licence or authority of the registered owner, to import into Australia, for the purposes of sale or for the purposes of any trade or business, articles to which the registered design had been applied abroad without the authority of the registered owner, or to sell any such articles.

*Diplomatic Privileges and Immunities Act* 1967 (No. 16)\*.

*Estate Duty Assessment Act* 1967 (No. 40)†.

*Excise Tariff* 1967 (No. 18)\*; *Excise Tariff* (No. 2) 1967 (No. 82); *Excise Tariff Validation Act* 1967 (No. 46).

*Fisheries Act* 1967 (No. 116) extended the limits in which Australia has exclusive rights over fisheries from three to twelve miles.

*Gift Duty Assessment Act* 1967 (No. 41)†.

*Home Savings Grants Act* 1967 (No. 50) extended eligibility for a grant to include widowed persons aged less than thirty-six years with one or more dependent children and increased the limit on the value of a home that may attract a grant from \$14,000 to \$15,000.

*Income Tax Act* 1967 (No. 77); *Income Tax (Aged Persons) Act* 1967 (No. 13); *Income Tax Assessment Act* 1967 (No. 19)\*; *Income Tax Assessment Act* (No. 2) 1967 (No. 38); *Income Tax Assessment Act* (No. 3) 1967 (No. 76); *Income Tax Assessment Act* (No. 4) 1967 (No. 85); *Income Tax (International Agreements) Act* 1967 (No. 39)†; *Income Tax (International Agreements) Act* (No. 2) 1967 (No. 86); *Income Tax (Non-resident Dividends and Interest) Act* 1967 (No. 87); *Income Tax (Partnerships and Trusts) Act* 1967 (No. 78).

*Industrial Research and Development Grants Act* 1967 (No. 51) provides up to \$6m a year for a scheme of grants to encourage increased industrial research and development in Australian manufacturing and mining industries.

*International Grains Arrangement Act* 1967 (No. 93) approved the signature and acceptance by Australia of the International Grains Arrangement 1967 (see Chapter 21, Rural Industry).

*International Wheat Agreement (Extension) Act* 1967 (No. 94) approved the signature and acceptance by Australia of the 1967 Protocol extending the operation of the International Wheat Agreement for a further year to 31 July 1968.

*Loan Act* 1967 (No. 72) authorised the raising and expending of a sum not exceeding \$300m for defence purposes.

*Loan (Airlines Equipment) Act* 1967 (No. 113) approved the borrowing by the Commonwealth of \$A2.5m from the Canadian Imperial Bank of Commerce to assist financing the purchase of up to six Twin Otter aircraft and related equipment by the Australian National Airlines Commission.

*Loan (Housing) Act* 1967 (No. 81) authorised the borrowing of an amount of \$122,840,000 for advances to the States under the Housing Agreement.

*Loan (Qantas Airways Ltd) Act* 1967 (No. 112) approved the borrowing by the Commonwealth of \$A61.4m from the United States Export-Import Bank and the Boeing Company to assist in the financing of jet aircraft and related equipment being purchased by Qantas Airways Ltd.

*Loan (War Service Land Settlement) Act* 1967 (No. 6) authorised the raising and expending of a sum not exceeding \$6.75m for financial assistance to the States of South Australia, Western Australia, and Tasmania in connection with War Service Land Settlement.

*Commonwealth legislation passed during 1967—continued*

*Ministers of State Act* 1967 (No. 1) amended the *Ministers of State Act* 1952–1966 to permit the appointment of one additional Minister and to increase the annual sum provided for ministerial salaries to \$197,300.

*Narcotic Drugs Act* 1967 (No. 53) gave the Commonwealth power to control the manufacture of narcotic drugs from locally produced raw materials and to direct certain other operations in accordance with obligations assumed by Australia on becoming a party to the Single Convention on Narcotic Drugs 1961.

*National Debt Sinking Fund Act* 1967 (No. 15) corrected a drafting error in the Schedule to the Act.

*National Health Act* 1967 (No. 14) made existing benefits under the Act available to persons eligible for pensions and allowances as a result of relaxations to the Social Services Means test (see Chapter 13, Welfare Services).

*National Health Act* (No. 2) 1967 (No. 100) authorised the provision of hearing aids for pensioners and their dependants and revised the First Schedule of the Act which sets out details of the medical benefits payable and the services in respect of which benefits are payable by the Commonwealth.

*National Library Act* 1967 (No. 28) provided for the appointment of the National Librarian to be made under the National Library Act instead of under the Public Service Act.

*Nationality and Citizenship Act* 1967 (No. 11) provided for the reduction of the qualifying period of residence for naturalisation for citizenship of non-British subjects called up for national service. They are now eligible for citizenship after three months' service regardless of their period of residence in Australia.

*Natural Gas Pipeline (South Australia) Agreement Act* 1967 (No. 56) approved an agreement between the Commonwealth and South Australia for the provision of financial assistance to the State towards financing the construction of a pipeline to carry natural gas to Adelaide from the Gidjealpa-Moomba region in the north-east of the State.

*Nauru Independence Act* 1967 (No. 103) provided for the independence of Nauru from 31 January 1968 (see Chapter 29, The Territories of Australia).

*Navigation Act* 1967 (No. 60) amended the *Navigation Act* 1912–1966 to give effect to the International Convention for the Safety of Life at Sea 1960.

*Parliamentary Retiring Allowances (Increase) Act* 1967 (No. 92) increased existing pensions under the Parliamentary Retiring Allowances Act on principles similar to those incorporated in the Defence Forces Retirement Benefits (Pension Increases) Act (see page 70).

*Pay-roll Tax Assessment Act* 1967 (No. 20)\*; *Pay-roll Tax Assessment Act* (No. 2) 1967 (No. 88).

*Petroleum (Ashmore and Cartier Islands) Act* 1967 (No. 124); *Petroleum (Submerged Lands) Act* 1967 (No. 118); *Petroleum (Submerged Lands) (Exploration Permit Fees) Act* 1967 (No. 120); *Petroleum (Submerged Lands) (Pipeline Licence Fees) Act* 1967 (No. 122); *Petroleum (Submerged Lands) (Production Licence Fees) Act* 1967 (No. 121); *Petroleum (Submerged Lands) (Registration Fees) Act* 1967 (No. 123); *Petroleum (Submerged Lands) Royalty Act* 1967 (No. 119). These Acts provide a legislative framework to govern the exploration for and the exploitation of the petroleum resources of submerged lands adjacent to Australia and certain of the Territories of the Commonwealth (see Chapter 25, Mineral Industry).

*Petroleum Search Subsidy Act* 1967 (No. 43) extended the operations of the *Petroleum Search Subsidy Act* 1959–1964 for twelve months so that operations completed before 30 June 1969 may qualify for subsidy.

*Post and Telegraph Rates Act* 1967 (No. 62); *Post and Telegraph Regulations Act* 1967 (No. 63). These Acts provided for increases in a range of postal and telegraph charges.

*Processed Milk Products Bounty Act* 1967 (No. 24) extended to 30 June 1972 the operations of the Act.

*Public Service Act* 1967 (No. 2) added the Department of Education and Science to the Departments constituting the Commonwealth Service.

*Public Service Act* (No. 2) 1967 (No. 115) provided for the inclusion of allowances in furlough payments and removed a limitation placed on the length of leave periods which can be granted to officers of the Commonwealth Service to enable them to perform services for prescribed international organisations or with certain governments.

*Repatriation Act* 1967 (No. 64) increased the rates of pensions payable to children in the case of the death of a member of the forces by 50 cents where they have lost one parent through war service or by \$1 where both parents are dead.

*Commonwealth legislation passed during 1967—continued*

*Sales Tax (Exemptions and Classifications) Act 1967 (No. 21)\*; Sales Tax (Exemptions and Classifications) Act (No. 2) 1967 (No. 29); Sales Tax (Exemptions and Classifications) Act (No. 3) 1967 (No. 80).*

*Seamen's Compensation Act 1967 (No. 97)* increased the amounts of compensation payable to seamen under the Act in line with increases being made in the amounts of compensation payable under the Commonwealth Employees Compensation Act (*see* page 69).

*Seamen's War Pensions and Allowances Act 1967 (No. 102)* increased the pensions payable under the Act for the children of deceased Australian mariners in line with similar increases made in the *Repatriation Act 1967* (*see* page 71).

*Sheltered Employment (Assistance) Act 1967 (No. 22)* enables the Government to make grants to eligible organisations to assist them in establishing and equipping sheltered workshops to assist severely handicapped persons to live a normal life in the community. Sheltered workshops are declared if a substantial number of the persons employed or to be employed on the premises are disabled persons and are paid for the work they perform. A disabled person is one who is either incapacitated to the extent necessary to qualify him for an invalid pension or would be likely to become incapacitated to that extent if he were not provided with sheltered employment. The Act provides assistance to eligible organisations on a \$2 for \$1 basis towards the capital cost of purchasing, erecting, or extending premises for use as sheltered workshops, towards the cost of equipping such workshops, and towards the annual rental of premises for use as a sheltered workshop up to three years. Eligible organisations are churches, charitable and benevolent groups, ex-servicemen's organisations, and local governing bodies, or other bodies approved by the Governor-General.

*Social Services Act 1967 (No. 10)* raised by \$156 the amount of means as assessed which will permit the payment of a full pension under the Act and provided for payment of an allowance for disabled persons employed in sheltered workshops.

*Social Services Act (No. 2) 1967 (No. 61)* increased the rate of child endowment for the fourth and subsequent children in an endowed family (*see* Chapter 13, Welfare Services).

*Softwood Forestry Agreement Act 1967 (No. 42)* enables the Commonwealth to enter into agreements with the States for the provision of financial assistance to be used for the purpose of expanding softwood plantings by the States.

*States Grants Act 1967 (No. 12); States Grants Act (No. 2) 1967 (No. 71); States Grants (Advanced Education) Act 1967 (No. 33); States Grants (Advanced Education) Act (No. 2) 1967 (No. 9); States Grants (Advanced Education) Act (No. 3) 1967 (No. 105); States Grants (Mental Health Institutions) Act 1967 (No. 74); States Grants (Science Laboratories) Act 1967 (No. 8); States Grants (Special Assistance) Act 1967 (No. 98); States Grants (Teachers Colleges) Act 1967 (No. 34); States Grants (Water Resources Measurement) Act 1967 (No. 73).*

*Statute Law Revision (Decimal Currency) Act 1967 (No. 3)* corrected certain typographical errors and incorrect citations in the *Statute Law Revision (Decimal Currency) Act 1966*.

*Stevedoring Industry Charge Act 1967 (No. 4)* fixed for the future the rate of the stevedoring industry charges at 48 cents a man-hour.

*Stevedoring Industry Charge Act (No. 2) 1967 (No. 110); Stevedoring Industry Charges Assessment Act 1967 (No. 111); Stevedoring Industry (Temporary Provisions) Act 1967 (No. 109).* These Acts provide for the re-organisation of the stevedoring industry by the introduction of a scheme for permanent employment on a weekly hiring basis. The former charge on a man-hour basis is replaced by three rates of charge according to type of workers, i.e. a sum not exceeding \$17.55 per man-week in respect of those employed on weekly hiring in permanent and continuous posts, 80 cents a man-hour in respect of other regular waterside workers in continuous posts, and 55 cents an hour in respect of irregulars in all posts and regulars employed in posts which are neither permanent nor continuous.

*Sugar Agreement Act 1967 (No. 95)* approved a Supplemental Agreement made between the Commonwealth and Queensland Governments to amend the Sugar Agreement 1962. The Supplemental Agreement includes provision for increasing the maximum wholesale prices specified in the Agreement and for extension of the current Agreement by one year to 31 August 1968 (*see* Chapter 21, Rural Industry).

*Sugar Industry Assistance Act 1967 (No. 117)* approved an agreement between the Commonwealth and the State of Queensland concerning the provision of financial assistance to the State so as to enable it to assist the sugar industry in respect of the 1967 season's No. 1 Pool sugar.

*Commonwealth legislation passed during 1967—continued*

*Sugar Marketing Assistance Agreement Act 1967* (No. 44) approved an agreement between the Commonwealth and the State of Queensland for the provision of financial assistance to the State in connection with the marketing of the 1966 No. 1 Pool of the Australian sugar crop.

*Superannuation Act 1967* (No. 52) provides for the extension of superannuation benefits to married women employed as permanent officers in the Commonwealth Public Service.

*Superannuation (Pension Increases) Act 1967* (No. 90) increased existing pensions under the Superannuation Act on principles similar to those incorporated in the Defence Forces Retirement Benefits (Pension Increases) Act (*see* page 70).

*Supply Act* (No. 1) 1967–68 (No. 36); *Supply Act* (No. 2) 1967–68 (No. 37).

*Tasmania Grant (Fire Relief) Act 1967* (No. 31); *Tasmania Grant (Gordon River Road) Act 1967* (No. 5).

*Trade Practices Act 1967* (No. 30) extended the operation of the *Trade Practices Act 1965* in relation to the State of Tasmania to give it full operation in that State.

*Universities (Financial Assistance) Act 1967* (No. 106); *Universities (Financial Assistance) Act* (No. 2) 1967 (No. 107).

*Wireless Telegraphy Act 1967* (No. 59) makes it an offence to establish or maintain a transmitter on a ship in waters adjacent to Australia for unauthorised broadcasting services or to assist such operations.

*Wool Industry Act 1967* (No. 32) increased the Government contribution for wool research and promotion for the three years 1967–68 to 1969–70 to payment on a basis of matching dollar for dollar moneys paid by wool growers by way of levy on wool sold up to a maximum of \$14m per annum.

\* The purpose of these Acts is to give effect to the 1961 Vienna Convention on Diplomatic Privileges and Immunities. They provide for the first time in Australia a comprehensive code of law on the subject of diplomatic privileges and immunities and enable Australia to ratify the Convention, which came into force on 24 April 1964.

† These Acts exempt from payment of Australian taxes persons in Australia in connection with the establishment of the Joint Defence Space Research Facility where they are subject to equivalent taxation in the United States.

**Cost of parliamentary government**

The table below shows, in broad groups, the expenditure incurred in the operation of the parliamentary system in Australia, comprising the Governor-General and Governors, the Ministries, the Upper and Lower Houses of Parliament, and electoral activities; *it does not attempt to cover the expenditure on Commonwealth and State administration generally*. Only broad groups are shown, but even these are not entirely comparable because of differences in accounting procedures and in the presentation of accounts. A very large part of the expenditure under the head of Governor-General or Governor represents official services entirely outside the Governor's personal interest, carried out at the request of the Government. The item includes salaries of Government House staffs and maintenance of residences, official establishments, grounds, etc., and expenditure on capital works and services.

**COST OF PARLIAMENTARY GOVERNMENT, 1966-67**  
(\$'000)

<i>Expenditure group</i>	<i>Cwlth</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>Total</i>
Governor-General or Governor(a)	(b)570	162	243	138	106	80	126	1,424
Ministry(c)	893	280	131	116	117	158	86	1,782
Parliament—								
Upper House(d)	661	269	286	..	146	281	115	1,759
Lower House(d)	1,302	824	528	713	288	403	231	4,288
Both Houses(e)	2,517	935	635	391	501	363	122	5,464
Miscellaneous(f)	1,300	250	109	63	86	34	46	1,888
<i>Total, Parliament</i>	<i>5,780</i>	<i>2,278</i>	<i>1,557</i>	<i>1,167</i>	<i>1,022</i>	<i>1,081</i>	<i>515</i>	<i>13,400</i>
Electoral(g)	4,749	287	509	143	184	88	70	6,029
Royal Commissions, Select Committees, etc.	35	98	49	45	110	2	8	348
Grand total	12,028	3,105	2,489	1,609	1,540	1,408	805	22,983

(a) Salaries and other expenses, including maintenance of house and grounds. (b) Includes official establishments, \$146,004. (c) Salaries as ministers, and travelling and other expenses. (d) Allowances to members (including ministers' salaries as members), travelling and other expenses. (e) Government contribution to members' superannuation funds, printing, reporting staff, library, etc. (f) Services, furniture, stores, etc. (g) Salaries, cost of elections, etc.

## COST OF PARLIAMENTARY GOVERNMENT, 1962-63 TO 1966-67

<i>Year</i>		<i>Cwlth</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>Total</i>
TOTAL									
(\$'000)									
1962-63 . . . . .		7,031	2,019	1,648	1,259	926	1,240	619	14,742
1963-64 . . . . .		8,015	2,112	1,837	1,292	1,019	1,308	670	16,252
1964-65 . . . . .		8,939	2,426	1,995	1,299	1,177	1,498	740	18,074
1965-66 . . . . .		8,897	2,494	1,985	1,546	1,285	1,451	779	18,438
1966-67 . . . . .		12,028	3,105	2,489	1,609	1,540	1,408	805	22,983
PER HEAD OF POPULATION									
(\$)									
1962-63 . . . . .		0.65	0.50	0.55	0.81	0.93	1.62	1.73	1.36
1963-64 . . . . .		0.73	0.52	0.60	0.82	1.00	1.66	1.85	1.48
1964-65 . . . . .		0.80	0.59	0.64	0.80	1.12	1.86	2.02	1.61
1965-66 . . . . .		0.78	0.73	0.62	0.94	1.19	1.76	2.11	1.60
1966-67 . . . . .		1.03	0.73	0.77	0.95	1.40	1.63	2.15	1.96

## Commonwealth Government Departments

In Year Book No. 49 (pages 87-98) a list appears of the Commonwealth Government Departments, giving particulars of each Department, as at the end of 1962, of the principal matters dealt with and the Acts administered by the Minister concerned, and changes made during 1963 and 1966 are shown, respectively, on page 83 of Year Book No. 50 and page 74 of Year Book No. 53. The *Commonwealth of Australia Directory*—1968 contains the latest detailed information for Departments. The Appendix to this Year Book gives particulars of some recent changes.

## CHAPTER 4

### DEFENCE

#### Department of Defence

##### Functions of Department of Defence

The functions of the Department of Defence include: defence policy; joint Service matters and matters having an inter-departmental defence aspect; the financial requirements of defence policy and the allocation of the funds made available; the supply aspect of defence policy including the review of production programmes and capacity; important matters of policy or principle affecting the Defence Forces and their requirements, including the strength, organisation and disposition of the forces, higher appointments in the Services, their weapons and equipment, and defence research and development.

##### Organisation, higher defence machinery, and the control of the joint Service machinery

The joint Service and inter-departmental advisory machinery of the Department consist of various committees headed by the Defence Committee, the Chiefs of Staff Committee, the Defence Administration Committee, and the Joint War Production Committee.

The *Defence Committee* is a statutory body consisting of the Secretary, Department of Defence, who is Chairman; the Chairman of the Chiefs of Staff Committee; the Chiefs of Staff of the three Services; the Secretary, Prime Minister's Department; the Secretary, Department of External Affairs; and the Secretary to the Treasury. Its function is to advise the Minister for Defence on: the defence policy as a whole and the co-ordination of military, strategic, economic, financial, and external affairs aspects of defence policy; matters of policy or principle and important questions having a joint Service or an inter-departmental defence aspect; and such other matters having a defence aspect as are referred to the Committee by or on behalf of the Minister for Defence.

The *Chiefs of Staff Committee* meets regularly for the discussion of technical military matters on a joint service basis, and is responsible in peace for the preparation of military appreciations and plans. The functions of the *Defence Administration Committee* are the regular review of the progress of the Defence Programme, the co-ordination or integration of Service activities where appropriate in the interests of improved efficiency and economy, and the improvement of methods and organisation. The function of the *Joint War Production Committee* is, briefly, to examine the Services' requirements for war *matériel* and to recommend whether industrial capacity is adequate to meet them.

In addition, a *Defence Business Board* is constituted to advise on business matters of common interest to the three Services, or important subjects on which the collective advice of the Board is desired from the business aspect, with a view to promoting efficiency and economy in the execution of the Defence Programme. The Board comprises businessmen who serve in a part-time honorary capacity and consists of an independent chairman and deputy chairman and the business advisers of the three Service Departments.

##### Basis of current defence policy

The primary aim of Australia's defence policy is to ensure the security of the Australian mainland and island Territories and to protect Australian national interests.

To meet the problem of Communist pressure in the general area of south-east Asia, and to ensure international order and progress, it is regarded as essential that the south-east Asian region should comprise free and independent states in a secure environment. In these circumstances Australia continues to play an active part in regional security alliances in south-east Asia and the Pacific—SEATO, ANZUS and Commonwealth defence arrangements—and has committed an expanding military and civil aid contribution to the Vietnam conflict.

The decision of the British Government to withdraw British forces from bases in Singapore and Malaysia will involve changes and adjustments to the present Commonwealth defence arrangements in the area. Changes in Australia's defence planning and preparations to meet this and other developments affecting the strategic situation in south-east Asia will emerge as the various requirements are examined continuously and in consultation as necessary with our allies.

### The defence programme

To meet the requirements of our own defence, and to meet our regional responsibilities, Australia is continuing to expand her defence forces. The overall objective is to raise, train, and equip forces to be operationally ready at short notice to participate in a wide range of likely military situations. This aim is pursued through a series of flexible defence programmes designed to give progressive effect to the objectives of policy approved by the Government. Large scale re-equipment of the Service has taken place, and Australia now has the most powerful and effective defence force it has ever had short of war-time mobilisation.

*Navy.* The naval programme provides for the progressive development and modernisation of the Royal Australian Navy into a well-balanced and effective operational fleet with emphasis on anti-submarine capabilities. Details of ships in commission and in reserve and of the current ship-building programme are shown on pages 79-80. In addition, a wide range of naval projects is being provided. These include fourteen Tracker and ten Skyhawk aircraft, delivered in November 1967, naval construction and support facilities, and accommodation and training equipments. The Navy personnel requirement by June 1968 is 16,980. The Navy Emergency Reserve has been raised with a planned strength of 2,000, and enlistment is proceeding.

*Army.* The reorganisation of the field force in the new tropical warfare organisation referred to in Year Book No. 53 has now been completed. Eight regular battalions of the Royal Australian Regiment have been raised and a ninth is being formed. The Australian Support Area, which provides the command, administrative, training, and maintenance organisation for the Army as a whole, has been progressively built up to meet the increased commitments both in Vietnam and Australia. Reorganisation of the Citizen Military Forces has also been completed; to provide additional opportunities for service with the C.M.F. the number of battalions has been increased from twenty to twenty-five including one battalion in the Territory of Papua and New Guinea. The Pacific Islands Regiment and supporting units continue to be developed, and at present two battalions of the Regiment have been raised.

The strength of the Regular Army is to be increased to 42,650 by 30 June 1968, and provision has been made to increase the C.M.F. up to 37,000 by the same date.

A scheme of selective national service was introduced in 1965 to supplement voluntary recruitment into the Regular Army. Details of this scheme were given in Year Book No. 53.

About \$150 million will be spent from 1965 to 1968 in buying modern equipment throughout the whole range of weapons, ammunition, vehicles, light aircraft, engineering, and signal stores, etc.

A large works programme for the accommodation of the Pacific Islands Regiment in Papua and New Guinea is almost completed, and a greatly increased Army works programme is being undertaken in Australia to provide the accommodation, training, and support requirements for the increase in Army strength to 42,650.

*Air Force.* The operational units of the Royal Australian Air Force comprise three bomber squadrons, five fighter squadrons, four transport squadrons, two utility helicopter squadrons, one surface-to-air missile squadron, and two control and reporting radar units. The fighter squadrons are being re-equipped with supersonic Mirage 111-O jet fighters, and three of the squadrons are scheduled to be completely re-equipped by the end of 1968. Twenty-four F111C strike reconnaissance aircraft have been ordered from the United States of America to replace the Canberra bombers now in service. Deliveries are scheduled for the latter half of 1968. Twenty-five Caribou short take-off and landing transport aircraft have been delivered. An additional medium range transport squadron was equipped with twelve C130E aircraft, which were received between August 1966 and February 1967. Ten Orion P3B aircraft, scheduled for delivery at the rate of two per month from January 1968, have been ordered to replace the obsolescent P2E Neptune maritime reconnaissance aircraft. Seventy-five Macchi all-through jet trainer aircraft have been ordered. The first six aircraft are being test flown in Italy before shipment to Australia, and the balance are to be assembled in Australia. The first aircraft was accepted by the R.A.A.F. on 2 October 1967. A further thirty-eight Macchi aircraft are to be ordered by June 1968. Delivery of ten dual Mirage trainer aircraft was completed in October 1967. Eight HS748 aircraft are on order from the United Kingdom for training air electronics officers and navigators. Two BAC 111 aircraft for V.I.P. transports and two new control and reporting units are also on order from the United Kingdom. The provision of modern airfield, operational, and technical facilities is being undertaken prior to the introduction of new aircraft types. In addition, the construction of permanent domestic accommodation is proceeding on a continuing basis. The number of personnel required for the operation of the R.A.A.F. by June 1968 is 21,335. Also, ex-R.A.A.F. personnel are being enlisted in the Air Force Emergency Force, which has a planned strength of 1,300.

*Research and development.* In this field Australia is making its principal contribution through the Long Range Weapons Project, which is a joint effort with the United Kingdom. Australia also participates in the European Launcher Development Organisation and is associated with the United States in many space and defence projects. The Australian executive authority in these matters is the Department of Supply.

### Defence expenditure

#### DEFENCE EXPENDITURE, 1966-67, AND DEFENCE VOTE, 1967-68 (\$'000)

<i>Service or department</i>	<i>Maintenance, aid programmes, etc.</i>	<i>Capital material requirements, machinery, plant, and equipment</i>	<i>Capital buildings, works, and acquisition of sites</i>	<i>Total expenditure</i>
DEFENCE EXPENDITURE, 1966-67				
Defence . . .	8,235	906	904	10,045
Navy . . .	111,160	63,097	8,817	183,074
Army . . .	237,799	36,742	63,467	338,008
Air . . .	145,629	68,342	13,203	227,174
Supply . . .	63,365	9,237	5,356	77,958
Other . . .	22,906	285	85	23,276
<b>Total . . .</b>	<b>589,094</b>	<b>178,609</b>	<b>91,832</b>	<b>859,535</b>
DEFENCE VOTE, 1967-68				
Defence . . .	9,727	324	1,479	11,530
Navy . . .	122,882	61,988	8,262	193,132
Army . . .	280,442	41,239	44,421	366,102
Air . . .	164,865	112,480	20,366	297,711
Supply . . .	70,872	10,001	4,853	85,726
Other . . .	26,033	320	30	26,383
<b>Total . . .</b>	<b>674,821</b>	<b>226,352</b>	<b>79,411</b>	<b>980,584</b>

### Logistic arrangement with United States Government

A logistic arrangement has been agreed with the United States Government in respect of Australian equipment purchases during the programme period up to 30 June 1968. This arrangement is in effect a 'package deal' covering all the items required instead of negotiating each separate purchase as it arises, and by this method Australia has obtained more advantageous financial terms together with assurances of better delivery dates to meet our requirements. Under this arrangement, instead of paying for the equipment roughly in line with deliveries, the Government is enabled to spread payments over an extended period.

### Personnel strengths

#### PERSONNEL STRENGTHS: SERVICES, 30 NOVEMBER 1967

<i>Category</i>	<i>Navy</i>	<i>Army</i>	<i>Air Force</i>	<i>Total</i>
Permanent Forces .	16,186	(a)41,780	20,365	78,331
Emergency Reserves .	838	960	342	2,140
Citizen Forces .	4,013	35,291	1,155	40,459
<b>Total Forces</b>	<b>21,037</b>	<b>78,031</b>	<b>21,862</b>	<b>120,930</b>

(a) Excludes 2,196 Pacific Islanders.



### **Reserve of Citizen Forces**

Under amendments made to defence legislation in 1964 the Citizen and Reserve Forces may be called out by proclamation for continuous full-time service in a 'Time of Defence Emergency'. The particular circumstances giving rise to the proclamation of a time of defence emergency could be varied, but would occur in a situation where the Regular Forces needed the full-time support of the Citizen and Reserve Forces in hostilities short of general war.

The legislation also provided for the establishment of volunteer Emergency Reserves for the three Services. These Reserves provide a ready means of supplementing and reinforcing operational units and may be called out for continuous full-time service when the Governor-General considers it desirable to do so.

### **Australian forces serving overseas**

Australia has participated with the United Kingdom and New Zealand in the Commonwealth Strategic Reserve since it was first established in Malaya in 1955, and has continued to station forces in the Reserve following the formation of Malaysia and Singapore. The Australian component of the Strategic Reserve comprises:

Navy—two destroyers or frigates with an annual visit by an aircraft carrier and escorts;

Army—one infantry battalion group and a light anti-aircraft battery;

Air Force—two fighter squadrons and supporting units.

Details of additional forces deployed to the Strategic Reserve during the period of Indonesian confrontation are contained in Year Book No. 53.

In response to an invitation of the Government of South Vietnam Australia has provided forces since 1962 to assist in the defence of that country. These forces have been increased progressively since then, as outlined in Year Book No. 53. In October 1967 the Government announced a further increase from the existing level of 6,300 to a total of over 8,000, to be attained during the first half of 1968. When the deployment of the additional elements is completed the following forces will be serving in South Vietnam:

Navy—a guided missile destroyer, a clearance diving team, and pilots, ground crew, and supporting personnel.

Army—a task force of three infantry battalions, a Centurion tank squadron, a special air service squadron, and other combat support units; a logistic support force; and a 100-man Army Training Team.

Air Force—a squadron of eight Canberra bombers, a squadron of sixteen Iroquois helicopters, and a squadron of six Caribou transport aircraft.

In pursuance of our obligations under the SEATO Treaty, at the invitation of the Government of Thailand, a squadron of R.A.A.F. Sabre fighter aircraft is deployed in Thailand as an integral part of the air defence system of that country.

### **Defence support aid**

In support of Australia's strategic policy of contributing to the common defence of south-east Asia the Government provides substantial financial aid to our Asian allies. This aid is given in the forms of direct defence assistance to support the armed forces of these countries and to increase their defence capability, and of civil aid and technical assistance.

Under the Aid programme assistance to the extent of \$2,500,000 will be provided for South Vietnam, Thailand, Pakistan, and the Philippines during 1967-68. This will include material assistance, the training of service and civilian personnel both in their home countries and in Australia, and, in the case of South Vietnam, special aid in the form of the provision of surgical teams to staff surgical blocks at the Long Xuyen, Bien Hoa, and Vung Tau hospitals, an engineering team to carry out a water supply project at Bien Hoa, the printing of school text books, and civic action by the Australian Force Vietnam.

Malaysia is also being further assisted to strengthen its defence capability by the extension of the aid programme commenced in 1964. The Australian Government, having provided some \$25 million for Malaysia and Singapore to the end of 1967, announced the provision of a further \$20 million to the end of 1970. The aid to Malaysia includes ammunition, military vehicles, weapons, small craft, engineer equipment, and general stores. Malaysian servicemen will continue to be trained in Australia and in the Malaysian area, and the seconding of Australian servicemen to the Malaysian armed forces will also be continued. Defence aid to Singapore comprises engineer equipment, field ambulances, vehicle maintenance equipment, and 2½ ton four-wheel-drive trucks. Army training courses will also be provided in Australia for Singapore services personnel.

## Naval defence

Prior to 1901, naval defence systems were organised under the State Governments. Information regarding these systems is given in Year Book No. 2, page 1084. An outline of the development of Australian naval policy is given in Year Books No. 3, page 1060, and No. 12, page 1012. An account appears in Year Book No. 15, pages 921-3, of the building of the Australian Navy, its costs, the compact with the Imperial Government, and other details. The growth and the activities of the Royal Australian Navy during the 1939-45 War are shown in Year Book No. 36, pages 1023-7.

Under the provisions of the Commonwealth of Australia Constitution Act the Minister of State for the Navy administers the Department of the Navy. Under the *Naval Defence Act* 1910-1966 the Royal Australian Navy is administered by the Naval Board. The Naval Board consists of the Minister as Chairman, four Naval Members, and the Secretary to the Department of the Navy.

Strong links with the Royal Navy are maintained by a constant exchange of officers for extended tours of duty and by a full exchange of information and ideas. A liaison staff is maintained by the Royal Australian Navy in London and by the Royal Navy in Australia. Advanced training and staff courses in the United Kingdom are provided by the Royal Navy for Royal Australian Navy officers. A liaison staff is also maintained by the Royal Australian Navy in Washington, and a comprehensive exchange of information is provided by this link. Staff courses in the United States are also attended by officers of the Royal Australian Navy.

### Ships of the Royal Australian Navy

*In commission, March 1968:* *Melbourne*—aircraft carrier; *Sydney*—fast troop transport; *Supply*—fast fleet replenishment tanker; *Stalwart*—escort maintenance ship; *Vampire*, *Vendetta*, *Duchess*, and *Anzac*—destroyers; *Perth*, *Hobart*, and *Brisbane*—guided missile destroyers; *Stuart*, *Parramatta*, *Derwent*, and *Yarra*—escort ships; *Queenborough*—training ship; *Diamantina*—training and oceanographic ship; *Hawk* and *Gull*—minesweepers; *Kimbla*—trials ship and boom defence vessel; *Moresby* and *Paluma*—survey vessels; *Oxley*—submarine; *Attack*, *Aitape*, *Samarai*, *Advance*, and *Acute*—patrol boats.

*In reserve, March 1968:* *Tobruk*—destroyer; *Quickmatch* and *Quiberon*—escort ships; *Gascoyne*—oceanographic ship; *Culgoa*—accommodation ship; *Teal*, *Ibis*, *Curlew*, and *Snipe*—minesweepers; *Bass* and *Banks*—general purpose vessels.

*On service overseas.* During the year ended March 1968 the following ships served in south-east Asian waters as units of the Commonwealth Strategic Reserve with headquarters in Singapore: *Melbourne*, *Supply*, *Vampire*, *Duchess*, *Derwent*, *Yarra*, and *Stuart*. The following ships served in support of the allied forces in South Vietnam: *Perth*, *Hobart*, *Sydney*, and *Boonaroo*. H.M.A.S. *Anzac* also made a visit overseas.

### Fleet Air Arm

The Fleet Air Arm of the Royal Australian Navy maintains three front line squadrons for embarkation in the operational carrier H.M.A.S. *Melbourne*. These squadrons currently consist of Skyhawk A4-G fighter/ground attack aircraft, Tracker S2-E anti-submarine aircraft, and Wessex MK. 31B submarine helicopters. Four training and support squadrons are based at the Naval Air Station H.M.A.S. *Albatross* at Nowra, New South Wales. Other aircraft operated by the Navy are the Scout helicopter (survey ships), Iroquois helicopter (training and search and rescue), Dakota, Vampire trainer, and Sea Venom (target towing).

### Ship construction and repairs

There are two naval dockyards, one at Garden Island, New South Wales, and one at Williamstown, Victoria. Also, the dockyard at Cockatoo Island, which is operated by the Cockatoo Docks and Engineering Company Pty Ltd by agreement with the Commonwealth, carries out considerable naval work. All three dockyards carry out ship refitting for the Navy.

Included in the present ship construction plan is the building of two destroyer escorts, one each at Cockatoo Island and Williamstown Dockyards. A 15,000-ton destroyer tender (H.M.A.S. *Stalwart*) was completed at Cockatoo Island in December 1967. Three submarines of the Oberon class are under construction in the United Kingdom. A guided missile destroyer (H.M.A.S. *Brisbane*) was completed in the United States in December 1967. Twenty 100-foot patrol vessels are being built by Evans Deakin and Co. Pty Ltd, Brisbane, Queensland, and Walkers Ltd, Maryborough, Queensland (ten by each contractor). The first two of these patrol boats (H.M.A.S. *Aitape* and H.M.A.S. *Attack*) were completed in November 1967, while H.M.A.S. *Samarai*, H.M.A.S. *Advance*, and H.M.A.S. *Acute* were completed in February 1968. H.M.A.S. *Melbourne* is to undergo an extended refit in 1968 at Garden Island Dockyard. The Daring class destroyers *Vendetta* and *Vampire* are

to be modernised, commencing in 1970. The anti-submarine guided weapon Ikara, which has been designed and developed in Australia, is being fitted into the guided missile destroyers and escorts.

#### **Personnel, entry, training, women's services, reserves**

*Personnel.* The authorised establishment of the Royal Australian Navy in relation to personnel borne for full-time duty for 1967-68 is 17,400. At 30 November 1967 the actual strength of personnel borne for full-time duty was 1,747 officers and 14,439 sailors, which includes 161 officers and sailors of the Citizen Naval Forces and 22 officers and sailors of the Royal Australian Navy Emergency Reserve.

*Naval college.* The Royal Australian Naval College, H.M.A.S. *Creswell*, is at Jervis Bay. The College was established to provide trained officers for the R.A.N. Junior entry to the College is at the age of fifteen to seventeen years, and senior entry at a maximum age of twenty years. Subsequent training as midshipmen and sub-lieutenants is in ships of the fleet, at universities or technical colleges, and at Royal Navy training establishments in the United Kingdom. In November 1967 there were sixty-nine cadet midshipmen under training.

*Direct entry into Navy.* To meet increasing requirements for officers, direct entries are accepted into the Royal Australian Navy. Short service commissions of seven years are granted on completion of training as seamen or aircrew officers to suitable applicants who have completed their secondary schooling and who are over seventeen years of age and under twenty-three years of age for seamen applicants, and under twenty-four years for aircrew applicants. Other direct entries may be approved outside these age limits from persons with appropriate qualifications and experience.

Opportunities exist for university undergraduates studying medicine, dentistry, mechanical engineering, electrical engineering, or aeronautical engineering to enter the R.A.N., and on successful completion of their studies to commence short or full-time service in the Navy. Fully qualified doctors, dentists, mechanical or electrical engineers, and instructors may also enter the R.A.N. directly if they are of the appropriate age.

*Training establishments.* H.M.A.S. *Cerberus* at Westernport, Victoria, is the main training establishment for adult sailors in the permanent naval forces, while several advanced training schools are established in New South Wales. The period of initial engagement for sailors varies from six years for tradesmen entry to nine or twelve years, and on completion sailors may re-engage for shorter periods up to the age of fifty.

H.M.A.S. *Nirimba* at Quakers Hill, New South Wales, is the naval school for apprentices. It provides secondary education, as well as technical training in trades, to boys aged fifteen to seventeen and a half years. The school was established in 1956 to meet the R.A.N.'s increasing demand for highly skilled tradesmen. In November 1967 there were 648 naval artificer apprentices under training. H.M.A.S. *Leeuwin* at Fremantle, Western Australia, is the junior recruit training establishment. Entrants must be aged between fifteen and a half and sixteen and a half years. Training lasts one year and instruction is mainly academic, the remaining time being devoted to basic naval and disciplinary training. On completion of the course sailors are posted for a period of sea training, after which they proceed to technical and specialist courses. In November 1967 there were 598 junior recruits undergoing training.

*Women's Services.* The present Women's Royal Australian Naval Service was inaugurated in January 1951. The numbers serving in shore establishments in November 1967 were 22 officers and 627 Wrens. The Royal Australian Naval Nursing Service was reconstituted in November 1964, and its strength in November 1967 was 23 officers.

*Emergency Reserve.* In November 1964 approval was given to form the Royal Australian Naval Emergency Reserve to provide a readily available source of trained manpower which may be called on for continuous full-time service. The authorised establishment of this force is 2,000 officers and sailors. At 30 November 1967 the strength of the reserve available for mobilisation was 61 officers and 777 sailors, which excludes 3 officers and 19 sailors serving full-time. Members are required to complete thirteen days' training annually and are paid an annual bounty.

*Citizen Naval Forces.* The Citizen Naval Forces consist of the R.A.N. Emergency List, Royal Australian Fleet Reserve, Royal Australian Naval Reserve, Royal Australian Naval Reserve (Sea-going), and Royal Australian Naval Volunteer Reserve. The authorised establishment of the combined forces is 10,000. At 30 November 1967 there were 1,199 officers and 2,814 sailors in the Citizen Naval Forces. These figures exclude 100 officers and 61 sailors serving full time. The R.A.N.R. is the training reserve of the Citizen Naval Forces. Members carry out weekly training and thirteen days' continuous training annually; sailors engage for periods of three years. Other reserves do not normally carry out part-time training, but members may volunteer for periods of annual training and for periods of full-time service with the R.A.N. A Women's Royal Australian Service Reserve consisting of ex-permanent naval forces W.R.A.N.S. officers and W.R.A.N.S. is being formed.

## Military defence

A detailed historical account of the Australian defence forces prior to federation appears in Year Book No. 2, pages 1075–81. *See also* Year Book No. 12, page 999.

### Commonwealth systems

Under the terms of the Commonwealth of Australia Constitution Act the Commonwealth took over control of defence matters in March 1901. The growth of the Commonwealth Military Forces may be considered to have taken place in a number of phases. For particulars of the phases which cover the period from the welding together of the military forces of the States into one homogeneous Army in 1902 up to the re-establishment of the Military Board and the organisation of Commands after the 1939–45 War *see* Year Book No. 46 and earlier issues.

National Service Training was introduced in 1951 and suspended in 1959–60. In November 1964 the Government announced that National Service Training was to be re-introduced from June 1965. The scheme provides for a period of two years full-time duty in the Regular Army followed by three years in the reserve. National Service registrants who are members of the Citizen Military Forces or who join prior to the ballot may elect to serve in the C.M.F. for a total of five or six years, depending on length of previous service, as an alternative to full-time continuous National Service Training. Special C.M.F. units have been formed to provide for those persons who wish to serve in the C.M.F., but who are unable to do so in normal units, because of remote location, etc.

### Organisation

Army Headquarters is responsible for the policy and control of the Australian Military Forces. The Military Board consists of the Minister for the Army, President; the Chief of the General Staff; the Adjutant-General; the Quartermaster-General; the Master-General of the Ordnance; the Deputy Chief of the General Staff; the Citizen Military Forces Member; and the Secretary, Department of the Army. After the 1939–45 War, Command Headquarters were established to implement Army Headquarters policy and to command and administer those units placed under their authority. Command Headquarters are established in the capital cities of Australia and Papua-New Guinea. The geographic extent of Commands is as follows.

*Northern Command*—the State of Queensland.

*Eastern Command*—the State of New South Wales, less those parts included in Southern and Central Commands.

*Southern Command*—the State of Victoria and part of southern New South Wales.

*Central Command*—the State of South Australia, plus a portion of south-western New South Wales.

*Western Command*—the State of Western Australia.

*Tasmania Command*—the State of Tasmania.

*Northern Territory Command*—the Northern Territory.

*Papua-New Guinea Command*—the Territory of Papua-New Guinea.

The Army is divided into the Field Force, Forces in Papua-New Guinea, and the Australian Support Area, with both Regular and Citizen Military Forces elements in each. The basic formation of the Field Force is the division, which consists of nine infantry battalions with supporting arms and services units. Within the division three task force headquarters can command varying combinations of divisional units. The substantial parts of the combat elements of one Regular and two C.M.F. divisions have been raised, together with logistic support units. The Regular element of the Forces in Papua-New Guinea consists of two battalions of the Pacific Islands Regiment with a number of supporting units. It is intended to raise a third battalion of the Pacific Islands Regiment. An infantry battalion forms the major C.M.F. element. The Australian Support Area provides the training, administrative, and command structure on the mainland.

At 30 December 1967, units of the Australian Regular Army were deployed overseas as follows. In Malaysia a battalion group was serving as part of the British Commonwealth Far East Strategic Reserve, while an anti-aircraft battery was serving at the invitation of the Malaysian Government. In Vietnam a Task Force of three battalions with supporting units, including aircraft support provided by the Royal Australian Air Force, was serving at the invitation of the Government of that country; and an armoured squadron had been warned for service in 1968.

**Personnel, training, women's services, cadets**

*Personnel.* The effective strength at 29 November 1967 was: Australian Regular Army (including 2,190 Pacific Islanders and 793 Women's Services), 43,544; Citizen Military Forces, 35,972.

*Staff College.* Until 1938 the training of staff officers was carried out in the various Military Districts throughout Australia, except in cases where officers were selected from time to time to attend courses abroad. In 1938 an Australian Command and Staff School, located in the original Officers' Mess at Victoria Barracks, Sydney, was established. Between 1939 and 1945 the training of staff officers was carried out under varying conditions by different schools in accordance with the changing needs of the war.

Early in 1946 the Staff School (Australia) was established at Seymour, Victoria, and redesignated the Staff College in conformity with other Commonwealth training establishments for training officers for command and staff appointments. The College was later moved to Queenscliff, Victoria, where it is at present situated. The course is held annually and is of twelve months duration. The normal intake is sixty-six students, and on successfully completing the course an officer is awarded the symbol 'psc'. The course is designed to train selected officers for appointments in all branches of the staff in peace and war and to prepare them to assume, after experience, command and higher staff appointments.

Included in the 1968 course will be students from the United Kingdom, Canada, New Zealand, India, United States of America, Thailand, Malaysia, the Philippines, Pakistan, Singapore, and Indonesia. Vacancies on each course are reserved also for officers who may be nominated by the Royal Australian Navy, the Royal Australian Air Force, and the Commonwealth Public Service.

In order to ensure common standards in tactical doctrine and staff and command training throughout the Commonwealth of Nations liaison is maintained with other Staff Colleges, and to this end there is also a reciprocal exchange of instructors between the United Kingdom and Australia. An instructor is also provided by New Zealand.

*Royal Military College.* The Royal Military College was established in 1911 at Duntroon in the Australian Capital Territory for the purpose of providing trained officers for the Army. The conditions of entry are laid down in the Royal Military College Regulations. The length of the normal course is four years. While at the College, Staff Cadets are wholly maintained, and, in addition, receive payment increasing with each year of the course. The course of instruction is organised into military and civil departments, and instruction is given by officers of the Army and academic staff. On graduation cadets are appointed lieutenants in the Australian Regular Army. The College also trains New Zealand cadets for commissions in the New Zealand Permanent Forces. In 1967 one Thai cadet commenced training at the College.

*Officer Cadet School.* The Officer Cadet School was established in 1951 at Portsea, Victoria, for the purpose of speeding up the production of junior regimental officers for the Australian Regular Army. Serving members of the Australian Regular Army, the Citizen Military Forces and civilians between the ages of eighteen and a half and twenty-two and a half years are eligible to apply for entrance. A special entry provides for candidates up to twenty-four and a half years. The course lasts for forty-four weeks, and on graduation cadets are appointed second-lieutenants in the Australian Regular Army. Graduates normally proceed to further training at the Army School of the Arm and Service to which they have been allotted before being posted to regimental duties. The Officer Cadet School also trains officers on occasions for Malaysia, New Zealand, Thailand, the Philippines, and Brunei.

*Officer Training Unit.* An Officer Training Unit has been established at Scheyville, New South Wales, which is responsible for the training of National Service officers.

*Women's Royal Australian Army Corps School.* The W.R.A.A.C. School, established in 1952 at Mildura, Victoria, moved to Mosman, New South Wales, in 1958. It has three wings, one whose primary task is the training of officer cadets for the W.R.A.A.C., one for the training of non-commissioned officers at all levels and for other special courses, and one which is a basic training wing. The officer cadets are selected from eligible applicants, who may be serving members between nineteen and a half and thirty-two years of age, or civilians between twenty-one and thirty years of age. The course is of six months' duration and on graduation cadets are appointed lieutenants in the Women's Royal Australian Army Corps.

*Army Apprentices' School.* The Army Apprentices' School was opened in 1948 at Balcombe, Victoria, with the aim of training youths as skilled tradesmen for the Australian Regular Army and to form a background for an Army career with prospects of promotion. The course is open to boys between the ages of fifteen and seventeen years and provides training in a number of highly skilled

trades. A three-year course of intensive theoretical and practical work at the Apprentices' School is followed by one year in an appropriate Army workshop or technical unit. At the end of their third year boys are given their Army trade test and also take the Victorian Apprenticeship Commission's final grade public examinations, which ensures that they will be accepted as qualified tradesmen in civil life when they eventually leave the Army. In addition to trade training the Apprentices' School provides general educational facilities up to the School Leaving Standard.

*Other schools.* Army Schools have been established for the major Arms and Services for the purpose of training officers and other ranks in the up-to-date techniques of their own Arm or Service, to qualify them for promotion requirements, and to produce trained instructors. Courses at Army Schools are conducted for members of both the Australian Army and the Citizen Military Forces.

The following Army Schools have been established: Jungle Training Centre, Armoured Centre, School of Artillery, School of Military Engineering, Transportation Centre, School of Military Survey, School of Signals, Infantry Centre, Army Intelligence Centre, Royal Australian Army Service Corps Centre, Royal Australian Army Medical Corps School of Army Health, Royal Australian Army Ordnance Corps Centre, Royal Australian Electrical and Mechanical Engineers' Training Centre, School of Music, Air Support Unit (Army Component), and Air Movement Training and Development Unit (Army Component).

*Women's Services.* In July 1950 approval was given for the enlistment of women into the Australian Regular Army on a limited scale. Enlistment commenced into the Royal Australian Army Nursing Service in November 1950 and into the Australian Women's Army Corps early in 1951. In February 1951 the Royal Australian Army Nursing Service became a Corps and was designated the Royal Australian Army Nursing Corps (R.A.A.N.C.). During June 1951 the Australian Women's Army Corps was redesignated the Women's Royal Australian Army Corps (W.R.A.A.C.). The Women's Services in the Australian Regular Army now comprise two Corps only, the Royal Australian Army Nursing Corps and the Women's Royal Australian Army Corps.

Women's Services are incorporated in the Citizen Military Forces, and one company of the Women's Royal Australian Army Corps is located in each Command excluding Northern Territory Command and Papua-New Guinea Command. Companies of the Royal Australian Nursing Corps are located in each Command excluding Northern Territory Command and Papua-New Guinea Command.

*Australian Cadet Corps.* The Australian Cadet Corps is a voluntary organisation. It serves as a training ground to provide, to some extent, the future officers and non-commissioned officers of the Australian Military Forces, and, as such, occupies a foremost position in the scheme of national defence. The Australian Cadet Corps, does not, however, form part of the Australian Military Forces. School Cadet units are raised at educational establishments throughout the Commonwealth and Papua and New Guinea, except in the Northern Territory. The minimum age for enrolment is the year in which the applicant reaches the age of fourteen years, and cadets, who, in the large majority of schools receive a free issue of A.M.F. pattern uniform, may remain in the Cadet Corps until they cease to be pupils of the educational establishments concerned. A few units retain their own pattern school uniform and are not issued with A.M.F. pattern uniforms. Provision is made for the appointment of officers, cadet under-officers, warrant and non-commissioned officers on an authorised establishment scale from within school units. School Cadet units may be, and in many cases are, affiliated with Citizen Military Force units. The establishment of the Corps is 45,000 all ranks, and at 30 September 1967 comprised 351 School Cadet units with a posted strength of 41,434, all ranks.

## Air defence

A statement regarding the preliminary steps taken in connection with the development of air defence appears in Year Book No. 18, page 610, and one on the expansion and development and type of operations of the Royal Australian Air Force during the 1939-45 War in Year Book No. 36, page 1027. Details of the current defence expansion as it affects the R.A.A.F. were outlined by the Prime Minister in his speech in the House of Representatives on 8 November 1965.

### Higher organisation

The Air Board is responsible to the Minister for Air for the control, organisation, and administration of the Royal Australian Air Force and is constituted as follows: Chief of the Air Staff, Air Member for Personnel, Air Member for Supply and Equipment, Air Member for Technical Services, and the Secretary, Department of Air.

The Air Board administers and controls R.A.A.F. units in Australia and its Territories through two commands, Operational Command and Support Command. The guiding principles of the command organisation within Australia are to decentralise day-to-day operating activities as far as possible and to streamline the force and make it as efficient as possible. The operational units overseas, working within the broad directives issued by the Air Board, comprise the R.A.A.F. component of the British Commonwealth Strategic Reserve located at Butterworth in Malaysia, a unit in Thailand and the R.A.A.F. component of the Australian task force in South Vietnam.

The members of the Air Board and their staffs are located at the Department of Air in Canberra. An R.A.A.F. representative is located in London, and air attachés are located in Djakarta, Saigon, Paris, and Washington. *Operational Command* is responsible for the command of operational units and the conduct of their operations within Australia and its territories. *Support Command* is responsible for the recruitment and training of personnel, and the supply and maintenance of service equipment.

### Organisation of units

*Bases.* Each command is established with the units necessary to carry out its allotted function. There is no fixed rule in relation to the number and types of units within each command, as this depends upon the nature of its present and future responsibilities. Where possible, units having similar functions or requiring similar facilities are located together, and the geographical locations are known as bases.

*Formations*—comprising a headquarters unit to control the activities of a number of units at one location; each formation has a base squadron which provides common services to all units at the location.

*Flying squadrons*—strike reconnaissance, air defence, ground attack, medium and short range transport, helicopter, and maritime reconnaissance squadrons which undertake the operational flying and, in conjunction with operational conversion units, the operational flying training commitments of the R.A.A.F.

*Operational conversion units*—specialising in operational conversion training of aircrew for the strike reconnaissance, air defence, and ground attack squadrons.

*Aircraft depots*—specialising in major overhaul, etc., of aircraft and equipment.

*Stores depots*—centrally located depots to which stores and equipment ordered by the R.A.A.F. are delivered for distribution to units.

*Airfield construction squadron*—specialising in the construction of aerodromes and associated buildings and works required by the R.A.A.F. in Australia, its Territories, and south-east Asia.

*Telecommunications units*—responsible for the communications services of the R.A.A.F.

*R.A.A.F. Hospitals*—hospitals in Australia and at Butterworth providing medical services for the R.A.A.F.

*Flying and ground schools and units*—schools and units specialising in the aircrew and ground staff training required by the R.A.A.F.

*R.A.A.F. Diploma Squadron and R.A.A.F. Academy*—training units, to diploma and university degree level respectively for officer cadet entrants to the R.A.A.F.

*R.A.A.F. Staff College*—trains specially selected R.A.A.F. officers for higher staff and command posts.

### Aircraft

The R.A.A.F.'s strike reconnaissance force is equipped with Canberras, and the air defence and ground attack squadrons are equipped with the Mirage 111-O and Avon Sabre. Transport aircraft currently in use are Hercules C130A and E. Caribou, Dakota, Mystere 20, HS748, Metropolitan, and Viscount. The two helicopter squadrons operate the Iroquois and the two maritime squadrons operate Neptune SP2H and Orion P3-B aircraft. During 1968 the strike reconnaissance force is to be re-equipped with the F111 C, and BAC 111 aircraft are to replace the Metropolitans. Aircraft used for training are the Winjeel, Macchi, HS748, Sabre, and Mirage.

### Personnel, reserve, women's services

At 1 December 1967 the authorised Permanent Air Force establishment was 22,814 and the Citizen Air Force, 1,080; the enlisted strength was Permanent Air Force 20,365 and Citizen Air Force 1,155; while the strength of the General Reserve was 7,326. The preceding Permanent Air Force figures include the Women's Royal Australian Air Force, which has an establishment of 1,046 and strength of 859, and the R.A.A.F. Nursing Service with an establishment of 99 and strength of 90.

## Department of Supply

For information relating to the creation of the Department of Supply and its development up to 1959 see Year Book No. 51, page 1204, and earlier issues. On 18 December 1959 the Department assumed responsibility for the operation and management of space tracking stations in Australia on behalf of the United States National Aeronautics and Space Administration. On 29 March 1962 Australia became a foundation member of the European Launcher Development Organisation, and the Department accepted responsibility for the test firing of the launching rocket for that Organisation's experimental satellite, using the facilities of the Woomera Rocket Range.

### Functions of Department

The functions of the Department of Supply include the following.

Defence research and development, including the operation of the Joint United Kingdom-Australia Weapons Research Project, and Australian research and development.

Operation and management of factories, workshops, and undertakings concerned in the production of munitions (including aircraft), clothing, canvas-ware, and other defence goods.

Manufacture, acquisition, provision, and supply of munitions (including aircraft) and miscellaneous goods and services required by the defence forces.

Arrangement of contracts for the supply of goods and the performance of services.

Operation and management of space tracking stations in Australia on behalf of the United States National Aeronautics and Space Administration.

Test firing of the launching rocket for the European Launcher Development Organisation's experimental satellite, using the facilities of the Woomera Rocket Range.

Acquisition, maintenance, and disposal of strategic materials.

Planning and establishment of manufacturing facilities for the production of munitions and other defence goods.

Investigation and development of Australian sources of supply in connection with defence.

Sale or disposal of surplus Commonwealth property other than land or buildings.

Provision of Commonwealth transport facilities outside the Australian Capital Territory and the Northern Territory.

Provision and control of stores required for or in connection with matters administered by the Department of Supply, and general storage for other Departments as required.

Arrangements for ascertaining costs and the control and limitation of profits in connection with the production of munitions and other defence goods.

The Minister for Supply administers the *Supply and Development Act 1939-1966*, except in so far as it concerns the building (see also the chapter Transport and Communication), repair, and maintenance of merchant ships and the building, extension, alteration, repair, and maintenance of shipyards, drydocking, and repair facilities for merchant ships.

### Research and Development

The Research and Development Division is responsible for research and scientific development in relation to war *matériel*, including the operation of the Joint United Kingdom-Australia Weapons Research Project. The headquarters of the Division is situated in Canberra, and the following establishments are included in the Division: (a) Weapons Research Establishment, Salisbury, South Australia; (b) Defence Standards Laboratories, Maribyrnong, Victoria; Woodville North, South Australia; and Alexandria, New South Wales; (c) Aeronautical Research Laboratories, Fishermen's Bend, Victoria.

### Weapons Research Establishment, Salisbury, South Australia

This establishment, which occupies an area of about six square miles, includes Edinburgh Airfield, where accommodation is provided for a unit of the R.A.A.F. which carries out the experimental and other flying required. Extensive facilities have been provided for branches of British firms which have contracted with the British Ministry of Aviation to develop weapons systems or components.

The Establishment has four main sections, namely the Trials Wing, the Space Physics Wing, the Weapons Research and Development Wing, and the Engineering Wing. The Trials Wing is concerned with the operation, development, and instrumentation of the Woomera Range, also the planning, execution, and assessment of trials. The Space Physics Wing undertakes the operation of United States satellite and space tracking stations throughout Australia and conducts research and development in support of the Range, including investigations into the characteristics of the upper atmosphere.



using sounding rockets. The Weapons Research and Development Wing is concerned primarily with Australian-initiated defence research, but assistance is also given with some phases of the Joint Project programme. The Engineering Wing provides the design and manufacturing effort required to support the work of the Establishment and the Range.

Testing ranges have been established at Woomera, which is approximately 280 miles north-west of Adelaide. A township, together with modern amenities such as hospital, school, kindergarten, community store, swimming pool, and all sporting facilities, has been built at Woomera to accommodate the staff and their families. The population is approximately 5,300.

#### **European Launcher Development Organisation (ELDO)**

By virtue of the major facilities at Woomera for launching space vehicles and the associated technical skills, Australia has become a member of ELDO, which has been established with the object of developing a launching vehicle for placing satellites in orbit for peaceful purposes. Other members of ELDO are Britain, Belgium, the Federal Republic of Germany, France, Italy, and the Netherlands. Test firings of the ELDO rocket will continue at Woomera until 1970.

#### **United States space projects**

Agreements have been signed by the Australian and United States Governments for a co-operative programme for the establishment and operation in Australia of space vehicle tracking stations. The agencies for the Australian and American Governments are the Department of Supply and the National Aeronautics and Space Administration (NASA) respectively.

As part of the world-wide network supporting NASA's space programme the stations are designed to track spacecraft in their orbits around the earth or on their journey into space, to receive telemetered data from the vehicle, and to issue radio commands controlling the vehicle's manoeuvres. The Department of Supply is responsible for managing, staffing, and operating the stations on behalf of NASA. The stations which are now in operation or under construction are at:

- Island Lagoon near Woomera (deep space probes and optical tracking of scientific satellites);
- Carnarvon in Western Australia (manned space flights and scientific satellites);
- Tidbinbilla in the A.C.T. (deep space probes and manned space flights);
- Orroral Valley in the A.C.T. (scientific satellites);
- Honeysuckle Creek in the A.C.T. (manned space flights, particularly the 'man on the moon' Apollo project);
- Cooby Creek near Toowoomba, Queensland (applications technology satellites).

An extensive communications system links the tracking stations with the control centres in the United States.

At all six stations the responsibility is vested in a station director who is a senior officer of the Weapons Research Establishment of the Department of Supply.

Under the Australian Government's policy of using the resources of private industry wherever possible, contracts for operation and/or maintenance services at the stations have been let as follows. Space Track Pty Ltd (Tidbinbilla and Island Lagoon), Amalgamated Wireless (A'asia) Ltd (Carnarvon and Cooby Creek), E.M.I. Electronics (Australia) Pty Ltd (Orroral Valley), and Standard Telephones and Cables Pty Ltd (Honeysuckle Creek).

NASA space projects requiring Australian participation are as follows.

##### *Manned space flights*

Project Apollo—landing of men on moon and their return to earth.

##### *Scientific and applications satellites*

Large multiple experiment scientific satellites (Orbiting Geophysical Observatories; Orbiting Astronomical Observatories, etc.). Operations satellites for meteorology (Tiros). Applications technology satellites for communications, navigation, radio propagation, etc. (ATS).

##### *Deep space probes*

Surveyor—soft landing of instrumented package on moon, including T.V. cameras.  
 Mariner—probes to Mars, Venus, etc.  
 Pioneer—interplanetary investigations.

#### **Defence Standards Laboratories**

The broad function of these Laboratories is to provide a scientific service to the Armed Services, civilian defence, and the factories, branches, and establishments of the Department of Supply. It also provides trained groups in specialist fields for which there is no counterpart elsewhere in Australia.

This service covers problems arising in the provision and use of defence *matériel* and is given generally within the fields of chemistry, physics, metallurgy, and engineering, and, to a limited extent, in those of bio-chemistry and physiology.

#### **Aeronautical Research Laboratories**

The work of these Laboratories lies in the fields of: (a) aeronautics; (b) guided missiles; and (c) branches of engineering appropriate to the special facilities, resources, or experience resulting from (a) and (b). In particular it comprises aerodynamics, including wind tunnel, free flight model and actual flight testing; structures of aircraft and missiles; metals and other materials used in the construction of airframes and engines; engines of the air-breathing type used for the propulsion of aircraft or missiles; human engineering studies relating to the operation of aircraft and guided missiles; research and development related to Australian-initiated guided missiles; and operational assessment studies on devices and techniques employed or proposed for the defence of Australia.

#### **Production of munitions**

The Department is responsible for the production of a wide range of munitions required by the Armed Services. Production is carried out substantially in Government factories, although some orders, mainly for components, are placed with private industry.

The following Government factories are currently in operation: Ammunition—Footscray, Victoria; Explosives and Filling—Albion and Maribyrnong, Victoria; Mulwala and St Marys, New South Wales; Ordnance—Maribyrnong, Bendigo, and Port Melbourne, Victoria; Small Arms—Lithgow, New South Wales; Clothing—South Melbourne and Brunswick, Victoria.

The Ammunition Factory produces the complete round of small arms ammunition and also components for larger calibre gun ammunition, including empty cartridge cases, electronic and mechanical fuses, and primers. The Explosives Factories produce the various types of explosive compositions and propellants required for gun ammunition, rockets, and guided missiles. The Filling Factory at St Marys fills and assembles into complete rounds of ammunition (other than small arms ammunition) the empty components and materials supplied by the other munitions factories and by private industry.

The Ordnance Factories at Maribyrnong and Bendigo are equipped to produce heavy ordnance equipment, such as naval guns and gun mountings; large turbine gears; steel shell bodies; empty rocket motors for guided missiles; trailers and tank transporters; and other items requiring heavy engineering capacity. As well as work for the Services, the Bendigo Factory is producing equipment for projects of national importance, e.g. control equipment for the Snowy Mountains Hydro-electric Authority, components for marine diesel engines for Australian shipping, large heavy engineering items for the coal, cement, and steel industries, and coining presses for the Royal Australian Mint.

The Port Melbourne Factory builds large marine diesel engines for the Australian shipbuilding industry. Major forgings and fabrications for these engines are produced at the Ordnance Factories at Maribyrnong and Bendigo. The Small Arms Factory is equipped to produce the rifles and other small arms required by the Services. Current production is the 7.62-mm automatic rifle, for which orders have also been received from overseas, and the 9-mm carbine, which replaces the Owen as the infantry light machine gun. The Clothing Factories make uniforms, clothing, and canvas goods for the three Services and also for the Postmaster-General's Department and some other Commonwealth authorities.

#### **Production of aircraft and guided weapons**

Production both in Government factories and in industry of military types of aircraft and aero engines and of other aircraft components required by the Royal Australian Air Force is administered by the Department of Supply. Planning of capacity and the negotiation of contractual arrangements concerning aircraft modification, repair and overhaul, and for the supply of spare parts and airborne equipment for the R.A.A.F., the R.A.N., and the Army are also functions of the Department.

The following factories are operated by the Department: The Government Aircraft Factory at Fishermen's Bend and the Final Assembly Workshops and Test Airfield at Avalon, Victoria, and the Airframe Repair Workshops at Parafield and Northfield, South Australia. The current aircraft production programme at the Government Aircraft Factory comprises the French Mirage supersonic fighter for the R.A.A.F. and the Jindivik radio-controlled target aircraft, which has been or is being supplied to Britain, Sweden, and the United States, as well as to the Weapons Research Establishment and the Royal Australian Navy. Apart from the Government Aircraft Factory, the Commonwealth Aircraft Corporation Pty Ltd is the only major aircraft manufacturer in Victoria, and this company is currently producing the French Atar turbo-jet engine for the Mirage fighter and also some sections of the airframe. The Corporation is also the prime contractor for the Australian production for the R.A.A.F. of the Italian Macchi jet trainer and for the production of the British Viper engine that powers this aircraft.

Other major activities carried out in the Government factories or by various private contractors are the manufacture of airframe and engine spare parts; the overhaul, repair, and modification of military aircraft and engines currently in service with the R.A.A.F., R.A.N., and Army; and the reconditioning and servicing of aircraft instruments and other ancillary equipment.

The production of the Ikara anti-submarine missile is continuing at the Government Aircraft Factory at Fishermen's Bend. Production of the complete Ikara system, covering broadly the missile, motor, propellants, guidance equipment, launcher, and magazine handling equipment, is a combined effort by departmental establishments and industry, directed and co-ordinated by the Department.

At St Mary's, New South Wales, a guided weapons repair facility has been established to repair and maintain the Tartar surface-to-air missile supplied by the United States for Australia's new missile destroyers. Later, the facility will be expanded to cater for other Service missiles.

#### Electronics supply

The Department is responsible for the technical aspects of production and procurement from local industry of telecommunications and electronic equipment for the Australian Forces and for certain other organisations such as Colombo Plan and SEATO. A wide range of these equipments is obtained from industry; some of the more important projects are the complete equipping of several major automatic telegraph relay centres for Army and Air; the local manufacture of ultra high-frequency ground station equipment for communication with high-speed aircraft, automatic direction finders for the Macchi aircraft, remote-controlled target ranges for the Army, electronic guidance equipment for the Ikara system, and the development and production of a transistorised field transceiver for the Army.

Contracts have also been arranged for the local development of a high stability quartz-crystal oscillator, and of other high stability electronic components, such as various types of fixed and variable resistors, mica and tantalum capacitors, and matched crystals.

#### Contract Board

Under the *Supply and Development Act 1939-1966* the Contract Board is the authority responsible for the arranging of contracts for the performance of services and the purchase of supplies for the Naval, Military, and Air Forces of the Commonwealth, as well as for the Department of Supply. The Board is also responsible for the sale or disposal of all surplus or unserviceable Commonwealth goods approved for disposal. By arrangement, the Board also arranges purchases on behalf of other Commonwealth departments and authorities which desire to use its facilities.

Although the head office of the Department transferred to Canberra in January 1968, the Contract Board will continue to meet in Melbourne for the present. The Board comprises representatives of the Departments of Supply, Navy, Army, and Air. In each State other than Victoria there is at present a District Contract Board, and it is proposed to establish a District Board also in Victoria. The administrative organisation of the Contract Board and the District Boards is the Contracts and Disposals Branch with offices in Canberra and each State. The table following shows, in respect of the Contract Board organisation, the purchases and realisations from disposals for the years 1965-66 and 1966-67.

**CONTRACT BOARD ORGANISATION: PURCHASES AND REALISATIONS  
FROM DISPOSALS, 1965-66 AND 1966-67**  
(£'000)

	<i>Purchases</i>		<i>Realisations from disposals</i>	
	<i>1965-66</i>	<i>1966-67</i>	<i>1965-66</i>	<i>1966-67</i>
Contract Board, Victoria . . .	129,549	184,784	3,315	3,153
District Contract Board—				
New South Wales . . . . .	25,294	29,651	1,950	2,674
Queensland . . . . .	4,475	5,644	662	862
South Australia . . . . .	7,007	10,258	1,054	1,154
Western Australia . . . . .	1,662	1,418	292	495
Tasmania . . . . .	230	235	104	153
<b>Total . . . . .</b>	<b>168,217</b>	<b>231,990</b>	<b>7,377</b>	<b>8,491</b>

**Defence supply planning**

The central planning authority of the Department is the Production Planning Branch, whose principal functions are:

- to study manufacturing capacity available for the Services' requirements in peace and war;
- to plan for and assist in the development of additional production capacity;
- to prepare submissions on defence production preparedness to the higher defence machinery;
- to plan the organisation of industrial resources for defence production in war;
- to provide and administer stocks of relevant materials and reserve pools of plant equipment and other requirements needed for rapid expansion of production in the event of war;
- to prepare advance co-ordinated production programmes against Service orders and to analyse and interpret achievement against these programmes for the information of the Department and the Services;
- to provide advisory services in the field of materials, supply, and utilisation to Government factories and contractors engaged in the production of munitions requirements;
- to administer the national stockpile;
- to administer overseas aid programmes allocated to the Department; and
- to undertake commercial sales.

A series of Industry Advisory Committees has been established to advise the Minister and the Department on the ability of industry to meet the Services' *matériel* requirements for mobilisation and war. The Committees are: Aircraft and Guided Weapons; Chemical; Electrical; Electronics and Telecommunications; Fibres, Textiles, Clothing, and Cordage; Leather and Footwear; Machine Tools and Gauges; Materials; Mechanical Engineering; and Rubber. Members of the Committees include industrialists of wide experience and the highest ability in their chosen fields.

**Stores and Transport Branch**

This Branch functions as the central storage and transport authority for most Commonwealth Departments. It is the authority for the arrangement of furniture removals at departmental expense in all States, but not in the Northern Territory. It has agents in Darwin. It also operates a shipping and customs section and the England-Australia bulk air freight scheme for Commonwealth Departments.

On 30 June 1967 the Branch had under its control land, buildings, and works, vehicles, plant, and equipment valued at \$26,139,056, and 3,569,436 sq ft of storage space as well as storage facilities for large quantities of chemicals, bulk liquids, and explosives.

**Finance Branch**

The total expenditure on Department of Supply activities in 1966-67 was \$155,159,000, comprising \$77,958,000 (net) from Parliamentary appropriations and \$77,201,000 from Trust Fund accounts. The latter included expenditure of \$15,149,000 for storage and transport and \$55,962,000 in Government Munitions and Aircraft Factories.

In addition, transactions under the United States-Australian logistics arrangement in 1966-67 amounted to \$2,355,000, comprising \$1,731,000 relating to Parliamentary appropriations and \$624,000 relating to Trust Fund accounts.



## CHAPTER 5

### REPATRIATION

The Repatriation Commission, established under the *Repatriation Act* 1920–1967, consists of three full-time members. It is responsible for the administration of the Repatriation Act and associated legislation, all matters of policy, and the general administration and overall supervision of the Repatriation Department. The central office is in Melbourne and there is a branch office, under the control of a Deputy Commissioner, in each State.

The principal functions of the Department are: the payment of war and service pensions to eligible ex-servicemen and ex-servicewomen and their dependants; the provision of medical treatment for ex-servicemen and ex-servicewomen for injuries and illnesses caused or aggravated by their war service; the provision of medical treatment in certain circumstances to ex-servicemen and ex-servicewomen who are suffering from injuries and illnesses not caused or aggravated by war service; and the provision of medical treatment to widows and dependants of deceased ex-servicemen whose deaths are due to war service.

Benefits are provided in respect of service, not only in the 1914–18 and 1939–45 Wars, but also in the Korea and Malaya operations and with the British Commonwealth Far East Strategic Reserve and the Special Overseas Forces.

Other functions of the Repatriation Department are outlined in a later section of this chapter.

For information on war service land settlement see Chapter 19, Public Finance; for statistics relating to war service homes see Chapters 9, Housing and Building and 19, Public Finance.

#### War pensions

The first provision for the payment of war pensions to ex-servicemen and their dependants was made by the Commonwealth Parliament in the *War Pensions Act* 1914. This Act was repealed in 1920 by the *Australian Soldiers' Repatriation Act* 1920 (amended from 31 December 1950 to the Repatriation Act). The main features relating to war pensions under repatriation legislation are set out in the following paragraphs.

##### Eligibility for pensions

Claims for eligibility for war pensions are determined in the first instance by Repatriation Boards, of which there is one in each State of the Commonwealth. Members of women's services are eligible for pensions and other benefits, as prescribed in the Act, on the same basis as male members of the forces. Amendments to the Act in 1943 considerably widened the eligibility provisions, to the benefit, mainly, of members of the Citizen Military Forces who had not served outside Australia. These provisions are summarised as follows:

A member of the forces who served (a) outside Australia, (b) in the Territories of Australia, such as Papua and New Guinea, or (c) within Australia in circumstances which can be regarded as combat against the enemy is covered for war pension purposes in respect of incapacity or death which may result from any occurrence that happened during the period from the date of his enlistment to the date of the termination of his service in respect of that enlistment.

In other cases where a member served only in Australia, incapacity or death to be pensionable must have been attributable to service.

There is a third ground applicable to all members except those with less than six months camp service. This provides that, where a condition existed at enlistment, a pension may accrue if it is considered that the condition was aggravated by service.

If, at any time after discharge, an ex-serviceman who served in a theatre of war becomes incapacitated or dies from pulmonary tuberculosis, war pension is payable as if the incapacity or death resulted from an occurrence on service (see also Service pensions, page 98). Medical treatment may also be provided.

*Korea and Malaya operations.* The commencement of hostilities in Korea and Malaya in 1950 made necessary the insertion in the Repatriation Act of a new division, under the terms of which the pension provisions of the Act were extended to Australian ex-servicemen and ex-servicewomen who served or were allotted for duty in prescribed operational areas. A new Regulation was also made, in 1951, to make such service personnel eligible for almost all the benefits available under the existing Regulations applicable to members of the forces.

*Repatriation (Far East Strategic Reserve) Act 1956-1966.* Provision was made under this Act for Australian forces who served in south-east Asia as part of the British Commonwealth Strategic Reserve. This Act, together with Regulations made under it, gave members with Malayan service the right to many benefits available under the Repatriation Act.

*Repatriation (Special Overseas Service) Act 1962-1966.* This legislation provides repatriation benefits for serving members of the defence forces, the circumstances of whose service expose them to risks above the normal conditions of peace-time service. Regulations made under the Act prescribe special areas within which service qualifies for Repatriation benefits. These special areas now include the Malayan Peninsula and Singapore and fifty miles to seaward but excluding the territories of Indonesia; South Vietnam; an area in Borneo comprising Sarawak, Brunei and Sabah; and an area fifty miles to seaward but excluding any territories of the Philippines.

### Rates

The main classes of war pensions are the special (T.P.I.) rate, the intermediate rate, the general rate, and the war widow's pension. These are not subject to a means test except where stated for certain classes of dependants.

The *special rate* of war pension is payable to those who are totally and permanently incapacitated and are unable to earn more than a negligible percentage of a living wage. The weekly rate is \$30.50, plus \$4.05 wife's allowance and \$1.38 for each child under sixteen years.

The *intermediate rate* of war pension, which previously applied only to certain cases of tuberculosis, was extended from 6 October 1965 to include ex-servicemen who, because of the severity of a war-caused incapacity, can only work part-time or intermittently and in consequence are unable to earn a living wage. The weekly rate is \$21.25, plus \$4.05 wife's allowance and \$1.38 for each child under sixteen years.

The *general rate* of war pension is the rate payable to those who suffer war-caused disabilities but are not thereby prevented from working, although their earning capacity may be reduced. The actual pension payable is assessed in accordance with the degree of incapacity suffered. The maximum (100 per cent) rate is \$12 a week. A wife and children under sixteen years also receive pensions at rates according to the assessed degree of incapacity of the ex-serviceman, the maximum being \$4.05 for a wife and \$1.38 for each child.

The *war widow's pension* is paid to widows of ex-servicemen who died as a result of war service and to their children under the age of sixteen years. A war widow's pension may also be paid to the widow of an ex-serviceman who was receiving, at the time of his death, the special rate of war pension or the rate payable to double amputees. The weekly rates are: widow, \$13; first child, \$4.40; second and each subsequent child, \$3.25.

*Other dependants* of an ex-serviceman who is suffering from a disability due to war service may be granted pensions under certain circumstances. Such pensions are subject to a means test and are assessed in accordance with the degree of the ex-serviceman's incapacity. Except in the case of a widowed mother of an unmarried ex-serviceman, other dependants are required to prove dependence on the ex-serviceman.

### Allowances

The following allowances are provided in addition to pension.

*Domestic allowance* (\$7 a week). This is paid, in addition to pension, to a widow of an ex-serviceman whose death is due to war service if she is fifty years of age, or is permanently unemployable, or has a dependent child under the age of sixteen years, or a dependent child over sixteen years being educated or trained and not in receipt of an adequate living wage.

*Attendant's allowance* (maximum rate \$10.50 a week). This allowance is paid, in addition to war pension, to certain classes of seriously disabled ex-servicemen, for example, the war blinded, the paralysed, and certain double amputees.

*Clothing allowance.* A clothing allowance is paid at various rates (38c to 75c a week) to an ex-serviceman who, as a result of war service, has lost an arm or a leg or, because of an injury to a limb, is required to use a surgical aid or appliance. An amount not exceeding \$19.50 in any one year is also payable to certain other war disabled ex-servicemen.

*Sustenance allowance.* This allowance is paid where an ex-serviceman is prevented from following his normal occupation through treatment of a war-caused disability or while undergoing medical investigation. The rate payable, where out-patient treatment is being received for a period of up to four weeks, or in-patient medical investigation is being carried out, is the same as the general (100 per cent) rate pension, less the amount of any war pension being paid.

Where an ex-serviceman, receiving in-patient treatment for a war-caused disability, is undergoing periods of essential convalescence immediately following discharge from hospital, or is prevented from following his usual occupation because of the necessity of out-patient treatment for a war-caused disability for a continuous period in excess of four weeks, a higher rate to bring the sustenance allowance up to the equivalent of the special (T.P.I.) rate is paid.

The wife, and any children under sixteen years of age, of an ex-serviceman who is receiving a sustenance allowance, are paid an amount which, when added to any war pension being paid, is equal to the full general rate pension for a wife and such children.

*Recreation transport allowance.* This allowance provides transport for recreation purposes and may be paid to an ex-serviceman who, as a result of war service, suffers certain amputations of the arms or legs or is seriously disabled to the extent that his powers of locomotion are negligible.

*Other allowances and general assistance.* These include a guardian's allowance, re-establishment loans and allowances, funeral benefits, vocational training allowances for education and training of children, fares and allowances for loss of remunerative time in connection with medical or pension purposes, and motor vehicle allowances for seriously disabled ex-servicemen.

### Appeals tribunals

The principal Act was amended as from 1 June 1929 to create tribunals to hear appeals in respect of war pensions. War Pensions Entitlement Appeal Tribunals are empowered to hear and decide any appeal by or on behalf of ex-servicemen or their dependants against decisions of a Repatriation Board or the Repatriation Commission that the incapacity or death of an ex-serviceman did not arise out of war service. Assessment Appeal Tribunals were created to hear and decide any appeal against a current assessment or a 'Nil' assessment of war pension made by a Repatriation Board or the Repatriation Commission in respect of the incapacity of an ex-serviceman which had been accepted as arising out of war service. Provision was made by subsequent legislation to enable the tribunals to hear appeals by certain members whose applications for a service pension had been refused on the grounds that they were not suffering from pulmonary tuberculosis or were permanently unemployable.

### Summary of war pensions

The following tables provide a summary of war pensions (excluding miscellaneous war pensions) for the 1914-18 War, the 1939-45 War (including war pensions payable under the *Interim Forces Benefits Act* 1947-1966 and the *Native Members of the Forces Act* 1957-1966), the Korea and Malaya operations, the Far East Strategic Reserve, and the Special Overseas Service. Statistics relating to miscellaneous war pensions are shown on pages 97 and 98 of this Chapter.

#### WAR PENSIONS: SUMMARY, AUSTRALIA, 1966-67

		1914-18 War	1939-45 War(a)	Korea and Malaya operations	Far East Strategic Reserve	Special Overseas Service(b)	Total
New claims granted	No.	1,184	18,150	687	284	816	21,121
Restorations	No.	113	402	8	..	3	526
Claims rejected(c)	No.	1,110	5,409	233	98	152	7,002
Pensions cancelled (gross)	No.	305	25,164	216	32	15	25,732
Deaths of pensioners	No.	5,624	5,232	36	5	1	10,898
Number of pensions in force at 30 June 1967		98,270	519,877	10,781	1,271	975	631,174
Annual pension liability at 30 June 1967	\$'000	55,307	106,615	1,195	126	145	163,388
Amount paid in pensions during the year 1966-67	\$'000	n.a.	n.a.	n.a.	n.a.	n.a.	161,399

(a) Includes interim forces and native members of the forces. (b) See page 92—*Repatriation (Special Overseas Service) Act* 1962-1966. (c) Number of ex-servicemen who had their claims for all their disabilities rejected.

#### WAR PENSIONS: SUMMARY, AUSTRALIA, 1962-63 TO 1966-67

	1962-63	1963-64	1964-65	1965-66	1966-67
New claims granted	36,189	32,417	27,879	22,750	21,121
Restorations	1,035	992	803	571	526
<i>Total additions</i>	37,224	33,409	28,682	23,321	21,647
Pensions cancelled (gross)	28,020	25,285	25,948	26,450	25,732
Deaths of pensioners	8,867	9,441	10,342	10,308	10,898
<i>Total reductions</i>	36,887	34,726	36,290	36,758	36,630



## Classes of war pensions

The following tables provide an analysis of the total number of new claims granted, pensions in force, and members on special rates for 1966-67.

## WAR PENSIONS: NEW CLAIMS GRANTED, AUSTRALIA, 1966-67

<i>Class</i>	<i>1914-18 War</i>	<i>1939-45 War(a)</i>	<i>Korea and Malaya operations</i>	<i>Far East Strategic Reserve</i>	<i>Special Overseas Service</i>	<i>Total</i>
Ex-servicemen . . . . .	536	5,197	126	68	315	6,242
Wives and widows of ex-servicemen . . . . .	613	5,452	143	67	192	6,467
Children . . . . .	29	7,330	416	149	297	8,221
Other dependants . . . . .	6	171	2	..	12	191
<b>Total . . . . .</b>	<b>1,184</b>	<b>18,150</b>	<b>687</b>	<b>284</b>	<b>816</b>	<b>21,121</b>

(a) Includes interim forces and native members of the forces.

## WAR PENSIONS IN FORCE: AUSTRALIA, 30 JUNE 1967

<i>Class</i>	<i>1914-18 War</i>	<i>1939-45 War(a)</i>	<i>Korea and Malaya operations</i>	<i>Far East Strategic Reserve</i>	<i>Special Overseas Service</i>	<i>Total</i>
Ex-servicemen . . . . .	36,429	182,830	2,905	378	370	222,912
Wives . . . . .	36,659	156,527	2,260	278	204	195,928
Children . . . . .	519	146,966	5,223	556	302	153,566
War widows . . . . .	23,950	21,027	118	15	33	45,143
Children of deceased ex-servicemen . . . . .	93	5,730	153	39	53	6,068
Orphans . . . . .	20	136	4	1	..	161
Parents . . . . .	375	6,238	113	3	13	6,742
Others . . . . .	225	423	5	1	..	654
<b>Total . . . . .</b>	<b>98,270</b>	<b>519,877</b>	<b>10,781</b>	<b>1,271</b>	<b>975</b>	<b>631,174</b>

(a) Includes interim forces and native members of the forces.

WAR PENSIONS: MEMBERS ON SPECIAL RATES OR EQUIVALENT, AUSTRALIA  
30 JUNE 1967

<i>Class</i>	<i>1914-18 War</i>	<i>1939-45 War(a)</i>	<i>Korea and Malaya operations</i>	<i>Far East Strategic Reserve</i>	<i>Special Overseas Service</i>	<i>Total</i>
Totally and permanently incapacitated ex-servicemen . . . . .	10,390	11,209	47	1	1	21,648
Blinded ex-servicemen . . . . .	188	245	1	..	1	435
Tuberculous ex-servicemen . . . . .	337	203	6	..	..	546
Tuberculous ex-servicemen (intermediate rate) . . . . .	70	191	5	..	..	266
Temporarily totally incapacitated ex-servicemen . . . . .	271	1,557	19	7	1	1,855
Ex-servicemen suffering other disabilities . . . . .	44	49	2	..	1	96
<b>Total . . . . .</b>	<b>11,300</b>	<b>13,454</b>	<b>80</b>	<b>8</b>	<b>4</b>	<b>24,846</b>

(a) Includes interim forces and native members of the forces.

## Number of war pensions and annual liability, States, etc.

The following table shows the number of pensions in force and annual liability for each war, field of operations, or service at 30 June 1967, according to place of payment. (The amount paid is shown on page 97 of this chapter.)

**WAR PENSIONS: NUMBER OF PENSIONS AND ANNUAL LIABILITY  
STATES, ETC., 30 JUNE 1967**

Number of war pensions in force at 30 June 1967						
Place of payment	Incapacitated ex-servicemen	Dependants of incapacitated ex-servicemen	Dependants of deceased ex-servicemen	Total	Annual pension liability(a) (\$'000)	
1914-18 WAR						
New South Wales(b)	11,805	11,942	8,332	32,079	18,583	
Victoria	11,744	11,797	8,158	31,699	18,193	
Queensland	4,986	4,971	2,616	12,573	7,297	
South Australia(c)	2,902	3,111	1,973	7,986	4,301	
Western Australia	2,804	3,284	1,613	7,701	3,526	
Tasmania	1,520	1,524	1,002	4,046	2,508	
Abroad	668	870	648	2,186	899	
Total	36,429	37,499	24,342	98,270	55,307	
1939-45 WAR(d)						
New South Wales(b)	64,796	102,890	12,383	180,069	38,160	
Victoria	49,426	83,502	8,648	141,576	28,448	
Queensland	27,498	48,197	4,891	80,586	17,701	
South Australia(c)	17,664	30,035	3,076	50,775	9,389	
Western Australia	15,948	25,499	2,704	44,151	8,379	
Tasmania	6,929	13,152	1,010	21,091	4,070	
Abroad	569	763	297	1,629	468	
Total	182,830	304,038	33,009	519,877	106,615	
KOREA AND MALAYA OPERATIONS						
New South Wales(b)	1,149	2,836	169	4,154	456	
Victoria	658	1,613	51	2,322	246	
Queensland	513	1,398	80	1,991	245	
South Australia(c)	200	550	17	767	83	
Western Australia	236	680	30	946	98	
Tasmania	101	321	18	440	45	
Abroad	48	88	25	161	22	
Total	2,905	7,486	390	10,781	1,195	
FAR EAST STRATEGIC RESERVE						
New South Wales(b)	150	375	30	555	52	
Victoria	67	127	18	212	24	
Queensland	108	224	6	338	35	
South Australia(c)	12	36	..	48	2	
Western Australia	30	48	2	80	6	
Tasmania	9	19	1	29	4	
Abroad	2	6	1	9	3	
Total	378	835	58	1,271	126	

(a) Includes domestic allowance payable to widows. (b) Includes Australian Capital Territory. (c) Includes Northern Territory. (d) Includes interim forces and native members of the forces.

**WAR PENSIONS: NUMBER OF PENSIONS AND ANNUAL LIABILITY  
STATES, ETC., 30 JUNE 1967—continued**

Number of war pensions in force at 30 June 1967						
Place of payment	Incapacitated ex-servicemen	Dependants of incapacitated ex-servicemen	Dependants of deceased ex-servicemen	Total	Annual pension liability(a) (\$'000)	
SPECIAL OVERSEAS SERVICE						
New South Wales(b)	169	223	51	443	69	
Victoria	54	78	9	141	19	
Queensland	92	155	22	269	35	
South Australia(c)	18	22	9	49	8	
Western Australia	23	27	7	57	11	
Tasmania	14	2	..	16	3	
Abroad	..	..	..	..	..	
Total	370	507	98	975	145	
TOTAL						
New South Wales(b)	78,069	118,266	20,965	217,300	57,320	
Victoria	61,949	97,117	16,884	175,950	46,930	
Queensland	33,197	54,945	7,615	95,757	25,313	
South Australia(c)	20,796	33,754	5,075	59,625	13,783	
Western Australia	19,041	29,538	4,356	52,935	12,020	
Tasmania	8,573	15,018	2,031	25,622	6,630	
Abroad	1,287	1,727	971	3,985	1,392	
Grand total	222,912	350,365	57,897	631,174	163,388	

(a) Includes domestic allowance payable to widows.  
Northern Territory.

(b) Includes Australian Capital Territory.

(c) Includes

**Summary of war pensions, 1962-63 to 1966-67**

The following table shows, for each war, field of operations, or service, and in total, the number of pensions granted, claims rejected, pensions in force, and the annual liability for pensions in each of the years ended 30 June 1963 to 1967.

**WAR PENSIONS: SUMMARY, AUSTRALIA, 1962-63 TO 1966-67**

<i>Number of war pensions in force at 30 June—</i>							
<i>Year</i>	<i>Pensions granted</i>	<i>Claims rejected(a)</i>	<i>Incapaci- tated ex- servicemen</i>	<i>Dependants of incapac- itated ex- servicemen</i>	<i>Dependants of deceased ex- servicemen</i>	<i>Total</i>	<i>Annual pension liability at 30 June (b) (\$'000)</i>
<b>1914-18 WAR</b>							
1962-63	2,394	1,854	46,606	45,212	23,566	115,384	47,410
1963-64	2,050	1,678	44,401	43,521	23,846	111,768	47,145
1964-65	1,631	1,481	41,820	41,353	24,191	107,364	47,730
1965-66	1,455	1,402	39,219	39,511	24,311	103,041	54,818
1966-67	1,184	1,110	36,429	37,499	24,342	98,270	55,307
<b>1939-45 WAR(c)</b>							
1962-63	32,567	6,125	170,621	345,990	29,728	546,339	81,103
1963-64	29,301	6,113	175,377	341,464	30,816	547,657	85,363
1964-65	25,173	5,525	178,558	331,398	31,865	541,821	92,050
1965-66	20,156	5,620	180,976	318,210	32,418	531,604	100,837
1966-67	18,150	5,409	182,830	304,038	33,009	519,877	106,615

(a) The number of claimants who had the claims for all their disabilities rejected.  
payable to widows.

(b) Includes domestic allowance

(c) Includes interim forces and native members of the forces.

## WAR PENSIONS: SUMMARY, AUSTRALIA, 1962-63 TO 1966-67—continued

Year	Pensions granted	Claims rejected(a)	Number of war pensions in force at 30 June—			Total	Annual pension liability at 30 June (b) (\$'000)	
			Incapacitated ex-servicemen	Dependants of incapacitated ex-servicemen	Dependants of deceased ex-servicemen			
KOREA AND MALAYA OPERATIONS								
1962-63	. .	1,035	342	2,412	5,618	290	8,320	876
1963-64	. .	862	271	2,554	6,175	322	9,051	945
1964-65	. .	858	231	2,687	6,673	340	9,700	1,031
1965-66	. .	801	277	2,807	7,140	370	10,317	1,116
1966-67	. .	687	233	2,905	7,486	390	10,781	1,195
FAR EAST STRATEGIC RESERVE								
1962-63	. .	193	48	166	264	36	466	48
1963-64	. .	196	58	223	396	39	658	62
1964-65	. .	208	49	275	536	39	850	76
1965-66	. .	170	87	314	646	52	1,012	99
1966-67	. .	284	98	378	835	58	1,271	126
SPECIAL OVERSEAS SERVICE(c)								
1963-64	. .	8	..	1	5	2	8	1
1964-65	. .	9	..	3	8	6	17	3
1965-66	. .	168	17	61	76	44	181	34
1966-67	. .	816	152	370	507	98	975	145
TOTAL								
1962-63	. .	36,189	8,369	219,805	397,084	53,620	670,509	129,437
1963-64	. .	32,417	8,120	222,556	391,561	55,025	669,142	133,516
1964-65	. .	27,879	7,286	223,343	379,968	56,441	659,752	140,889
1965-66	. .	22,750	7,403	223,377	365,583	57,195	646,155	156,904
1966-67	. .	21,121	7,002	222,912	350,365	57,897	631,174	163,388

(a) The number of claimants who had the claims for all their disabilities rejected. (b) Includes domestic allowances payable to widows. (c) Not applicable prior to 1963-64.

The following table shows, for the years 1962-63 to 1966-67, the amounts paid in pensions and the places where they were paid.

## WAR PENSIONS: AMOUNT PAID(a), STATES, ETC., 1962-63 TO 1966-67 (\$'000)

Place of payment	1962-63	1963-64 (b)	1964-65	1965-66 (b)	1966-67
New South Wales(c) . . .	48,106	53,108	52,809	58,851	55,884
Victoria . . .	41,815	45,526	45,064	49,526	46,882
Queensland . . .	20,750	23,040	23,295	25,928	24,992
South Australia(d) . . .	12,349	13,500	13,209	14,633	13,613
Western Australia . . .	10,509	11,547	11,430	12,617	11,869
Tasmania . . .	5,663	6,152	6,210	6,914	6,650
Abroad . . .	1,539	1,656	1,466	1,677	1,509
Total . . .	140,731	154,530	153,483	170,146	161,399

(a) Includes domestic allowances paid to widows. (b) Includes five 12-weekly payments.  
(c) Includes Australian Capital Territory. (d) Includes Northern Territory.

**Miscellaneous war pensions**

The Commission is also responsible for the payment of pensions and allowances to beneficiaries under the *Seamen's War Pensions and Allowances Act 1940-1967* and Cabinet decisions granting eligibility to persons who were attached to the armed forces during war-time.

The following table shows the number and class of pensions and the annual liability at 30 June 1967, and the table thereafter shows the amounts paid during the years 1962-63 to 1966-67 and the place of payment.

**MISCELLANEOUS WAR PENSIONS: NUMBER OF PENSIONS AND ANNUAL LIABILITY, AUSTRALIA, 30 JUNE 1967**

Class	Number of pensions in force at 30 June 1967			Total	Annual pension liability (\$'000)
	Members (a)	Dependants of members	Dependants of deceased members		
Act of grace . . . . .	121	147	60	328	111
Seamen's war pension . . . . .	82	114	78	274	86
New Guinea civilians . . . . .	1	..	82	83	84
<b>Total . . . . .</b>	<b>204</b>	<b>261</b>	<b>220</b>	<b>685</b>	<b>281</b>

(a) 'Member' in this context is a person in respect of whose wartime experience a pension is paid.

**MISCELLANEOUS WAR PENSIONS: AMOUNT PAID, STATES, ETC.  
1962-63 TO 1966-67  
(\$'000)**

Place of payment	1962-63	1963-64 (a)	1964-65	1965-66 (a)	1966-67
New South Wales(b)	144	150	156	161	148
Victoria . . . . .	67	71	70	76	71
Queensland . . . . .	38	45	42	46	44
South Australia(c)	32	35	30	34	29
Western Australia . . . . .	17	17	17	20	20
Tasmania . . . . .	5	5	4	4	4
Abroad . . . . .	3	..	1	3	1
<b>Total . . . . .</b>	<b>305</b>	<b>323</b>	<b>321</b>	<b>344</b>	<b>317</b>

(a) Includes five 12-weekly payments.

(b) Includes Australian Capital Territory.

(c) Includes Northern Territory.

**Service pensions**

The *Repatriation Act 1920-1967* provides for a service pension to be paid, subject to a means test of income and property, to the following persons:

- ex-servicemen who served in a theatre of war and have attained the age of sixty years or are permanently unemployable;
- ex-servicemen who suffer from pulmonary tuberculosis, irrespective of the area of their service; and
- ex-servicewomen who suffer from tuberculosis, or who served in a theatre of war, or served abroad or embarked for service abroad and have attained the age of fifty-five years, or are permanently unemployable.

**Rates of pension**

The maximum rate of service pension is the same as that paid to an age or invalid pensioner by the Department of Social Services. A single or married ex-serviceman receives a pension of \$13.00 a week. If, however, an ex-serviceman's wife is receiving a social service pension, a tuberculosis allowance or a service pension as a member of the forces, the rate is \$11.75 a week. The service pension of an ex-serviceman is increased by \$1.50 a week for each eligible child other than the first and by \$4.00 a week if a guardian's allowance is payable.

The maximum weekly rates payable to a service pensioner's wife and eligible children are: wife \$6.00; first child, \$1.50; other children up to the fourth, 25c each. *Eligible child* means a child of a service pensioner under the age of sixteen years, or a child over that age who is wholly or substantially dependent on the pensioner and is undergoing full-time education, in which case pension may continue until the child's twenty-first birthday.

Supplementary assistance of \$2.00 a week is paid in addition to service pension to an ex-serviceman who is paying rent, or for lodging, or board and lodging, and whose *means as assessed* do not exceed \$1.00 a week or \$2.00 a week if he is married. (The allowance is reduced if the *means as assessed* exceed these amounts.)

A service pensioner who is unmarried, widowed, divorced, or married but separated, and who has care and control of one or more children, qualifies for a guardian's allowance of \$4.00 a week.

The means test sets limits to the amount of income or property which a pensioner may have for the purpose of service pension. The amount of service pension payable depends upon the claimant's *means as assessed*, which consist of his annual rate of income plus a property component equal to \$2.00 for each complete unit of \$20 of net value of property above \$400. For married couples, except where they are separated or in other special circumstances, the income and property of each for purposes of applying the means test is taken to be half the total income and property of both, even if only one is a pensioner or claimant. A person's *means as assessed* may consist entirely of income, entirely of property, or of both income and property components. If a single person's *means as assessed* do not exceed \$7 a week, he receives the maximum rate of pension. If his *means as assessed* exceed \$7 a week, the rate payable is the maximum rate less the amount by which *means as assessed* exceed \$7 a week. If his *means as assessed* are \$20 a week or more, no service pension is payable.

Income means earnings and other forms of income derived from any source, with certain exceptions, of which the principal are: certain income derived from property; gifts or allowances from children, parents, brothers or sisters; benefits from friendly societies; child endowment; Commonwealth health benefits. The value of board and lodging received by a pensioner, either free or in return for services, is normally assessed as income at \$1.25 a week. Property includes all real and personal property, such as houses, land, money in hand, in a bank or on loan, shares, investments or legacies, vehicles used for business purposes, and livestock. Property does not include an applicant's permanent home, furniture or personal effects, the surrender value of life insurance policies (up to \$1,500), the value of any reversionary interest, the capital value of any life interest, annuity or contingent interest, or vehicles maintained only for personal use.

Eligibility for service pensions was extended on 1 November 1941 to veterans of the South African War 1899–1902 and in 1943 to members of the Forces of the 1939–45 War. Members of the Forces who served in Korea and those who served in Malaya prior to the commencement of the *Repatriation (Far East Strategic Reserve) Act* 1956–1966 are also eligible.

An ex-serviceman or ex-servicewoman in receipt of a service pension is entitled, with certain exceptions, to free medical benefits for disabilities not caused by war. These benefits include general practitioner service, specialist service where necessary, full pharmaceutical benefits, surgical aids and appliances (including spectacles), dental treatment, and treatment in Repatriation General Hospitals.

## Operations

### SERVICE PENSIONS: SUMMARY, AUSTRALIA, 1966-67

	South African War	1914–18 War	1939–45 War (a)	Korea- Malaya operations	Miscel- laneous (b)	Total
New claims granted . . . . .	9	2,701	5,821	35	12	8,578
Restorations . . . . .	..	459	597	..	..	1,056
Cancellations (gross) . . . . .	12	1,796	2,375	14	..	4,197
Deaths . . . . .	52	3,341	967	1	1	4,362
Pensions in force at 30 June 1967 . . . . .	282	42,161	24,442	87	21	66,993
Annual liability at 30 June 1967 \$'000 . . . . .	125	21,242	9,840	25	7	31,239
Amount paid in pensions during 1966-67 . . . . . \$'000	n.a.	n.a.	n.a.	n.a.	n.a.	29,126

(a) Includes native members of the forces. (b) Act of grace pensions.

## SERVICE PENSIONS: SUMMARY, AUSTRALIA, 1962-63 TO 1966-67

	1962-63	1963-64	1964-65	1965-66	1966-67
New claims granted . . . . .	11,485	10,026	8,273	8,048	8,578
Restorations . . . . .	962	1,065	1,035	1,052	1,056
<i>Total additions</i> . . . . .	<i>12,447</i>	<i>11,091</i>	<i>9,308</i>	<i>9,100</i>	<i>9,634</i>
Cancellations (gross) . . . . .	4,595	4,679	4,948	4,259	4,197
Deaths . . . . .	3,274	3,573	3,947	4,000	4,362
<i>Total reductions</i> . . . . .	<i>7,869</i>	<i>8,252</i>	<i>8,895</i>	<i>8,259</i>	<i>8,559</i>

## Classes of service pensions

The following tables give an analysis of the total number of new claims granted and pensions in force for 1966-67.

## SERVICE PENSIONS: NEW CLAIMS GRANTED, AUSTRALIA, 1966-67

<i>Class</i>	<i>South African War</i>	<i>1914-18 War</i>	<i>1939-45 War (a)</i>	<i>Korea- Malaya opera- tions</i>	<i>Miscell- aneous</i>	<i>Total</i>
Ex-servicemen . . . . .	9	2,006	3,356	10	..	5,381
Wives and widows of ex-servicemen . . . . .	..	612	1,306	7	..	1,925
Children . . . . .	..	83	1,159	18	..	1,260
Other . . . . .	..	..	..	..	12	12
<b>Total</b> . . . . .	<b>9</b>	<b>2,701</b>	<b>5,821</b>	<b>35</b>	<b>12</b>	<b>8,578</b>

(a) Includes native members of the forces.

## SERVICE PENSIONS: NUMBER IN FORCE, STATES, 30 JUNE 1967

<i>State</i>	<i>South African War</i>	<i>1914-18 War</i>	<i>1939-45 War (a)</i>	<i>Korea- Malaya opera- tions</i>	<i>Miscell- aneous</i>	<i>Total</i>
New South Wales(b) . . . . .	137	13,510	7,602	34	..	21,283
Victoria . . . . .	39	11,222	5,132	19	11	16,423
Queensland . . . . .	31	6,787	5,216	12	3	12,049
South Australia(c) . . . . .	35	4,784	2,095	7	5	6,926
Western Australia . . . . .	33	4,366	3,264	9	2	7,674
Tasmania . . . . .	7	1,492	1,133	6	..	2,638
<b>Australia</b> . . . . .	<b>282</b>	<b>42,161</b>	<b>24,442</b>	<b>87</b>	<b>21</b>	<b>66,993</b>

(a) Includes native members of the forces.  
Territory.

(b) Includes Australian Capital Territory.

(c) Includes Northern Territory.

## Number, by class, of service pensions and amount paid

The following tables show the number of each class of service pension in force, the annual liability and the amounts paid for the years 1962-63 to 1966-67.

SERVICE PENSIONS: NUMBER OF EACH CLASS OF PENSION AND ANNUAL LIABILITY  
AUSTRALIA, 1962-63 TO 1966-67

Number of service pensions at 30 June payable to—								
Year	Ex-servicemen who are—		Dependants(a) of ex-servicemen where the ex-serviceman is—			Miscellaneous(b)	Total	Annual pension liability at 30 June (\$'000)
	Aged ex-servicemen	Permanently unemployable	Suffering from pulmonary tuberculosis	Aged or permanently unemployable	Suffering from pulmonary tuberculosis			
1962-63 .	30,818	14,278	1,160	14,368	1,537	..	62,161	22,759
1963-64(b)	32,855	14,527	1,122	14,817	1,466	1	64,788	24,652
1964-65 .	33,959	14,296	1,080	14,480	1,354	9	65,178	25,685
1965-66 .	34,403	14,396	1,070	14,716	1,299	10	65,894	26,637
1966-67 .	34,814	14,512	1,073	15,421	1,152	21	66,993	31,239

(a) Includes dependants of deceased service pensioners.

(b) Miscellaneous service pensions were not payable prior to 1963-64.

SERVICE PENSIONS: AMOUNT PAID, STATES, ETC.  
1962-63 TO 1966-67  
(\$'000)

Place of payment	1962-63	1963-64	1964-65	1965-66	1966-67
New South Wales(a)	7,095	7,981	8,494	9,499	9,998
Victoria	4,949	5,654	5,974	6,626	6,720
Queensland	3,362	3,823	4,048	4,477	4,715
South Australia(b)	2,487	2,689	2,766	3,025	3,134
Western Australia	2,927	3,177	3,320	3,571	3,612
Tasmania	837	874	904	964	935
Abroad	..	..	2	10	11
<b>Australia</b>	<b>21,657</b>	<b>24,198</b>	<b>25,508</b>	<b>28,172</b>	<b>29,126</b>

(a) Includes Australian Capital Territory.

(b) Includes Northern Territory.

## Medical treatment for ex-servicemen and dependants of ex-servicemen

Medical treatment is provided for all disabilities which have been accepted as due to war service. In addition, and subject to certain conditions, treatment is provided for disabilities not due to war service for: ex-servicemen and ex-servicewomen receiving war pensions at or exceeding the maximum general (100 per cent) rate; ex-servicemen who have contracted pulmonary tuberculosis; nurses who served in the 1914-18 war; widows and certain dependants of ex-servicemen whose deaths have been accepted as due to war service and of deceased T.P.I. pensioners; and service pensioners, including service pensioners of the Boer War.

In-patient treatment for eligible patients is provided at the six Repatriation General Hospitals (one in each State) and eight auxiliary hospitals and sanatoriums as follows: *New South Wales*—Lady Davidson Hospital; *Victoria*—Macleod Hospital and Anzac Hostel; *Queensland*—Kenmore Hospital, Rosemount Hospital and Anzac Hostel; *South Australia*—Biralee Hospital; and *Western Australia*—The Edward Millen Hospital. The Anzac Hostels specialise in the care and treatment of long-term patients.

The total number of available beds for patients in open wards or parts of wards in all these institutions at 30 June 1967 was 4,168, and expenditure amounted to \$25,320,421. In addition, expenditure of \$30,576,677 was incurred on medical services outside these institutions.



**Repatriation hospitals and institutions**

Details of full-time staff in Repatriation general hospitals and other Repatriation institutions are given in the following table.

**REPATRIATION HOSPITALS AND INSTITUTIONS: FULL-TIME STAFF  
STATES, 30 JUNE 1967**

<i>Type of institution</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>Aust.</i>
General hospitals—							
Medical staff . . . . .	114	80	34	22	28	8	286
Nursing staff . . . . .	785	535	286	204	202	55	2,067
Other staff . . . . .	1,119	788	489	306	433	106	3,241
<i>Total, general hospitals</i>	<i>2,018</i>	<i>1,403</i>	<i>809</i>	<i>532</i>	<i>663</i>	<i>169</i>	<i>5,594</i>
Other in-patient institutions(a) . . . . .	210	105	172	37	35	..	559
Out-patient clinics(a) . . . . .	169	77	22	33	25	..	326
Limb and appliance centres(a) . . . . .	73	68	28	21	14	11	215
<i>Grand total</i>	<i>2,470</i>	<i>1,653</i>	<i>1,031</i>	<i>623</i>	<i>737</i>	<i>180</i>	<i>6,694</i>

(a) Total staff.

The following table gives details of in-patients treated at Repatriation general hospitals and other Repatriation institutions in each State. The figures shown refer to cases, e.g. a person who is admitted to hospital twice during a year is counted twice.

**REPATRIATION GENERAL HOSPITALS AND INSTITUTIONS: IN-PATIENTS  
TREATED, STATES, 1966-67**

	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>Aust.</i>
<b>REPATRIATION GENERAL HOSPITALS</b>							
In-patients at beginning of year . . . . .	1,263	730	482	308	391	116	3,290
Admissions and re-admissions during year . . . . .	18,190	11,283	8,943	4,792	5,657	1,774	50,639
<i>Total in-patients treated</i>	<i>19,453</i>	<i>12,013</i>	<i>9,425</i>	<i>5,100</i>	<i>6,048</i>	<i>1,890</i>	<i>53,929</i>
Discharges . . . . .	17,144	10,414	8,541	4,453	5,335	1,686	47,573
Deaths . . . . .	1,002	906	411	361	345	103	3,128
In-patients at end of year . . . . .	1,307	693	473	286	368	101	3,228
Average daily number resident . . . . .	1,141	661	447	282	383	101	3,015

**OTHER REPATRIATION INSTITUTIONS**

In-patients at beginning of year . . . . .	195	103	123	36	27	..	484
Admissions and re-admissions during year . . . . .	1,481	312	933	117	198	..	3,041
<i>Total in-patients treated</i>	<i>1,676</i>	<i>415</i>	<i>1,056</i>	<i>153</i>	<i>225</i>	<i>..</i>	<i>3,525</i>
Discharges . . . . .	1,445	297	918	120	204	..	2,984
Deaths . . . . .	47	6	8	2	2	..	65
In-patients at end of year . . . . .	184	112	130	31	19	..	476
Average daily number resident . . . . .	195	108	129	35	24	..	491

In addition to the Repatriation institutions, eligible patients may be treated in other country and metropolitan hospitals and nursing homes at Repatriation expense. During 1966-67, 13,785 Repatriation in-patients were accommodated and treated in hospitals and 718 in nursing homes.

Repatriation psychiatric patients requiring custodial care are, by agreement with the State Governments, accommodated at the expense of the Repatriation Department in separate wings of psychiatric hospitals administered by the State authorities. At 30 June 1967 there were 848 Repatriation patients in these hospitals.

Out-patient treatment is provided throughout the Commonwealth at Repatriation hospitals and clinics and through the Repatriation Local Medical Officer Scheme. During 1966-67, 574,191 out-patients were treated at Repatriation institutions, and visits to or by local medical officers totalled 2,695,306.

### General Repatriation benefits and miscellaneous

#### Other Repatriation Department activities

The activities of the Department in respect of general benefits for the welfare of ex-servicemen and dependants concern mainly education and training of children under the Soldiers' Children Education Scheme (*see* pages 103-5), medical benefits for widows and children of deceased ex-servicemen and for widowed mothers of deceased unmarried ex-servicemen, funeral expenses for certain classes of ex-servicemen and dependants, and allowances to certain classes of dependants.

These and new benefits designed for the re-establishment of servicemen and servicewomen after discharge were extended and made available, by legislation passed in June 1940, to servicemen and servicewomen engaged in the 1939-45 War, and in November 1950 and May 1963 to those engaged in the Korea and Malaya operations and to those serving in such other areas as may be prescribed under the *Repatriation (Special Overseas Service) Act* 1962-1966, respectively. The re-establishment benefits generally administered by the Repatriation Commission are: payment of re-employment allowance while awaiting employment; provision of tools of trade and equipment where they are necessary to employment; transportation expenses to meet the cost of fares and removal of household belongings where an ex-serviceman takes up training, employment, or a business, or settles on the land; supplements to wages of apprentices whose apprenticeships were interrupted by war service; re-establishment loans to enable ex-servicemen and widows to establish themselves in business, practices or occupations, including (until the Division of War Service Land Settlement began operations early in 1946) agricultural occupations; payment of re-establishment allowances during the early stages of establishment in business; gifts up to \$150 for furniture to ex-servicemen who are blind or totally and permanently incapacitated, also to widows with children under sixteen years of age; and free passages to Australia for wives, widows and children of ex-servicemen who married abroad (and passages outward from Australia in certain cases of ex-servicemen and dependants).

In 1949 the Department took over the functions of the Re-establishment Division of the former Department of Post-War Reconstruction and became responsible for the co-ordination of all matters relating to training under the Commonwealth Reconstruction Training Scheme. This scheme is now concluded, the prescribed time limits for eligibility having expired on 30 June 1950. Re-establishment of the more seriously disabled, where ordinary training is not sufficient, continues to be a function of the Department, and special means have to be found to overcome each problem.

Expenditure in 1966-67 on general Repatriation benefits for all wars was \$3,942,000, comprising: Soldiers' Children Education Scheme, \$2,462,000; recreation transport allowance, \$623,000; and other benefits \$857,000. In addition, \$28,000 was expended by other Commonwealth authorities on Repatriation employment and vocational training.

#### Expenditure by the Repatriation Department, 1966-67

The net expenditure by the Department for the year ended 30 June 1967 was \$265,344,010 distributed as follows.

	\$'000
Pensions, allowances and other benefits . . . . .	194,783
Medical treatment . . . . .	55,897
Administration . . . . .	11,543
Works, rent and maintenance . . . . .	3,120
<b>Total . . . . .</b>	<b>265,344</b>

#### Soldiers' Children Education Scheme

The Soldiers' Children Education Scheme was established in 1921 and operates with the assistance of the voluntary Education Boards in each State. These Boards consist of representatives of government and non-government education authorities and of ex-service and other organisations which have a general interest in the welfare of the children of ex-servicemen. The objects of the Scheme are to assist and encourage eligible children in acquiring a standard of education compatible with their aptitude and ability, and to prepare them to enter an agricultural, commercial, professional, or industrial calling of their own choice.

**Eligible children.** Eligible children are children of ex-servicemen whose deaths have been accepted as due to war service; or of ex-servicemen who died from causes not due to war service but who were receiving at the date of death a war pension at a special rate for blindness, total and permanent incapacity, pulmonary tuberculosis, or amputation of two or more limbs; or of ex-servicemen who, as a result of war service, are blinded, totally and permanently incapacitated, or receiving the special rate pension for pulmonary tuberculosis and are likely to receive such pension for a period of at least three years.

**General benefits.** From the commencement of primary education up to twelve years, school requisites and fares are provided. An education allowance is also payable for a child from commencement of secondary education or from the age of twelve years, whichever is the earlier, while the child is undertaking primary or secondary education. Further assistance beyond, or parallel with, the later years of secondary education is provided where an approved beneficiary continues with a course of specialised education or training necessary for a career. Specialised education covers a wide range and may include: professional degree or diploma courses at universities and technical colleges; theological training; cadet and pupilage training, i.e. training combined with employment, such as nursing, pharmacy and journalism; industrial, including apprenticeship training, and other courses of trade and business training approved by an Education Board; and agricultural training at an agricultural college. At this stage of training, in addition to the education allowance, fees are paid and text books, essential equipment and other minor benefits are provided.

All education allowances are subject to an allowed income limit test, i.e. the amount of education allowance payable depends on the amount of income a child receives over the allowed limit. The child's income for the purpose of determining the allowance payable means earnings from employment and other earnings from personal exertion and such portion of a scholarship, bursary or grant as the Education Board determines to be income. Income does not include war or service pensions paid for the child or any similar payment, income the child receives from private means, or income from casual employment during the entire period of a school or university vacation where the student is to continue as a full-time student under the scheme after the vacation. The parent's income does not affect the child's allowance. The scale of maximum allowances payable to eligible children at various stages of education is as follows.

**SOLDIERS' CHILDREN EDUCATION SCHEME**  
**WEEKLY RATES OF ALLOWANCES, JANUARY 1968**  
**(\$)**

<i>Type of training</i>	<i>Living at home</i>	<i>Living away from home</i>
At school—		
Aged 12 and under 14 years . . . . .	1.90	6.33
Aged 14 „ „ 16 years . . . . .	2.88	6.33
Aged 16 „ „ 18 years . . . . .	6.33	9.78
Professional (university, etc.) . . . . .	10.75	17.40
Agricultural . . . . .	..	3.18
Industrial (apprenticeship, etc.) . . . . .	2.30	4.60

The following tables show the costs of education under the scheme for the year ended 30 June 1967 and the number of children in receipt of benefit at 30 June 1967.

**SOLDIERS' CHILDREN EDUCATION SCHEME: EXPENDITURE, 1966-67**  
**(\$'000)**

	<i>N.S.W. (a)</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A. (b)</i>	<i>W.A.</i>	<i>Tas.</i>	<i>Aust.</i>
Cost of education of beneficiaries—							
Under 12 years of age . . . . .	7	8	8	3	1	2	29
12 years of age and over . . . . .	814	673	442	233	164	95	2,421
<b>Total expenditure . . . . .</b>	<b>821</b>	<b>681</b>	<b>450</b>	<b>236</b>	<b>165</b>	<b>97</b>	<b>(c)2,450</b>

(a) Includes Australian Capital Territory of \$12,000.

(b) Includes Northern Territory.

(c) Excludes overseas expenditure

**SOLDIERS' CHILDREN EDUCATION SCHEME: NUMBER RECEIVING BENEFITS(a)  
AT 30 JUNE 1967**

<i>Type of training</i>	<i>N.S.W. (b)</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A. (c)</i>	<i>W.A.</i>	<i>Tas.</i>	<i>Abroad</i>	<i>Total</i>
At school—								
Aged under 14 years(d)	883	644	459	192	171	151	9	2,509
Aged 14 and under 16 years	1,008	734	518	256	242	173	16	2,947
Aged 16 and under 18 years	738	545	297	181	113	75	17	1,966
<i>Total at school</i>	<i>2,629</i>	<i>1,923</i>	<i>1,274</i>	<i>629</i>	<i>526</i>	<i>399</i>	<i>42</i>	<i>7,422</i>
Professional	317	342	202	126	71	41	11	1,110
Agricultural	6	11	12	..	8	..	..	37
Industrial	6	7	..	2	2	..	..	17
<b>Grand total</b>	<b>2,958</b>	<b>2,283</b>	<b>1,488</b>	<b>757</b>	<b>607</b>	<b>440</b>	<b>53</b>	<b>8,586</b>

(a) Refers only to children in receipt of an education allowance. (b) Includes Australian Capital Territory.  
(c) Includes Northern Territory. (d) From 12 years of age or the commencement of secondary education, whichever is the earlier.

#### Settlement of returned service personnel on the land

Reference to the settlement of returned service personnel on the land will be found in the chapters Public Finance and Rural Industry.

#### Re-establishment benefits for national servicemen

Subject to prescribed conditions, special re-establishment benefits are provided for national servicemen under the *Defence (Re-establishment) Act 1965–1967*. They apply to all national servicemen whether or not they have served on 'special service' and ensure that servicemen will not be at a disadvantage on their return to civil life. The scheme includes appropriate full or part-time training as a supplement to skills acquired in the Army, refresher training for specialists and training for those who, for various reasons, may not be able to return to their former employment. The assistance includes payment of tuition fees, other associated fees and fares, and provision of books and equipment as appropriate. A training allowance is also provided for trainees undertaking full-time studies.

Re-establishment loans may be granted, subject to certain conditions, to those national servicemen who, prior to call-up, were engaged in professional practice, business, or agricultural occupations, or who, because of their call-up, were prevented from engaging in these occupations, and who are in need of financial assistance for their re-establishment in civil life.

The maximum amounts of the loans are business and professional \$3,000, agricultural \$6,000.

### The Services Canteens Trust Fund

The Services Canteens Trust Fund was established under the *Services Trust Funds Act 1947*. Its funds are derived from the assets and profits of wartime services canteens, mess and regimental funds of disbanded units, and several other sources.

The total amount transferred to the Fund to 31 December 1967 was \$11,053,986. The Act prescribed that, of this, \$5 million and such further amounts as the trustees of the Fund might from time to time decide, should be devoted to the provision of education facilities for the children of eligible ex-servicemen and ex-servicewomen, and that the balance of the Fund should be used to provide relief for ex-servicemen and ex-servicewomen and their dependants in necessitous circumstances.

The Fund is administered by eleven honorary trustees appointed by the Governor-General. The trustees have power to determine the persons or groups of persons to benefit from the Fund and the extent of the benefits to be granted within the provisions of the Act, and to appoint regional committees to assist with the administration. Members of regional committees are all persons who served in the 1939–45 War or are widows of men who served during the war. They serve in an honorary capacity.

#### Assistance from the Fund

Persons eligible for assistance from the Fund are those who, between 3 September 1939 and 30 June 1947, served in the Australian Naval, Military or Air Forces, including members of the canteens staff of any ship of the Royal Australian Navy, persons duly accredited to any part of the

Defence Forces who served in an official capacity on full-time paid duty, and their dependants. The trustees have introduced schemes for providing welfare relief for ex-servicemen and ex-servicewomen who are eligible for benefits, and for their dependants; benefits for children of eligible ex-servicemen and ex-servicewomen who are suffering from serious and incapacitating afflictions; and education benefits for the children of eligible ex-servicemen and ex-servicewomen. From its inauguration in 1947 the Fund is to be available for forty years for welfare relief and for thirty years for educational benefits.

*Welfare relief.* The trustees have prescribed a policy for welfare relief which makes assistance available only to those who are in genuine distress from which they cannot extricate themselves by their own efforts. To 31 December 1967, \$3,225,791 has been granted as welfare relief from the Fund \$1,963,640 to ex-servicemen and their dependants, and \$1,262,151 to widows and orphans. The amount granted during 1967 was \$173,929. A total of 34,322 ex-servicemen and ex-servicewomen and 17,746 widows and orphans were granted welfare assistance from the Fund to 31 December 1967.

*Assistance under Afflicted Children's Scheme.* The Fund assists dependent children suffering from afflictions which permanently disable or seriously retard their progress or prevent the enjoyment of normal health and strength, and who face a prospect of dependence on others for all or part of their lives. The extent to which assistance will be granted in a particular case depends largely on the nature of the child's affliction, the facilities available, the family circumstances, and the funds that can be made available. Up to 31 December 1967, 2,623 afflicted children had been assisted under the Afflicted Children's Scheme, involving an expenditure of \$301,702. The amount granted during 1967 was \$11,866. The number of new children assisted in 1967 was 47.

*Educational Assistance Scheme.* Educational assistance is restricted to children who are fifteen years of age and over, thirteen years and over where there are exceptional circumstances, and twelve years in the case of orphans. The object is to assist eligible children to obtain the highest education within their capacity. Assistance is in the form of awards ranging up to \$400 a year depending on the nature of the course undertaken and the family circumstances. These awards are granted chiefly for children at secondary education level, but are also available for other types of education. They are designed to cover, or contribute towards, the cost of essential books, fees in cases where government school courses are not available, fares between the child's home and school, essential equipment and material, uniforms in certain cases, and maintenance for the child while at school. Higher training awards are provided for selected students for post-graduate study, in Australia or overseas, in the ancillary services to medicine, welfare and science, and also for selected craftsmen to gain experience in their trade overseas. One post-graduate scholarship is provided each year for study overseas, valued at \$2,500 per annum for up to three years.

The number of children assisted under the educational assistance scheme to 31 December 1967 was 61,400, and the expenditure on educational awards, post-graduate scholarships and higher training awards to 31 December 1967 was \$6,895,831. The number granted in 1967 was 7,193 at a value of \$629,193.

*Total assistance.* The total assistance granted under the three schemes during 1967 was \$814,988 and from the inception of the Fund to 31 December 1967 totalled \$10,423,324.

## CHAPTER 6

# INTERNATIONAL RELATIONS

### Relations with Commonwealth and other countries

Australia's international relations have developed steadily since its attainment of nationhood at the beginning of this century. Initially, association with Britain and co-operation with the Commonwealth countries were a major preoccupation. These links remain important principles of foreign policy. Australia also maintains particularly close relations with the United States of America and is continuing to foster regional association with the countries of Asia.

#### Commonwealth relations

In addition to being represented at the meetings of Commonwealth Prime Ministers, Finance Ministers, and Ministers for External Affairs, Australia belongs to the sterling area, retains the system of judicial appeal from the States' courts to the Privy Council, maintains High Commissions in most other Commonwealth countries, and is a member of the main Commonwealth organisations providing for co-operation in economic, scientific, educational, and other fields.

#### Relations with the United States of America

An important feature of Australia's international relations is its relationship with the United States of America. This relationship is formally expressed in the so-called ANZUS Treaty which was signed pursuant to Articles 51 and 52 of the United Nations Charter. It provides that, in the event of armed attack on any one of them in the Pacific, the United States, Australia, and New Zealand would each act to meet the common danger in accordance with its constitutional processes.

#### Australia and Asia

Geographical location to the south of Asia has become an increasingly important factor in Australia's foreign policy. Australia is active as a member of the South-East Asia Treaty Organisation (SEATO), as a regional member of the United Nations Economic Commission for Asia and the Far East (ECAFE), as a member of the Colombo Plan Consultative Committee of the Asian Development Bank, and of the Asian and Pacific Council (ASPAC); and also in commercial and professional associations.

#### United Nations

From the time of the drafting of the United Nations Charter, Australia has taken an active role in that organisation, primarily through participation in the General Assembly but also through membership of the Security Council (1946-47 and 1956-57), the Economic and Social Council (1948-50, 1953-55 and 1962-64), and the Trusteeship Council.

Contributions are made to various forms of international aid through the United Nations and other international agencies.

#### SEATO

Following the cessation of fighting in Indo-China in 1954, Australia, with other countries situated in the south-east Asian region, or having responsibilities there, supported a proposal to form a collective defence alliance to guarantee the peace and security of the region from external aggression. On 8 September 1954 Australia, France, New Zealand, Pakistan, the Philippines, Thailand, the United Kingdom, and the United States signed the South-East Asian Collective Defence Treaty at Manila. They also signed a Pacific Charter stating the principles on which they had acted. A Protocol to the Treaty extended its operation to Cambodia, Laos and the free territory under the jurisdiction of the State of Vietnam, although no action on these territories would be taken except at the invitation or with the consent of the government concerned.

While primary emphasis has been placed on the defence significance of the Treaty, an organisation has been established in Bangkok to co-ordinate activities to combat subversion both by counter-propaganda and security training and by the development of the economic and social welfare of the peoples of the Treaty Area. To facilitate this task the Australian Government in 1956 instituted a

SEATO Aid Programme, under which by 30 June 1967 aid to the value of \$16.42 million had been given to member countries in Asia to help develop their capacity to resist aggression and subversion and to stimulate economic development. This programme is complementary to Australia's Colombo Plan contribution. Australian SEATO Aid projects, completed or in progress, include the provision of geodetic survey vessels for the Philippines; a military technical training school, a vehicle base repair shop, and two 50 kW radio transmitters to Thailand; telecommunication and technical training equipment to Pakistan; and barbed wire, corrugated iron and blacksmith's tools, town water supply systems for Bien Hoa and Can Tho, three surgical teams, and primary school textbooks for Vietnam. Australia has also provided military training, and technical training in the fields of engineering, telecommunications, naval architecture and dockyard maintenance, security procedures, and surveying for more than 220 trainees from Asian member countries. In addition a number of senior service officers of other member countries have visited Australia to foster understanding and to develop co-operation between the armed forces.

### The Colombo Plan

The Colombo Plan originated at a meeting of Commonwealth Foreign Ministers in Colombo in January 1950. The meeting set up a consultative committee to review economic development in south and south-east Asia. The task of this committee was to devise the most effective means of tackling the problems of economic development in the area and of focusing world attention on them.

Membership of the consultative committee is now made up of Australia, Canada, Ceylon, India, New Zealand, Pakistan, the United Kingdom, Malaysia, the United States, Burma, Cambodia, Indonesia, Japan, Laos, Nepal, the Philippines, Thailand, Vietnam, Korea, Bhutan, the Maldive Islands, Afghanistan, Singapore, and Iran.

Australian assistance under the Colombo Plan to 30 June 1967 amounted to \$141,751,000. Of this, \$96,404,800 had been spent on economic development projects and \$45,346,200 had been spent under the Technical Co-operation Scheme. Australia has placed emphasis on the importance of technical assistance in providing a base for economic development. A summary of expenditure, by country and under different heads, is set out in the following table.

AUSTRALIA'S EXPENDITURE ON THE COLOMBO PLAN TO 30 JUNE 1967  
(\$'000)

Country	Economic develop- ment	Technical assistance				Grand total
		Training	Experts	Equip- ment	Total	
Afghanistan . . .	..	78.8	1.4	0.3	80.5	80.5
Bhutan . . .	289.9	..	..	..	..	289.9
Brunei . . .	..	78.6	1.0	..	79.6	79.6
Burma . . .	4,185.9	1,385.0	125.2	625.5	2,135.7	6,321.6
Cambodia . . .	2,627.8	210.4	234.9	223.8	669.1	3,296.9
Ceylon . . .	9,294.0	995.8	407.0	379.0	1,781.8	11,075.8
India . . .	29,464.4	2,103.2	281.7	692.7	3,077.6	32,542.0
Indonesia . . .	9,095.8	5,040.6	1,148.7	516.6	6,705.9	15,801.7
Korea . . .	..	451.1	32.4	158.4	641.9	641.9
Laos . . .	1,555.6	322.7	120.0	451.4	894.1	2,449.7
Malaysia . . .	3,709.3	6,986.1	2,014.3	1,598.0	10,598.4	14,307.7
Maldives . . .	..	12.0	..	0.6	12.6	12.6
Nepal . . .	266.5	239.8	78.9	30.0	348.7	615.2
Pakistan . . .	24,524.1	1,725.2	550.0	971.4	3,246.6	27,770.7
Philippines . . .	86.0	1,280.9	188.3	573.7	2,042.9	2,128.9
Singapore . . .	..	1,845.5	585.1	853.7	3,284.3	3,284.3
Thailand . . .	7,192.3	2,265.9	591.0	807.2	3,664.1	10,856.4
Vietnam . . .	3,481.0	1,438.0	396.1	918.1	2,752.2	6,233.2
General—						
Mekong Project . . .	..	..	342.2	130.0	472.2	472.2
Miscellaneous . . .	632.2	..	26.2	..	2,858.0	3,490.2
<b>Total . . .</b>	<b>96,404.8</b>	<b>26,459.6</b>	<b>7,124.4</b>	<b>8,930.4</b>	<b>(a)45,346.2</b>	<b>(a)141,751.0</b>

(a) Includes Miscellaneous.

**Economic development aid**

Most of Australia's contribution under the Colombo Plan has been spent on providing predominantly Australian-made equipment for developmental projects or on gifts of commodities such as wheat, flour, fertiliser, coal, copper, and condensed milk which have been sold in the recipient country to raise counterpart funds for agreed developmental projects.

The projects assisted by Australia cover a wide range, including irrigation and preparation of land for food crops, irrigation and electric power projects, secondary industries, municipal services, road building, transport and communications facilities, broadcasting equipment, and lignite mining.

A Technical Co-operation Scheme has been an integral part of the Colombo Plan since its inception in 1950. Co-ordination of technical assistance is provided by a Council for Technical Co-operation, which meets regularly in Colombo, served by a Colombo Plan Bureau.

**Technical assistance**

Australia had spent a total of \$26,459,600 on training awards under the Colombo Plan up to 30 June 1967. A total of 7,309 awards for training in Australia had been made. The main fields of study include engineering, public administration, education, nursing, science, medicine and health, and agriculture. Substantial numbers have also been trained in such fields as accountancy, arts, economics, food technology, social studies, and industry.

At 30 June 1967 a total of 4,284 awards had been granted under the correspondence scholarship scheme inaugurated by Australia in 1955. Main fields of study are accountancy, engineering, English, and trade courses.

Australia had spent a total of \$7,124,400 on experts and advisers up to 30 June 1967. This involved the services of experts and advisers on 1,083 assignments. The majority of these were in Malaysia and Thailand.

The following table shows the number of training awards and experts provided to Colombo Plan countries by Australia up to 30 June 1967.

**AUSTRALIA: TRAINING AWARDS AND EXPERTS PROVIDED UNDER COLOMBO PLAN TO 30 JUNE 1967**

<i>Country</i>	<i>Training awards</i>	<i>Correspondence awards</i>	<i>Expert assignments</i>	<i>Country</i>	<i>Training awards</i>	<i>Correspondence awards</i>	<i>Expert assignments</i>
Afghanistan .	39	..	2	Maldives .	10	..	..
Brunei .	24	13	6	Nepal .	56	..	12
Burma .	469	360	33	Pakistan .	523	..	79
Cambodia .	57	..	42	Philippines .	518	72	33
Ceylon .	390	628	78	Singapore .	452	324	139
India .	827	303	66	Thailand .	580	81	146
Indonesia .	1,168	286	105	Vietnam .	293	..	46
Korea .	190	..	3	General, etc.	..	..	27
Laos .	102	..	13				
Malaysia .	1,611	2,217	253	<b>Total .</b>	<b>7,309</b>	<b>4,284</b>	<b>1,083</b>

At 30 June 1967 a total of 412 requests for technical equipment had been met, at a total cost of \$8,930,400. The range of items supplied include text books and Australian reference books for schools, universities and technical training institutions; equipment and tools for technical education; livestock and equipment for breeding programmes; radio receivers for use in remote areas; film projectors and visual aids for training centres; X-ray equipment for hospitals; and agricultural research equipment.

In addition to training awards, experts and equipment, technical assistance funds have been spent on contributions to the Colombo Plan Bureau, publications, International House, training centres, and the ECAFE Asian Economic Development Institute.



## Participation in the United Nations

### Australia's contributions to the United Nations

Australia played an active part in drafting the Charter of the United Nations at the Conference on International Organization in San Francisco in 1945 and has been a consistent supporter of the principles and objectives of the United Nations since its foundation. Australia's influence in the affairs of the United Nations has been exerted primarily through the annual debates in the General Assembly, through membership of the Security Council (1946-47 and 1956-57) and the Economic and Social Council (1948-50, 1953-55 and 1962-64), and through the Trusteeship Council. By virtue of responsibility for the administration of the Trust Territory of Nauru prior to Nauru's independence in January 1968 and the continuing administration of the Trust Territory of New Guinea, Australia has been a member of the Trusteeship Council, as an administering power, since the Council's establishment.

In 1950 Australia joined fifteen other member States in answering the Security Council's call to help the Republic of Korea to repel Communist aggression from the north, and members of all three armed services took part in the three years of fighting which followed. Australia has also been directly involved in United Nations activities in many other parts of the world. Australia has contributed its share of the costs, both assessed and voluntary, of all United Nations peace-keeping operations, the largest of which have been the United Nations Emergency Force (UNEF) in the Middle East in 1956-67, the United Nations Operation in the Congo (ONUC) in 1960-64, and the United Nations Force in Cyprus (UNFICYP) since 1964. In addition to financial contributions, an element of fifty Australian policemen has been made available for service with UNFICYP.

In the economic, social and cultural sphere Australia has contributed to the work of the United Nations through membership of its specialised agencies and of the Economic and Social Council. Australia is a foundation member of one of the four Regional Economic Commissions—the Economic Commission for Asia and the Far East, the 4th and 15th Sessions of which were held in Australia. In 1963 Australia became a regional member of ECAFE.

Australia has had varying periods of service as a member of the executive bodies of the principal specialised agencies. As a leading agricultural country, Australia played a large part in the establishment of the Food and Agriculture Organization (FAO). Australia is a member of the Board of Governors of the International Atomic Energy Agency. Australia served as a member of the governing body of the International Labour Organisation either as a titular government member or as a deputy member from 1945 to 1960, and in 1963 was again elected to the governing body as a titular government member for a further three-year term. Australia has also been a prominent member of the International Civil Aviation Organization since its inception, and in 1962 was re-elected to the Council as one of the nine States of principal civil aviation importance. Australia was a member of the executive board of the United Nations Children's Fund (UNICEF) from 1947 to 1961 and was re-elected in 1966 for a three-year term.

### Australia's contributions in international aid

Australia's contributions towards various forms of international aid through the United Nations and other international organisations to June 1967 amounted to about \$165,200,000. This is additional to the funds provided for the Colombo Plan and the cash grant for the development of Papua and New Guinea.

The Australian Government contributed \$7,527,000 to the United Nations Expanded Programme of Technical Assistance (EPTA) from the inception of the Programme in 1950 to December 1965. This was spent on the provision of experts, training, supplies, and equipment, and supplemented Australian aid under the Technical Co-operation Scheme of the Colombo Plan. Australia also contributed \$1,500,000 to the Special Fund to December 1965. EPTA and the Special Fund were merged on 1 January 1966 into the United Nations Development Programme (UNDP) and Australia's contribution to the Programme to 30 June 1967 was \$1,755,000.

Australian experts sent abroad under the United Nations aid programmes up to 30 June 1967 totalled 634. A total of 752 United Nations trainees had come to Australia up to 30 June 1967.

Other contributions by Australia (to June 1967) have included \$45,044,000 to the United Nations Relief and Rehabilitation Administration (UNRRA); \$6,594,000 to the International Refugee Organization; \$3,660,000 to Post-UNRRA Relief; \$14,056,000 for food and medical supplies to the United Nations Children's Fund (UNICEF), which has been helping the under-privileged children of the world since its establishment in 1946; \$3,598,000 of essential supplies to the United Nations Korean Reconstruction Agency; \$3,320,000 of supplies to the United Nations Relief and Works Agency for Palestine refugees; \$1,443,000 for the programmes for the United Nations High Commissioner for Refugees; and \$96,000 for the WHO Malaria Eradication Special Account.

Australia has also contributed \$530,000 to the Intergovernmental Committee for European Migration's programme for providing transportation from Hong Kong to countries of resettlement for refugees of European origin coming out of mainland China.

In addition, Australia has made significant contributions to the development funds of international financial institutions; to June 1967 these amounted to \$47,590,000 to the International Bank for Reconstruction and Development, \$1,996,000 to the International Finance Corporation, \$20,779,000 to the International Development Association, and \$3,795,000 to the Asian Development Bank.

In 1962 Australia supported the establishment of the UN/FAO World Food Programme and has contributed \$1,679,000 in cash and kind to the Programme.

### Diplomatic representation

The Department of External Affairs is responsible for advising the Minister for External Affairs and the Australian Government on the conduct of foreign affairs and relations with foreign Governments. Its officers staff the Australian diplomatic service and the consular and administrative service.

#### Australian missions overseas

In December 1967 Australia maintained the following diplomatic and consular missions abroad.

### AUSTRALIAN MISSIONS OVERSEAS

#### Embassies (31)

- Argentina*—Calle Rivadavia 1829, Piso 5, Buenos Aires.
- Austria*—Concordia-platz 2/3, Vienna 1.
- Belgium*—51/52 Avenue des Arts, Brussels-4.
- Brazil*—Caixa Postal 251-ZC-00, Rio de Janeiro.
- Burma*—88 Strand Road, Rangoon.
- Cambodia*—94 Moha Vithei Preah Norodom, Phnom Penh.
- China*—Arcadia Building, 402 Tun Hua South Road, Taipei.
- Ethiopia*\*—C/o Australian High Commission, Nairobi, Kenya.
- France*—13 Rue Las Cases, Paris 7<sup>e</sup>.
- Germany, Federal Republic of*†—Kölner Strasse 157, Bad Godesburg, Bonn.
- Greece*—8 Makedonon Street, Athens.
- Indonesia*—Djalan Thamrin 15, Gambir, Djakarta.
- Ireland*—33 Fitzwilliam Square, Dublin.
- Israel*—145 Hayarkon Street, Tel Aviv.
- Italy*—Via Sallustiana 26, Rome.
- Japan*—1-14 Mita 2-chome, Minato-ku, Tokyo.
- Korea*—32-10 Songwoldong, Suda Moon-ku, Seoul.
- Laos*—Quartier Phone Xay, Boite Postale No. 292, Vientiane.
- Lebanon*—C/o Palm Beach Hotel, rue de Phenice, Beirut.
- Mexico*—Paseo de la Reforma 195, 5<sup>o</sup> Paso, Mexico 5, D.F. Mexico City.
- Nepal*‡—C/o Australian High Commission, New Delhi, India.
- The Netherlands*—Lange Voorhout 18, The Hague.
- The Philippines*—L & S Building, 1414 Roxas Street, Manila.
- South Africa*—Standard Bank Building, Church Square, Pretoria.
- Sweden*—Sergelstorg 12, Stockholm 40.
- Thailand*—323 Silom Road, Bangkok.
- Union of Soviet Socialist Republics*—13 Kropotkinsky Pereulok, Moscow.
- United Arab Republic*—1097 Corniche el Nil, Garden City, Cairo.
- United States of America*—1700 Massachusetts Avenue, Washington, D.C., 20036.
- Vietnam*—Caravelle Building, Place Lam Son, Saigon.
- Yugoslavia*—191-3, Bulevar Revolucije, Belgrade.

\* The Australian High Commissioner in Kenya is concurrently Ambassador to Ethiopia. † The Australian Ambassador is also head of the Australian Military Mission in Berlin. ‡ The Australian High Commissioner in India is concurrently Ambassador to Nepal.

**High Commissions (14)**

*Britain\**—Australia House, The Strand, London, W.C.2.  
*Canada*—Royal Bank Chambers, 90 Sparks Street, Ottawa, 4, Ontario.  
*Ceylon*—3 Cambridge Place, Colombo, 7.  
*Ghana*—6/26 Milne Avenue, Airport Residential Area, Accra.  
*India†*—No. 1/50-G Shantipath, Chanakyapuri, New Delhi.  
*Kenya*—Jeevan Bharati Bldg, Harambee Ave, Nairobi.  
*Malaysia*—44 Jalan Ampang, Kuala Lumpur.  
*Malta*—Airways House, Gaiety Lane, Cnr High Street, Sliema, Valletta.  
*New Zealand*—I.C.I. House, Molesworth Street, Wellington, N1.  
*Nigeria*—Investment House, 21–25 Borad Street, Lagos.  
*Pakistan*—United Bank Bldg, 54 Haider Road, Rawalpindi.  
*Singapore*—Thornycroft House, 201 Clemenceau Ave, Singapore.  
*Tanzania*—Bank House, Independence Avenue, Dar es Salaam.  
*Uganda‡*—Jeevan Bharati Bldg, Harambee Ave, Nairobi.

**Other (14)**

Military Mission in Berlin§—Olympia Stadium, Charlottenburg 9, Berlin.

## Mission to—

*European Economic Community*—51/52 Avenue des Arts, Brussels-4.  
*United Nations (New York)*—750 Third Avenue, New York 17, New York 10020.  
*United Nations (Geneva)*—56–58 Rue de Moillebeau, Petit Saconnex, 1211, Geneva 19.

## Consulate-General in—

*Spain*—Calle General Sanjurjo 44, Madrid 3.  
*Switzerland*—56–58 Rue de Moillebeau, Petit Saconnex, 1211, Geneva 19.  
*New York*—International Building, 636 Fifth Avenue, New York 20, New York 10020.  
*San Francisco*—350 Post Street, Union Square, San Francisco, California 94108.

## Consulate in—

*Denmark*—Nørrevold 68, Copenhagen.  
*Germany, Federal Republic of*—Hamburg 36, Neuerwall 39, Hamburg.  
*New Caledonia*—45 Tce, Rue de Verdun, Noumea.  
*Portuguese Timor*—Dili.  
*South Africa*—1001 Colonial Mutual Building, 106 Adderly Street, Cape Town.

## Commission in—

*Fiji*—C.M.L.A. Building, 3 Central Street, Suva.

The Department of External Affairs is responsible for the control and administration of all the diplomatic and consular missions listed above with the exception of the High Commission, London, which is the responsibility of the Prime Minister's Department.

Specialist officers of the Trade Commissioner Service, other Commonwealth Government Departments and the Defence Services stationed abroad are attached to Australian diplomatic or consular missions. Senior attached officers are in some cases accredited to the missions with diplomatic or consular ranks approved by the Minister for External Affairs. In addition, the Department of Trade and Industry maintains Trade Commissioner posts which engage in trade promotion in a number of cities where Australia does not have diplomatic or consular representation (for complete list of Trade Commissioner posts *see* pages 114–15).

The Department of Immigration similarly maintains offices overseas which engage in recruitment of migrants. A complete list of these offices is given on pages 115–16.

**Diplomatic representatives in Australia**

There are thirty-six non-Commonwealth and ten Commonwealth countries represented by diplomatic missions in Australia.

The following list shows the addresses of the overseas representatives in Australia. Full details of Commonwealth and foreign representation in Australia may be obtained from publications issued by the Department of External Affairs, Canberra. Consular representatives are not included. Particulars of these are contained in a publication *Consular and Trade Representatives in Australia*, issued by the Department of External Affairs, Canberra. There are about 250 such representatives in Australia, and fifty-five countries are represented.

\* Administered by Prime Minister's Department. † The Australian High Commissioner in India is concurrently Ambassador to Nepal. ‡ The Australian High Commissioner in Kenya is concurrently High Commissioner to Uganda. § The Australian Ambassador to Germany is also head of the Australian Military Mission in Berlin.

## DIPLOMATIC REPRESENTATIVES IN AUSTRALIA

## Embassies (33)

*Argentina*—5a Arkana Street, Yarralumla, Canberra, A.C.T.  
*Austria*—Ainslie Building, 39 Ainslie Avenue, Civic Centre, Canberra, A.C.T.  
*Belgium*—19 Arkana Street, Yarralumla, Canberra, A.C.T.  
*Brazil*—6 Monaro Crescent, Forrest, Canberra, A.C.T.  
*Burma*—85 Mugga Way, Red Hill, Canberra, A.C.T.  
*Cambodia*—5 Canterbury Crescent, Deakin, Canberra, A.C.T.  
*China*—70 Empire Circuit, Forrest, Canberra, A.C.T.  
*Denmark*—5 Melbourne Avenue, Forrest, Canberra, A.C.T.  
*France*—6 Darwin Avenue, Yarralumla, Canberra, A.C.T.  
*Germany, Federal Republic of*—Empire Circuit, Yarralumla, Canberra, A.C.T.  
*Greece*—22 Arthur Circle, Forrest, Canberra, A.C.T.  
*Indonesia*—4 Hotham Crescent, Deakin, Canberra, A.C.T.  
*Ireland*—Ainslie Building, 39 Ainslie Avenue, Civic Centre, Canberra, A.C.T.  
*Israel*—Turrana Street, Yarralumla, Canberra, A.C.T.  
*Italy*—27 State Circle, Deakin, Canberra, A.C.T.  
*Japan*—3 Tennyson Crescent, Forrest, Canberra, A.C.T.  
*Korea*—42 Mugga Way, Red Hill, Canberra, A.C.T.  
*Laos*—71 National Circuit, Deakin, Canberra, A.C.T.  
*Mexico*—40 Mugga Way, Red Hill, Canberra, A.C.T.  
*Nepal\**—11-7, 4 chome, Minami-Azabu, Minato-ku, Tokyo, Japan.  
*The Netherlands*—120 Empire Circuit, Yarralumla, Canberra, A.C.T.  
*The Philippines*—Moonah Place, Yarralumla, Canberra, A.C.T.  
*Portugal*—22 Bougainville Street, Manuka, Canberra, A.C.T.  
*South Africa*—3 Zeehan Street, Red Hill, Canberra, A.C.T.  
*Sweden*—Turrana Street, Yarralumla, Canberra, A.C.T.  
*Switzerland*—37 Stonehaven Crescent, Deakin, Canberra, A.C.T.  
*Thailand*—9 Daly Street, Deakin, Canberra, A.C.T.  
*Turkey, Republic of*—9 Sirius Place, Red Hill, Canberra, A.C.T.  
*Union of Soviet Socialist Republics*—78 Canberra Avenue, Griffith, Canberra, A.C.T.  
*United Arab Republic*—125 Monaro Crescent, Red Hill, Canberra, A.C.T.  
*United States of America*—State Circle, Yarralumla, Canberra, A.C.T.  
*Vietnam*—39 National Circuit, Forrest, Canberra, A.C.T.  
*Yugoslavia, Socialist Federal Republic of*—27 Endeavour Street, Red Hill, Canberra, A.C.T.

## High Commissioners (10)

*Britain*—Commonwealth Avenue, Canberra, A.C.T.  
*Canada*—Commonwealth Avenue, Canberra, A.C.T.  
*Ceylon*—35 Empire Circuit, Forrest, Canberra, A.C.T.  
*Ghana*—35 Endeavour Street, Red Hill, Canberra, A.C.T.  
*India*—63 Mugga Way, Red Hill, Canberra, A.C.T.  
*Malaysia*—71 State Circle, Yarralumla, Canberra, A.C.T.  
*Malta*—261 La Perouse Street, Red Hill, Canberra, A.C.T.  
*New Zealand*—M.L.C. Building, London Circuit, Civic Centre, Canberra, A.C.T.  
*Pakistan*—59 Franklin Street, Forrest, Canberra, A.C.T.  
*Singapore*—81 Mugga Way, Red Hill, Canberra, A.C.T.

## Legations (3)

*Finland*—83 Endeavour Street, Red Hill, Canberra, A.C.T.  
*Peru*—17 Canterbury Crescent, Deakin, Canberra, A.C.T.  
*Uruguay*—82 Dominion Circuit, Deakin, Canberra, A.C.T.

## Agents-General for States

From early times the Australian colonies maintained agents in London to encourage immigration and to carry out commercial and financial negotiations. Since federation the States have continued to maintain Agents-General in London, all of whom work in close co-operation with the High Commissioner for Australia at Australia House, The Strand, London. The addresses of the Agents-General are as follows: New South Wales—56-7 The Strand, London, W.C.2; Victoria—Victoria

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\* The Nepalese Ambassador to Japan is concurrently Ambassador to Australia and to New Zealand.

House, Melbourne Place, The Strand, London, W.C.2; Queensland—392 The Strand, London, W.C.2; South Australia—South Australia House, 50 The Strand, London, W.C.2; Western Australia—Western Australia House, 115 The Strand, London, W.C.2; Tasmania—458 The Strand, Charing Cross, London, W.C.2.

## Overseas trade representation

### The Australian Trade Commissioner Service

The Department of Trade maintains Trade Commissioners in thirty-four countries. The first permanent Trade Commissioner Post was set up in Canada in 1929. Before that Australia's only official trade representatives abroad were in the High Commission Office in London and at the Office of the Commissioner-General for Australia in New York. By late 1967 Trade Commissioners were established at the following posts: United States of America—New York, Washington, Los Angeles, and San Francisco; Canada—Vancouver, Ottawa and Montreal; West Indies—Trinidad; Britain and Europe—London, Brussels, The Hague, Vienna, Athens, Paris, Bonn, Hamburg, Geneva, Stockholm, Rome and Valletta; Persian Gulf—Bahrain; Africa—Nairobi, Johannesburg, and Cairo; Lebanon—Beirut; India—New Delhi and Calcutta; Ceylon—Colombo; South-east Asia—Singapore, Djakarta, Kuala Lumpur, Bangkok, and Hong Kong; China—Taipei; Japan—Tokyo and Osaka; New Zealand—Wellington, Christchurch, and Auckland; Philippines—Manila; Pakistan—Karachi; South America—Buenos Aires and Lima; Pacific Islands—Sydney. Twenty-eight editions of the Department of Trade's promotion periodical *Austral News* now circulate in over 100 countries in four languages. (See also Australian Trade Missions in the chapter Overseas Transactions.)

The addresses of Australian Trade Commissioner Posts overseas are shown in the following list.

### Trade Commissioner Service of the Commonwealth of Australia

*Argentina*—Australian Embassy, Seccion Comercial, Calle Rivadavia 1823, Piso-Dto. 'A', Buenos Aires.

*Austria*—Australian Embassy, Concordia-platz 2/3, Vienna 1.

*Bahrain*—Almoayyed Building, Government Road, Bahrain.

*Belgium*—Australian Embassy, 51/52 Avenue des Arts, Brussels-4.

*Britain*—Australia House, The Strand, London, W.C.2.

*Canada*—1155 Dorchester Boulevard West, Montreal 2, P.Q.; 1030 W. Georgia Street, Vancouver 5, B.C.; Australian High Commission, 90 Sparks Street, Ottawa 4, Ontario.

*Ceylon*—Australian High Commission, 3 Cambridge Place, Colombo 7.

*China (Taiwan)*—Australian Embassy, 400 Tun Hua South Road, Taipei.

*France*—Australian Embassy, 26 Rue de la Pepiniere, Paris, 8<sup>e</sup>.

*Germany, Federal Republic of*—Australian Embassy, Kölnerstrasse 157, Bad Godesburg, Bonn; Australian Consulate, Hamburg 36, Neuerwall 39.

*Greece*—Australian Embassy, 8 Makedonon Street, Athens.

*Hong Kong*—Union House, Chater Road, Hong Kong.

*India*—9 Shakespeare Sarani, Calcutta 2; 1/50G Shantipath, Chanakyapuri, New Delhi.

*Indonesia*—C/o Australian Embassy, Djalan Thamrin 15, Djakarta.

*Italy*—Australian Embassy, Via Sallustiana 26, Rome.

*Japan*—Australian Embassy, 1-14 Mita 2-Chome, Minato-ku, Tokyo; 50, 5-Chome, Koraibashi-suji, Higashi-ku, Osaka.

*Kenya*—Silopark House, Queensway, Nairobi.

*Lebanon*—L'Union de Paris Building, Rue Maamari, Beirut.

*Malaysia*—44 Jalan Ampang, Kuala Lumpur.

*Malta*—Australian High Commission, Airways House, Gaiety Lane, cnr High Street, Sliema, Valletta.

*The Netherlands*—143 Koninginnegracht, The Hague.

*New Zealand*—203 Queen Street, Auckland C.1; Bank of New Zealand House, Cathedral Square, Christchurch; Australian High Commission, I.C.I. House, Molesworth Street, Wellington.

*Pacific Islands*—C/o Department of Trade and Industry, A.N.Z. Bank Building, cnr Pitt and Hunter Streets, Sydney, N.S.W.

*Pakistan*—Australian High Commission, 9 Kutchery Road, Karachi 4.

*Peru*—Jiron Arica 837, Lima.

*The Philippines*—Australian Embassy, 1414 Roxas Street, Manila.

*Singapore*—Australian High Commission, MacDonald House, Orchard Road, Singapore 9.

*South Africa*—32 Plein Street, Johannesburg.

*Sweden*—Australian Embassy, Sergelstorg 12, Stockholm 40.

*Switzerland*—Australian Consulate-General, 56–58 Rue de Moillebeau, Petit Saconnex 1211, Geneva 19.

*Thailand*—Australian Embassy, 40 Chartered Bank Lane, Bangkok.

*Trinidad*—72 South Quay, Port-of-Spain, Trinidad.

*United Arab Republic*—Australian Embassy, 1097 Corniche el Nil, Garden City, Cairo.

*United States of America*—Paramount Building, 1735 Eye Street, N.W. Washington, D.C.; Australian Consulate-General, 636 Fifth Avenue, New York 20, New York; Australian Consulate-General, 350 Post Street, Union Square, San Francisco, California; 3600 Wilshire Boulevard, Los Angeles 5, California.

#### **Australian Trade Correspondents and Marketing Officers**

Australian Trade Correspondents and Marketing Officers have no official status but supplement the work of the Trade Commissioner Service. Correspondents are located in Suva, Fiji; Mozambique; Port Louis, Mauritius; Tel Aviv, Israel; and Istanbul, Turkey. Marketing Officers are located in Rangoon, Burma; Madrid, Spain; Dublin, Ireland; and Mexico City, Mexico.

#### **Trade Commissioners of overseas governments in Australia**

*Britain*—Senior British Trade Commissioner—Commonwealth Avenue, Canberra, A.C.T.

British Trade Commissioners—16–20 Bridge Street, Sydney, N.S.W.; 330 Collins Street, Melbourne, Vic.; M.L.C. Building, cnr Adelaide and Edward Streets, Brisbane, Qld; F.C.A. Building, Franklin Street, Adelaide, S.A.; 84 St George's Terrace, Perth, W.A.

Office of the Hong Kong Government Trade Representative—Kembla Building, Margaret Street, Sydney, N.S.W.

Office of the Fiji Government Representative—38 Martin Place, Sydney, N.S.W.

*Canada*—Canadian Trade Commissioners—A.M.P. Building, Circular Quay, Sydney, N.S.W.; 2 City Road, South Melbourne, Vic.

*Ceylon*—Ceylon Trade Commissioner—66 Pitt Street, Sydney, N.S.W.

*China*—300 George Street, Sydney, N.S.W.

*India*—Indian Trade Commissioner—167–187 Kent Street, Sydney, N.S.W.

*Malaysia*—Malaysian Trade Commissioner—50 Young Street, Sydney, N.S.W.

*New Zealand*—Senior New Zealand Trade Commissioner—280–288 George Street, Sydney, N.S.W.

New Zealand Government Trade Commissioners—330 Collins Street, Melbourne, Vic.; M.L.C. Building, Adelaide Street, Brisbane, Qld.

*Pakistan*—4–6 Bligh Street, Sydney, N.S.W.

*South Africa*—South African Trade Commissioner—622 St Kilda Road, Melbourne, Vic.

*Sweden*—14th Floor, West Tower, Prince's Gate, Melbourne, Vic.

### **Commonwealth Migration Offices overseas**

The Department of Immigration has established offices overseas to handle migration matters, and in some countries regional offices are provided. Inquiries and applications may also be made at any Australian diplomatic, consular or trade post overseas. Special facilities for migration business are available as follows.

*Argentina*—Australian Embassy, Calle Rivadavia 1829, Piso 5, Buenos Aires.

*Austria*—Australian Embassy, Migration Office, Teinfaltstrasse 1, Vienna.

*Belgium*—Australian Embassy, Migration Office, 51/52 Avenue des Arts, Brussels-4.

*Britain*—'Canberra House', Migration Office, 10–16 Maltravers Street, The Strand, London, W.C.2.

*Denmark*—Australian Consulate, Hammerensgade 4, 1267 Copenhagen, K.

*Fiji*—Australian Commission, C.M.L.A. Building, 3 Central Street, Suva.

*France*—Australian Embassy, Migration Office, 28 Rue de la Pepiniere, Paris, 8<sup>e</sup>.

*Germany, Federal Republic of*—Australian Embassy, Migration Office, Hohenzollernring 103, Cologne.

*Greece*—Australian Embassy, Migration Office, 8 Makedonon Street, Athens.

*Hong Kong*—Australian Government Trade Commission, Migration Office, 9th Floor, Union House, Connaught Road Central, Hong Kong.

*India*—Australian Government Trade Commission, Mercantile Bank Building, 52 Mahatma Gandhi Road, Bombay.

*Italy*—Australian Embassy, Migration Office, Via Magenta 5, Rome.

*Kenya*—Australian High Commission, Silopark House, Queensway, Nairobi.

*Lebanon*—Australian Embassy, Migration Office, 7th Floor, S.F.A.H. Building, Kantari Street, Beirut.

*Malta*—Australian Migration Office, Airways House, Gaiety Lane, cnr High Street, Sliema, Valletta.

*The Netherlands*—Australian Embassy, Migration Office, Mauritskade 19, The Hague.

*Spain*—Australian Consulate-General, Calle General Sanjurjo 44, Madrid 3.

*Sweden*—Australian Embassy, Migration Office, Sergelstorg 12, Stockholm 40.

*Switzerland*—Australian Consulate-General, Migration Section, 56–58 Rue de Moillebeau, Petit Saconnex, 1211, Geneva 19.

*Turkey*—Australian Embassy, Room 1007, Grand Ankara Hotel, Ankara.

*United Arab Republic*—Australian Embassy, Migration Office, 12 Hassan Sabri Street, Zamalek, Cairo.

*United States of America*—Australian Consulate-General, International Building, 636 Fifth Avenue, New York 20, New York.

Australian Consulate-General, Qantas Building, 350 Post Street, Union Square, San Francisco 8, California.

*Yugoslavia*—Australian Embassy, Migration Office, Bulevar Revolucije 191–193, Belgrade.

## CHAPTER 7

# POPULATION

Statistics in this chapter cover, in the main, the year 1967. More detailed figures will be found in the annual bulletin *Demography*, and current statistics are published in the *Monthly Review of Business Statistics*, the *Quarterly Summary of Australian Statistics*, and the mimeographed series *Australian Demographic Review* and *Overseas Arrivals and Departures*. The final detailed results of the various population censuses are published in a series of printed volumes and parts (see list at end of this Year Book, also the chapter Miscellaneous—Statistical and other official publications of Australia). Pending publication of the 1966 printed volumes a series of mimeographed bulletins are being issued containing the census results in summary form.

With the proclamation of the *Constitution Alteration (Aboriginals)* 1967 on 10 August 1967 the provision of the Constitution in Section 127 requiring the exclusion of Aborigines in reckoning the numbers of the people of the Commonwealth or of a State or other part of the Commonwealth, was repealed.\* Population statistics now include particulars of Aborigines, and population statistics for earlier periods starting with 30 June 1961 have been revised to include particulars of Aborigines. Rates based on population statistics have been revised accordingly. However, detailed analyses of population enumerated in the censuses of June 1961 and 1966 exclude full-blood Aborigines. Particulars of the Aboriginal population are given on page 150 in this chapter.

### Types of population statistics

Statistics of the population and its characteristics for Australia or the component States and Territories or other constituent areas at specific dates are divided in three main ways.

- (i) *Those ascertained by census enumeration.* The population censuses result in comprehensive statistics of characteristics of the population, such as age, sex, birthplace, etc.
- (ii) *Those ascertained by 'population counts'.* From time to time in specific areas there are additional enumerations of the population, which are known as population counts, because normally very little information other than number of persons and their sex is obtained.
- (iii) *Estimates of number and sex.* Estimates for dates subsequent to a census, for Australia as a whole, take account of natural increase and net overseas migration since the last census. Estimates for States and Territories are approximate, since complete records of interstate migration are not available. The population in each State and Territory is estimated by adding to the population ascertained at the census the natural increase and the recorded net gain to Australia from overseas migration for that State or Territory; gains and corresponding losses that result from movements between States and Territories in so far as they are recorded as transfers of residence under child endowment procedures or Commonwealth electoral procedures are also taken into account, supplemented by results of any special count or sample survey. Holiday, business, or other similar short-term movements between the States and Territories subsequent to the census are not taken into account.

Estimates carried forward in this way eventually reach the point when another census is taken, and the numbers so ascertained supersede those resulting from the estimates. In the light of the census results the estimates for the newly completed intercensal period are revised to adjust for the differences between the new census result and the population at the census date estimated on the basis of the previous census. This is to bring intercensal estimates into line with the two census results and thus effect adjustment for unrecorded or inaccurately recorded movement of population in the intercensal period. Such a revision is made when the preliminary (field count) results of a census become available. Further revision may be necessary when the final results of a census become available.

Final revised estimates become the permanent population estimates. A mean population for twelve month periods is required for certain purposes, and is calculated by the method described on page 130. As populations at specific dates are used in these calculations, consequential revisions are made to mean populations when the estimates for specific dates are revised as described above.

*The method used for estimating State and Territory populations, as described in (iii) above is different from that used prior to June 1961 (for particulars see Year Book No. 52, page 191). Population estimates subsequent to the 1961 Census are based on a method which excludes holiday, business or*

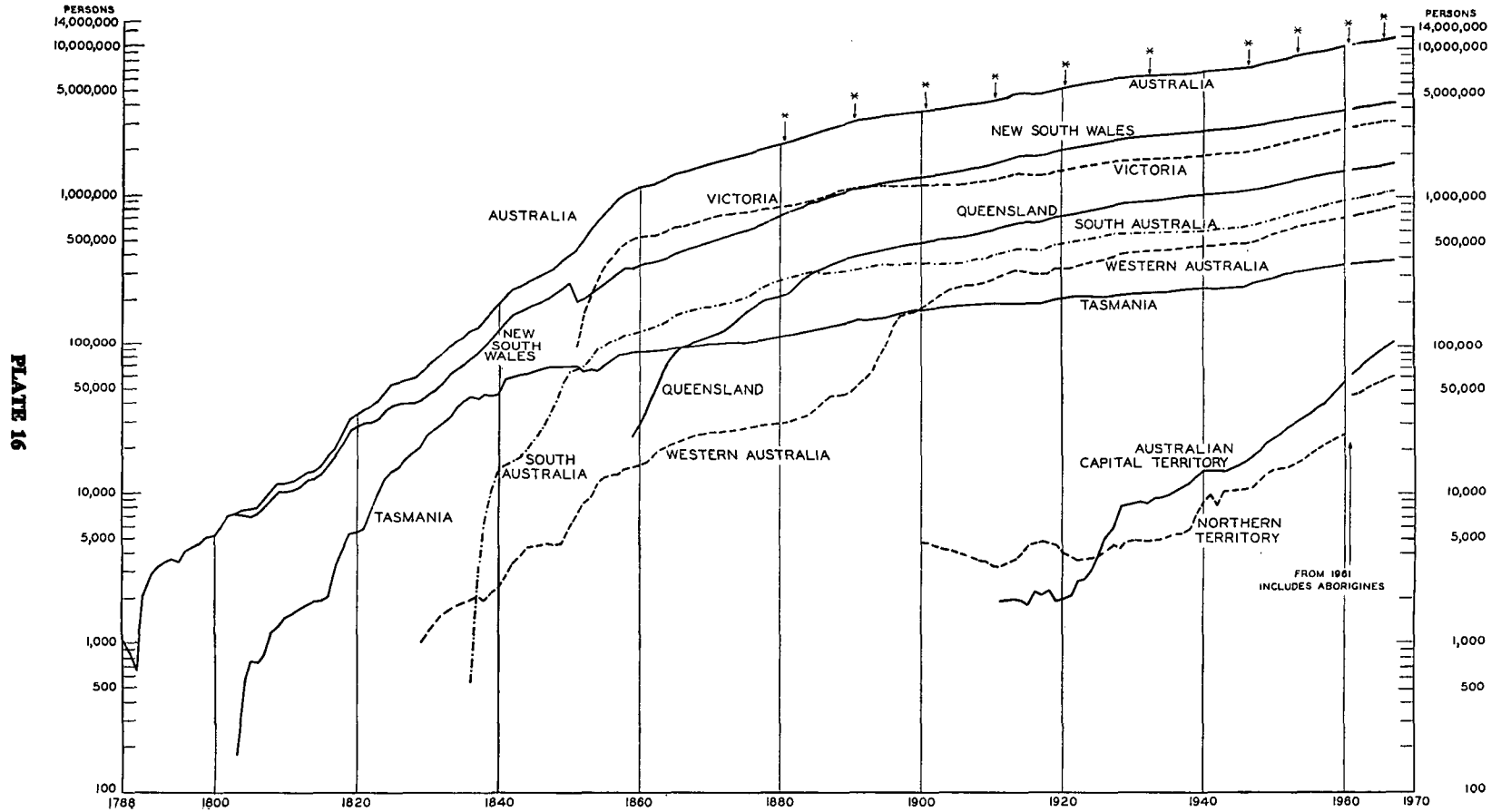
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\* For fuller particulars see page 66.



# POPULATION OF AUSTRALIA, 1788 TO 1967

## RATIO GRAPH



NOTE. THE VERTICAL SCALE IS LOGARITHMIC, AND THE CURVES RISE AND FALL ACCORDING TO THE RATE OF INCREASE OR DECREASE; ACTUAL NUMBERS ARE INDICATED BY THE SCALE.

\* AUSTRALIAN CENSUS

other similar short-term movements since the census between States and Territories. As a consequence, marked quarterly seasonal movements in some States due to interstate holiday movements are reflected in population figures prior to 1961 but not for subsequent years. This has some effect on the continuity of the series of mean population figures and should be borne in mind when making calculations which use mean populations as a basis (*see* page 130).

All population statistics shown in this issue of the Year Book for dates up to and including June 1966, and all mean populations for calendar years up to 1965 and financial years up to 1965-66, are final. Population statistics for dates or years subsequent to these will be revised in accordance with the results of the next census.

### The census

In Year Book No. 53 a special article was included outlining the history, purposes, legal basis, organisation, and publication of results of the population census in Australia (*see* pages 164 to 170 of that issue), but considerations of space preclude its repetition in this issue.

#### Early 'musters'

Although regular censuses were not instituted in the several colonies until the years specified in the table below, population returns in one form or another have existed from a very early period in the history of Australia. The earliest enumerations were known as 'musters', and although the actual results of very few of them have been preserved, it is probable that during the early days of colonisation they were of frequent occurrence. The first official 'muster' was taken in 1788 soon after the new settlement at Sydney Cove was formed, and in 1803 the first 'muster' of convicts in Van Dieman's Land (now Tasmania) was conducted.

#### Development of the census

The first regular census in Australia was taken in New South Wales in November 1828, and included the population of Moreton Bay (now Queensland) but not Van Dieman's Land (Tasmania). Particulars were asked concerning the names, ages and civil conditions of the inhabitants. The next census was taken in 1833, and was followed by another in 1836, when arrangements were made for the enumeration of the population of the newly-established settlement at Port Phillip (Victoria). The first censuses taken in Tasmania, Victoria and Queensland as separate colonies were in 1841, 1854 and 1861 respectively. The first regular census in South Australia was taken in 1844 and in Western Australia in 1848. The 1881 census was the first simultaneous census taken in Australia and formed part of the first simultaneous census of the British Empire.

The following table shows the total population recorded at each census conducted prior to 1891.

POPULATION ENUMERATED(a), CENSUSES IN AUSTRALIA, 1828 TO 1886

Date	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
1828- November . . .	36,598	..	..	..	..	..	..	..	..
1833- 2 September . . .	60,794	..	..	..	..	..	..	..	..
1836- 2 September . . .	77,096	..	..	..	..	..	..	..	..
1841- 2 March . . .	130,856	..	..	..	..	..	..	..	..
27 September . . .	..	..	..	..	..	50,216	..	..	..
1844-26 February . . .	..	..	..	17,366	..	..	..	..	..
1846-26 February . . .	..	..	..	22,390	..	..	..	..	..
2 March . . .	189,609	..	..	..	..	..	..	..	..
1847-31 December . . .	..	..	..	..	..	70,164	..	..	..
1848-10 October . . .	..	..	..	..	4,622	..	..	..	..
1851- 1 January . . .	..	..	..	63,700	..	..	..	..	..
1 March . . .	268,344	..	..	..	..	70,130	..	..	..
1854-26 April . . .	..	(b)234,298	..	..	..	..	..	..	..
30 September . . .	..	..	..	..	11,743	..	..	..	..
1855-31 March . . .	..	..	..	85,821	..	..	..	..	..
1856- 1 March . . .	269,722	..	..	..	..	..	..	..	..
1857-29 March . . .	..	408,998	..	..	..	..	..	..	..
31 March . . .	..	..	..	..	..	81,492	..	..	..
1859-31 December . . .	..	..	..	..	14,837	..	..	..	..
1861- 7 April . . .	350,860	538,628	(b)30,059	126,830	..	89,977	..	..	..
1864- 1 January . . .	..	..	61,467	..	..	..	..	..	..
1866-26 March . . .	..	..	..	163,452	..	..	..	..	..
1868- 2 March . . .	..	..	99,901	..	..	..	..	..	..
1870- 7 February . . .	..	..	..	..	..	99,328	..	..	..
31 March . . .	..	..	..	..	24,785	..	..	..	..
1871- 2 April . . .	502,998	730,198	..	185,626	..	..	..	..	..
1 September . . .	..	..	120,104	..	..	..	..	..	..
1876-26 March . . .	..	..	..	213,271	..	..	..	..	..
1 May . . .	..	..	173,283	..	..	..	..	..	..
1881- 3 April . . .	749,825	861,566	213,525	276,414	29,708	115,705	(c)3,451	..	2,250,194
1886- 1 May . . .	..	..	322,853	..	..	..	..	..	..

(a) Excludes full-blood Aborigines. (b) Previously included with New South Wales. (c) Included with South Australia for the censuses of 1866, 1871 and 1876. Actually Northern Territory was not transferred to the Commonwealth until 1 January 1911.

### Population recorded at censuses

State and Territorial populations recorded at the Australia-wide censuses taken over the period 1881 to 1966 are shown in the following table. The figures relate to the political boundaries of the several States (or Colonies) and Territories as they existed at the date of each census, except that the Northern Territory has been shown separately from South Australia for the censuses prior to its transfer from that State. The years of formation of the separate Colonies and transfer of the Territories are shown in the chapter Discovery, Colonisation and Federation of Australia (page 5).

#### POPULATION(a), BY SEX: AUSTRALIAN CENSUSES, STATES AND TERRITORIES 1881 TO 1966

Census	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T. (b)	Aust.
MALES									
3 April 1881	410,211	451,623	125,325	146,183	17,062	61,162	3,347	..	1,214,913
5 April 1891	609,666	598,222	223,779	162,241	29,807	77,560	4,560	..	1,705,835
31 March 1901	710,005	603,720	277,003	180,485	112,875	89,624	4,216	..	1,977,928
3 April 1911	857,698	655,591	329,506	207,358	161,565	97,591	2,734	992	2,313,035
4 April 1921	1,071,501	754,724	398,969	248,267	177,278	107,743	2,821	1,567	2,762,870
30 June 1933	1,318,471	903,244	497,217	290,962	233,937	115,097	3,378	4,805	3,367,111
30 June 1947	1,492,211	1,013,867	567,471	320,031	258,076	129,244	7,378	9,092	3,797,370
30 June 1954	1,720,860	1,231,099	676,252	403,903	330,358	157,129	10,288	16,229	4,546,118
30 June 1961	1,972,909	1,474,395	774,579	490,225	375,452	177,628	16,206	30,858	5,312,252
30 June 1966	2,124,462	1,613,904	843,897	548,530	426,691	187,390	21,508	49,977	5,816,359
FEMALES									
3 April 1881	339,614	409,943	88,200	130,231	12,646	54,543	104	..	1,035,281
5 April 1891	517,471	541,866	169,939	153,292	19,975	69,107	338	..	1,471,988
31 March 1901	644,841	597,350	221,126	177,861	71,249	82,851	595	..	1,795,873
3 April 1911	789,036	659,960	276,307	201,200	120,549	93,620	576	722	2,141,970
4 April 1921	1,028,870	776,556	357,003	246,893	155,454	106,037	1,046	1,005	2,672,864
30 June 1933	1,282,376	917,017	450,317	289,987	204,915	112,502	1,472	4,142	3,262,728
30 June 1947	1,492,627	1,040,834	538,944	326,042	244,404	127,834	3,490	7,813	3,781,988
30 June 1954	1,702,669	1,221,242	642,007	393,191	309,413	151,623	6,181	14,086	4,440,412
30 June 1961	1,944,104	1,455,718	744,249	479,115	361,177	172,712	10,889	27,970	5,195,934
30 June 1966	2,109,360	1,605,622	819,788	543,345	409,982	184,045	15,925	46,036	5,734,103
PERSONS									
3 April 1881	749,825	861,566	213,525	276,414	29,708	115,705	3,451	..	2,250,194
5 April 1891	1,127,137	1,140,088	393,718	315,533	49,782	146,667	4,898	..	3,177,823
31 March 1901	1,354,846	1,201,070	498,129	358,346	184,124	172,475	4,811	..	3,773,801
3 April 1911	1,646,734	1,315,551	605,813	408,558	282,114	191,211	3,310	1,714	4,455,005
4 April 1921	2,100,371	1,531,280	755,972	495,160	332,732	213,780	3,867	2,572	5,435,734
30 June 1933	2,600,847	1,820,261	947,534	580,949	438,852	227,599	4,850	8,947	6,629,839
30 June 1947	2,984,838	2,054,701	1,106,415	646,073	502,480	257,078	10,868	16,905	7,579,358
30 June 1954	3,423,529	2,452,341	1,318,259	797,094	639,771	308,752	16,469	30,315	8,986,530
30 June 1961	3,917,013	2,930,113	1,518,828	969,340	736,629	350,340	27,095	58,828	10,508,186
30 June 1966	4,233,822	3,219,526	1,663,685	1,091,875	836,673	371,435	37,433	96,013	11,550,462

(a) Excludes full-blood Aborigines.

(b) Part of New South Wales prior to 1911.

#### Increase since 1901 census

The increases in the populations of the several States and Territories and of Australia as a whole during the last seven intercensal periods are shown in the following table, which distinguishes the numerical increases, the proportional increases (which do not allow for the differences in the length of the intercensal periods) and the average annual rates of increase.

**POPULATION: INTERCENSAL INCREASES(a), STATES AND TERRITORIES  
1901 TO 1966**

State or Territory	1901-1911 (10 years)	1911-1921 (10 years)	1921-1933 (12½ years)	1933-1947 (14 years)	1947-1954 (7 years)	1954-1961 (7 years)	1961-1966 (5 years)
<b>NUMERICAL INCREASE</b>							
New South Wales(b)	293,602	453,637	500,476	383,991	438,691	493,484	316,809
Victoria	114,481	215,729	288,981	234,440	397,640	477,772	289,413
Queensland	107,684	150,159	191,562	158,881	211,844	200,569	144,857
South Australia	50,212	86,602	85,789	65,124	151,021	172,246	122,535
Western Australia	97,990	50,618	106,120	63,628	137,291	96,858	100,044
Tasmania	18,736	22,569	13,819	29,479	51,674	41,588	21,095
Northern Territory	-1,501	557	983	6,018	5,601	10,626	10,338
A.C.T.(c)	..	858	6,375	7,958	13,410	28,513	37,185
Australia	681,204	980,729	1,194,105	949,519	1,407,172	1,521,656	1,042,276
<b>PROPORTIONAL INCREASE—PER CENT</b>							
New South Wales(b)	21.67	27.55	23.83	14.76	14.70	14.41	8.09
Victoria	9.53	16.40	18.87	12.88	19.35	19.48	9.88
Queensland	21.62	24.79	25.34	16.77	19.15	15.21	9.54
South Australia	14.01	21.20	17.33	11.21	23.38	21.61	12.64
Western Australia	53.22	17.94	31.89	14.50	27.32	15.14	13.58
Tasmania	10.86	11.80	6.46	12.95	20.10	13.47	6.02
Northern Territory	-31.20	16.83	25.42	124.08	51.54	64.52	38.15
A.C.T.(c)	..	50.06	247.86	88.95	79.33	94.06	63.21
Australia	18.05	22.01	21.97	14.32	18.57	16.93	9.92
<b>AVERAGE ANNUAL RATE OF INCREASE—PER CENT</b>							
New South Wales(b)	1.97	2.46	1.76	0.99	1.98	1.94	1.57
Victoria	0.91	1.53	1.42	0.87	2.56	2.58	1.90
Queensland	1.98	2.24	1.86	1.11	2.53	2.04	1.84
South Australia	1.32	1.94	1.31	0.76	3.05	2.83	2.41
Western Australia	4.36	1.66	2.29	0.97	3.51	2.03	2.58
Tasmania	1.04	1.12	0.51	0.87	2.65	1.82	1.18
Northern Territory	-3.67	1.57	1.87	5.93	6.12	7.37	6.68
A.C.T.(c)	..	4.14	10.71	4.65	8.70	9.93	10.29
Australia	1.67	2.01	1.63	0.96	2.46	2.26	1.91

(a) Excludes full-blood Aborigines.  
South Wales prior to 1911.

(b) Includes Australian Capital Territory prior to 1911.

(c) Part of New

Minus sign (-) denotes decrease.

## Growth and distribution of population

### Growth of population

The table which follows shows the growth in the population of each sex in the various States and Territories as measured by the estimated population at 31 December in 1900 and thereafter at decennial intervals to 1960, and for each year from 1963 to 1967.

**ESTIMATED POPULATION(a), BY SEX: STATES AND TERRITORIES  
DECEMBER, 1900 TO 1967**

31 Dec.—	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T. (b)	Aust.
<b>MALES</b>									
1900	716,047	601,773	274,684	180,349	110,088	89,763	4,288	..	1,976,992
1910	858,181	646,482	325,513	206,557	157,971	98,866	2,738	..	2,296,308
1920	1,067,945	753,803	396,555	245,300	176,895	107,259	2,911	1,062	2,751,730
1930	1,294,419	892,422	481,559	288,618	232,868	113,505	3,599	4,732	3,311,722
1940(c)	1,402,297	947,037	536,712	297,885	248,734	123,650	6,337	7,856	3,570,508
1950	1,627,618	1,114,497	620,329	364,705	294,758	147,103	9,414	13,021	4,191,445
1960	1,951,907	1,453,815	766,448	483,802	372,665	180,511	14,785	29,140	5,253,073
1963(d)	2,047,191	1,540,749	810,535	514,666	407,024	183,330	27,798	40,320	5,571,613
1964(d)	2,078,808	1,573,966	825,775	529,100	417,023	185,051	29,267	43,972	5,682,962
1965(d)	2,112,610	1,602,058	841,926	544,257	427,330	186,483	30,632	48,333	5,793,629
1966(d)	2,143,521	1,628,672	855,726	554,810	439,680	188,539	31,920	51,846	5,894,714
1967(d)	2,180,721	1,655,935	870,770	561,833	454,743	191,446	33,189	55,867	6,004,504

For footnotes see next page.

**ESTIMATED POPULATION(a), BY SEX: STATES AND TERRITORIES  
DECEMBER 1900 TO 1967—continued**

<i>31 Dec.—</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T. (b)</i>	<i>Aust.</i>
<b>FEMALES</b>									
1900 .	644,258	594,440	219,163	176,901	69,879	83,137	569	..	1,788,347
1910 .	785,674	654,926	273,503	200,311	118,861	94,937	563	..	2,128,775
1920 .	1,023,777	774,106	354,069	245,706	154,428	105,493	1,078	910	2,659,567
1930 .	1,251,934	900,183	435,177	285,849	198,742	111,792	1,365	3,987	3,189,029
1940(c) .	1,388,651	967,881	494,740	301,171	225,342	120,352	2,637	6,304	3,507,078
1950 .	1,613,439	1,122,685	585,089	358,138	277,891	143,230	5,006	10,558	4,116,036
1960 .	1,925,354	1,434,475	735,838	473,220	358,368	175,458	10,002	26,132	5,138,847
1963(d) .	2,030,552	1,530,297	784,911	507,721	391,871	179,469	22,093	36,955	5,483,869
1964(d) .	2,063,313	1,563,955	800,750	522,854	401,098	181,457	23,487	40,553	5,597,467
1965(d) .	2,098,439	1,593,802	817,497	538,701	410,918	183,125	24,832	44,465	5,711,779
1966(d) .	2,129,786	1,621,198	832,156	549,780	423,005	185,366	26,179	48,203	5,815,673
1967(d) .	2,166,588	1,647,696	847,496	556,644	438,020	188,182	27,450	52,309	5,924,385
<b>PERSONS</b>									
1900 .	1,360,305	1,196,213	493,847	357,250	179,967	172,900	4,857	..	3,765,339
1910 .	1,643,855	1,301,408	599,016	406,868	276,832	193,803	3,301	..	4,425,083
1920 .	2,091,722	1,527,909	750,624	491,006	331,323	212,752	3,989	1,972	5,411,297
1930 .	2,546,353	1,792,605	916,736	574,467	431,610	225,297	4,964	8,719	6,500,751
1940(c) .	2,790,948	1,914,918	1,031,452	599,056	474,076	244,002	8,974	14,160	7,077,586
1950 .	3,241,057	2,237,182	1,205,418	722,843	572,649	290,333	14,420	23,579	8,307,481
1960 .	3,877,261	2,888,290	1,502,286	957,022	731,033	355,969	24,787	55,272	10,391,920
1963(d) .	4,077,743	3,071,046	1,595,446	1,022,387	798,895	362,799	49,891	77,275	11,055,482
1964(d) .	4,142,121	3,137,921	1,626,525	1,051,954	818,121	366,508	52,754	84,525	11,280,429
1965(d) .	4,211,049	3,195,860	1,659,423	1,082,958	838,248	369,608	55,464	92,798	11,505,408
1966(d) .	4,273,307	3,249,870	1,687,882	1,104,590	862,685	373,905	58,099	100,049	11,710,387
1967(d) .	4,347,309	3,303,631	1,718,266	1,118,477	892,763	379,628	60,639	108,176	11,928,889

(a) Includes Aborigines from 1963. The results of the census of 30 June 1966 have been taken into account in the preparation of estimates for dates subsequent to the census of 30 June 1961. See text, page 117. (b) Part of New South Wales prior to 1911. (c) Includes all defence personnel enlisted in Australia irrespective of movement subsequent to enlistment. (d) Includes Aborigines.

The estimated population at 31 December each year from 1788 to 1946 is shown in *Demography*, Bulletin No. 67, 1949, and for the period 1886 to 1966 in *Demography*, Bulletin No. 84, 1966. A graph illustrating the growth of the population of Australia and of each State and Territory appears on plate 16, page 118.

**Proportions of area and of population, density and masculinity**

In the following table the proportions of the total area and of the total population represented by each State and Territory are given, together with the density and the masculinity of the population. Additional information regarding density and masculinity of population appears later in this chapter (see pages 134-5).

**PROPORTIONS OF AREA AND OF POPULATION(a); DENSITY AND MASCULINITY  
OF POPULATION(a); STATES AND TERRITORIES, 31 DECEMBER 1967**

<i>State or Territory</i>	<i>Proportion of total area per cent</i>	<i>Proportion of population, 31 Dec. 1967 (per cent)</i>			<i>Density(b)</i>	<i>Mascu- linity(c)</i>
		<i>Males</i>	<i>Females</i>	<i>Persons</i>		
New South Wales . . . . .	10.43	36.32	36.57	36.44	14.05	100.65
Victoria . . . . .	2.96	27.58	27.81	27.69	37.59	100.50
Queensland . . . . .	22.47	14.50	14.31	14.40	2.58	102.75
South Australia . . . . .	12.81	9.36	9.40	9.38	2.94	100.93
Western Australia . . . . .	32.88	7.57	7.39	7.48	0.91	103.82
Tasmania . . . . .	0.89	3.19	3.18	3.18	14.39	101.73
Northern Territory . . . . .	17.53	0.55	0.46	0.51	0.12	120.91
Australian Capital Territory . . . . .	0.03	0.93	0.88	0.91	115.20	106.80
<b>Australia . . . . .</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>4.02</b>	<b>101.35</b>

(a) Includes Aborigines. (b) Number of persons per square mile. (c) Number of males per 100 females.

### Urban and rural distribution

In censuses before 1966 *metropolitan and other urban* boundaries were delineated without common criteria, but for the 1966 census a new uniform concept of *urban*, based on a minimum population density of 500 persons per square mile, was introduced. Other new criteria concerned land use, continuity of dwellings, enclaves, and unoccupied dwellings in holiday areas. No account was taken of administrative boundaries in delineating these urban centres.

Because of practical difficulties (notably lack of time to carry out an extensive examination of each area in order to re-design suitable collector's districts and the absence of suitable topographic boundaries around small towns) the new criteria were for the time being uniformly applied only to urban centres within the capital city statistical divisions and the statistical districts (*see below*), to other urban centres with a population of 30,000 or more, and to a few smaller centres (Katoomba-Wentworth Falls, Lawson-Hazelbrook, and urban centres in the Shires of Wyong and Gosford in New South Wales, Moe-Yallourn in Victoria, Cairns in Queensland, and Kalgoorlie in Western Australia). It is proposed to extend the application of the new criteria to smaller centres in future censuses.

Briefly the new criteria are as follows.

- (1) Population clusters of 1,000 or more persons having a minimum density of 500 persons per square mile shall be designated '*urban*'. This density shall be determined for each census collector's district (the smallest geographical area available). Additionally, some areas of lower population and/or density shall be classified as '*urban*' on other grounds (e.g. holiday areas, industrial areas).
- (2) Around each principal urban centre with a population of 75,000 or more *two* boundaries shall be drawn. The *outer* boundary shall circumscribe the area which is expected to be in close economic and social contact with the principal urban centre for the next two or three decades. These areas shall be designated STATISTICAL DIVISIONS (for State capital cities) or STATISTICAL DISTRICTS (for Canberra, Newcastle, Wollongong, and Geelong). The *inner* boundary shall delimit the principal urban centre itself. It shall be a *moving* boundary, which from census to census, as urbanisation proceeds, will move outwards to encompass peripheral development. For capital cities the principal urban centre encompassed by the inner boundary shall be designated the METROPOLITAN AREA.
- (3) Other urban centres shall be described by name as URBAN.

For urban centres *not* yet delimited by the new criteria, this procedure was used: urban centres were intensively examined on the most recent aerial photographs available and the boundaries set as closely as possible to the periphery of the built-up area without regard to local government boundaries. The greater availability of recent aerial photographs in 1966 than in 1961 enabled more meaningful boundaries to be delineated for many small urban centres.

Census field count statement No. 4, *Population, Principal Urban Centres of Australia* contains an appendix in which are expounded the full criteria now being applied.

*Rural* population comprises the inhabitants of the remaining portions of each State or Territory. The term *migratory* used in the following tables refers to persons not elsewhere enumerated who at midnight on 30 June 1966 were on ships in Australian waters or were travelling on long-distance trains, motor coaches or aircraft.

### URBAN AND RURAL POPULATIONS(a): STATES AND TERRITORIES CENSUS, 30 JUNE 1966

Division	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
PERSONS									
Urban—									
Metropolitan	2,446,345	2,110,168	718,822	727,916	499,969	119,469	..	92,308	6,714,997
Other	1,210,345	642,987	558,115	173,796	140,267	141,512	28,753	..	2,895,775
Rural	568,073	463,383	384,689	188,590	193,399	109,779	8,385	3,705	1,920,003
Migratory	9,059	2,988	2,059	1,573	3,038	675	295	..	19,687
Total	4,233,822	3,219,526	1,663,685	1,091,875	836,673	371,435	37,433	96,013	11,550,462
PERCENTAGES									
Urban—									
Metropolitan	57.78	65.54	43.21	66.67	59.76	32.16	..	96.14	58.14
Other	28.59	19.97	33.55	15.92	16.76	38.10	76.81	..	25.07
Rural	13.42	14.39	23.12	17.27	23.12	29.56	22.40	3.86	16.62
Migratory	0.21	0.09	0.12	0.14	0.36	0.18	0.79	..	0.17
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

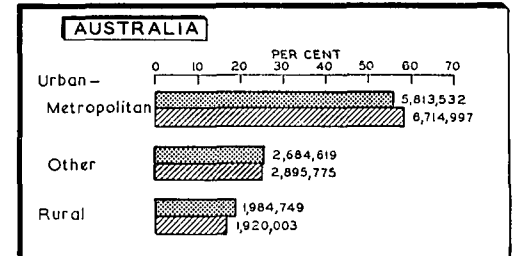
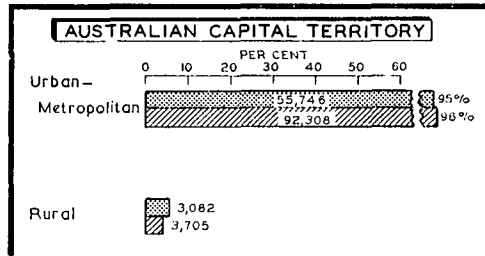
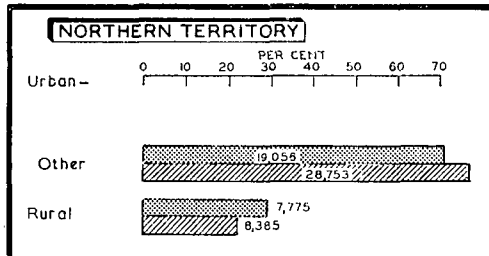
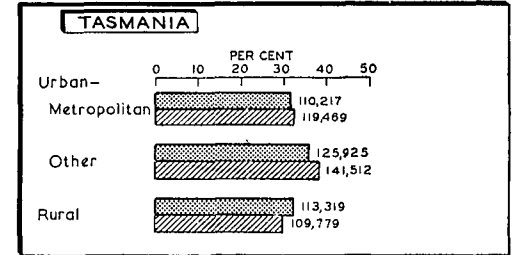
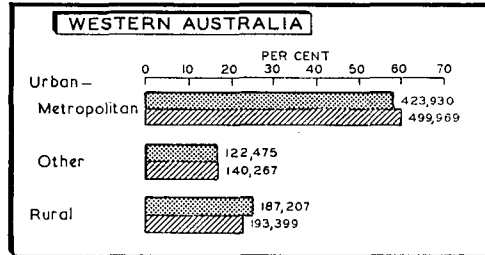
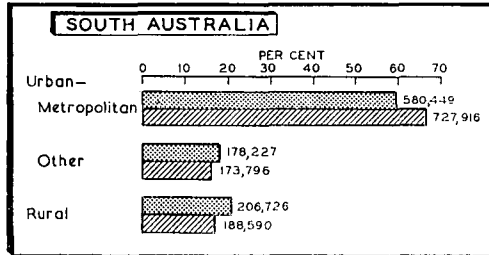
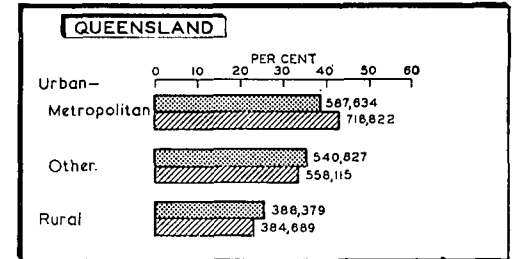
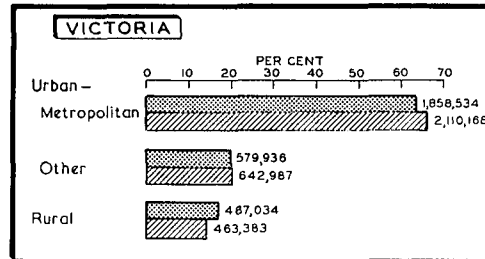
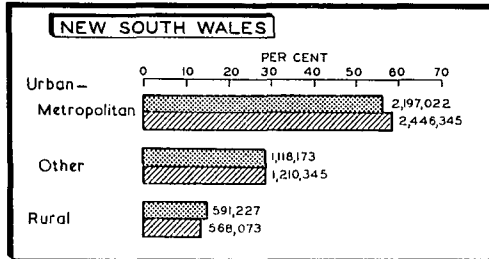
(a) Excludes full-blood Aborigines. *See* letterpress preceding this table for explanation of urban, rural, etc.

# URBAN AND RURAL POPULATION: AUSTRALIA

## CENSUSES 1961 AND 1966

### PERCENTAGE DISTRIBUTION

1961  
1966



**NOTE.** THE PROPORTIONS OF URBAN AND RURAL POPULATIONS WITHIN EACH STATE ETC. ARE INDICATED BY THE LENGTH OF THE BARS; THE ACTUAL POPULATIONS WHICH CONSTITUTE THOSE PROPORTIONS ARE SHOWN BY THE RESPECTIVE FIGURES.

The following table shows the population of statistical divisions, statistical districts and principal urban centres with a population of 6,000 persons or more (as defined on page 123) in each State and Territory of Australia at 30 June 1966.

<i>Urban centre, etc.</i>	<i>Population (a)</i>	<i>Urban centre, etc.</i>	<i>Population (a)</i>	<i>Urban centre, etc.</i>	<i>Population (a)</i>
<b>NEW SOUTH WALES</b>		<b>VICTORIA</b>		<b>SOUTH AUSTRALIA</b>	
Sydney Statistical Division—		Melbourne Statistical Division—		Adelaide Statistical Division—	
Metropolitan Area . . . . .	2,446,345	Metropolitan Area . . . . .	2,110,168	Metropolitan Area . . . . .	727,916
Remainder . . . . .	94,962	Remainder . . . . .	120,412	Remainder . . . . .	43,259
<i>Total</i> . . . . .	<i>2,541,307</i>	<i>Total</i> . . . . .	<i>2,230,580</i>	<i>Total</i> . . . . .	<i>771,175</i>
Newcastle Statistical District—		Geelong Statistical District—		Whyalla . . . . .	22,121
Urban Newcastle . . . . .	233,936	Urban Geelong . . . . .	105,059	Mount Gambier . . . . .	17,251
Remainder . . . . .	93,542	Remainder . . . . .	6,305	Port Pirie . . . . .	15,566
<i>Total</i> . . . . .	<i>327,478</i>	<i>Total</i> . . . . .	<i>111,364</i>	Reynella—Port Noarlunga (g) . . . . .	11,818
Wollongong Statistical District—		Ballarat . . . . .	56,290	Port Augusta . . . . .	10,103
Urban Wollongong . . . . .	162,153	Bendigo . . . . .	42,208	Port Lincoln . . . . .	8,888
Remainder . . . . .	15,279	Moe—Yallourn . . . . .	23,198	Gawler(g) . . . . .	6,645
<i>Total</i> . . . . .	<i>177,432</i>	Shepparton . . . . .	17,506		
Albury—Wodonga(b) . . . . .	32,032	Warrnambool . . . . .	17,499	<b>WESTERN AUSTRALIA</b>	
Broken Hill . . . . .	30,014	Morwell . . . . .	16,610	Perth Statistical Division—	
Wagga Wagga . . . . .	25,819	Wangaratta . . . . .	15,175	Metropolitan Area . . . . .	499,969
Maitland(c) . . . . .	23,112	Traralgon . . . . .	14,079	Remainder . . . . .	58,852
Orange . . . . .	22,196	Mildura . . . . .	12,931	<i>Total</i> . . . . .	<i>558,821</i>
Tamworth . . . . .	21,680	Horsham . . . . .	10,562	Kalgoorlie—Boulder . . . . .	19,908
Goulburn . . . . .	20,871	Hamilton . . . . .	10,054	Bunbury . . . . .	15,459
Lismore . . . . .	19,734	Dromana—Sorrento . . . . .	9,935	Geraldton . . . . .	12,125
Bathurst . . . . .	17,222	Colac . . . . .	9,498	Albany . . . . .	11,419
Woy Woy—Umina . . . . .	16,287	Sale . . . . .	8,640	Collie . . . . .	7,628
Grafton . . . . .	15,561	Ararat . . . . .	8,233	Northam . . . . .	7,400
Dubbo . . . . .	15,331	Werribee . . . . .	8,228		
Cessnock—Bellbird(c) . . . . .	15,331	Benalla . . . . .	8,224		
Armidale . . . . .	14,984	Echuca—Moama(f) . . . . .	8,010		
Glenbrook—Faulconbridge (d) . . . . .	13,731	Bairnsdale . . . . .	7,785	<b>TASMANIA</b>	
Lithgow . . . . .	13,165	Maryborough . . . . .	7,707	Hobart Statistical Division—	
Queanbeyan(e) . . . . .	12,515	Swan Hill . . . . .	7,381	Metropolitan Area . . . . .	119,469
Kurri Kurri—Weston(c) . . . . .	11,567	Mornington—Balcombe . . . . .	7,349	Remainder . . . . .	21,842
Gosford . . . . .	11,310	Castlemaine . . . . .	7,103	<i>Total</i> . . . . .	<i>141,311</i>
Taree . . . . .	10,560	Warragul . . . . .	6,846	Launceston . . . . .	60,456
Katoomba—Wentworth Falls . . . . .	10,524	Portland . . . . .	6,690	Burnie—Somerset . . . . .	18,042
Richmond—Windsor(d) . . . . .	9,933			Devonport . . . . .	14,874
Nowra—Bomaderry . . . . .	9,633	<b>QUEENSLAND</b>		Ulverstone . . . . .	6,842
Griffith . . . . .	9,537	Brisbane Statistical Division—			
The Entrance . . . . .	9,131	Metropolitan Area . . . . .	718,822		
Cooma . . . . .	9,103	Remainder . . . . .	58,852		
Casino . . . . .	8,502	<i>Total</i> . . . . .	<i>777,674</i>		
Parkes . . . . .	8,438	Townsville . . . . .	56,768	<b>NORTHERN TERRITORY</b>	
Inverell . . . . .	8,413	Gold Coast(f) . . . . .	53,183	Darwin . . . . .	20,413
Kempsey . . . . .	8,181	Toowoomba . . . . .	52,139	Alice Springs . . . . .	6,037
Moree . . . . .	8,031	Rockhampton . . . . .	45,376		
Coff's Harbour . . . . .	7,667	Cairns . . . . .	29,326		
Gunnedah . . . . .	7,507	Bundaberg . . . . .	25,402		
Forbes . . . . .	7,369	Mackay . . . . .	24,578		
Murwillumbah . . . . .	7,311	Maryborough . . . . .	20,393		
Cowra . . . . .	7,076	Mount Isa . . . . .	16,877		
Port Macquarie . . . . .	7,063	Gladstone . . . . .	12,426		
Toukley—Gorokan—Budgewoi . . . . .	6,658	Gympie . . . . .	11,279	<b>AUSTRALIAN CAPITAL TERRITORY</b>	
Muswellbrook . . . . .	6,312	Warwick . . . . .	10,065	Canberra Statistical District—	
Deniliquin . . . . .	6,239	Dalby . . . . .	8,860	Metropolitan Area . . . . .	92,308
Cootamundra . . . . .	6,219	Ayr . . . . .	8,674	Remainder . . . . .	14,827
Singleton . . . .					

(a) Excludes full-blood Aborigines. (b) Includes part of urban centre in Victoria. (c) Included in Newcastle Statistical District—Remainder. (d) Included in Sydney Statistical Division—Remainder. (e) Included in Canberra Statistical District—Remainder. (f) Includes part of urban centre in New South Wales. (g) Included in Adelaide Statistical Division—Remainder.



**Principal incorporated cities and towns**

The following table shows the population of the principal incorporated cities and towns with a population of 6,000 or more in each State and Territory of Australia at 30 June 1966. The figures relate to areas delimited for local government or other administrative purposes, and differ in some cases from figures shown in the table on page 125 which are based on the new census concept of 'urban' (see page 123).

**POPULATION(a) OF PRINCIPAL INCORPORATED CITIES AND TOWNS: STATES AND TERRITORIES, CENSUS, 30 JUNE 1966**

<i>City or town</i>	<i>Population</i>	<i>City or town</i>	<i>Population</i>	<i>City or town</i>	<i>Population</i>
<b>NEW SOUTH WALES</b>		<b>VICTORIA</b>		<b>QUEENSLAND—continued</b>	
Sydney . . . . .	(b)	Melbourne . . . . .	(b)	Dalby . . . . .	8,860
Greater Wollongong . . . . .	149,506	Ballaarat . . . . .	41,639	Charters Towers . . . . .	7,602
Newcastle . . . . .	143,025	Bendigo . . . . .	30,806	<b>SOUTH AUSTRALIA</b>	
Greater Cessnock . . . . .	34,515	Geelong . . . . .	18,129	Adelaide . . . . .	(b)
Blue Mountains . . . . .	30,731	Geelong West . . . . .	17,538	Whyalla . . . . .	22,121
Broken Hill . . . . .	30,036	Warrnambool . . . . .	17,499	Mount Gambier . . . . .	17,251
Maitland . . . . .	28,428	Shepparton . . . . .	17,487	Port Pirie . . . . .	13,964
Wagga Wagga . . . . .	25,819	Moe . . . . .	16,531	Port Augusta . . . . .	10,103
Albury . . . . .	25,112	Wangaratta . . . . .	15,175	Port Lincoln . . . . .	8,888
Shellharbour . . . . .	22,061	Traralgon . . . . .	14,079	Renmark . . . . .	6,275
Tamworth . . . . .	21,680	Mildura . . . . .	12,931	<b>WESTERN AUSTRALIA</b>	
Orange . . . . .	20,995	Newtown and Chilwell . . . . .	11,700	Perth . . . . .	(b)
Goulburn . . . . .	20,871	Horsham . . . . .	10,562	Bunbury . . . . .	15,459
Lismore . . . . .	19,734	Hamilton . . . . .	10,054	Geraldton . . . . .	12,125
Bathurst . . . . .	17,222	Colac . . . . .	9,498	Albany . . . . .	11,419
Grafton . . . . .	15,951	Sale . . . . .	8,640	Kalgoorlie . . . . .	9,174
Dubbo . . . . .	15,561	Ararat . . . . .	8,233	Northam . . . . .	7,400
Armidale . . . . .	14,984	Benalla . . . . .	8,224	<b>TASMANIA</b>	
Windsor . . . . .	13,299	Maryborough . . . . .	7,707	Hobart . . . . .	(b)
Lithgow . . . . .	12,811	Swan Hill . . . . .	7,381	Launceston . . . . .	37,217
Queanbeyan . . . . .	12,515	Castlemaine . . . . .	7,103	<b>NORTHERN TERRITORY</b>	
Taree . . . . .	10,560	Echuca . . . . .	7,043	Darwin City . . . . .	18,042
Cooma . . . . .	9,103	Portland . . . . .	6,690	<b>AUSTRALIAN CAPITAL TERRITORY</b>	
Camden . . . . .	8,661	<b>QUEENSLAND</b>		Canberra City . . . . .	93,311
Casino . . . . .	8,502	Brisbane . . . . .	(b)		
Parkes . . . . .	8,438	Townsville . . . . .	58,847		
Inverell . . . . .	8,413	Toowoomba . . . . .	55,799		
Kempsey . . . . .	8,181	Gold Coast . . . . .	49,481		
Moree . . . . .	8,031	Rockhampton . . . . .	46,083		
Gunnedah . . . . .	7,507	Cairns . . . . .	26,696		
Forbes . . . . .	7,369	Bundaberg . . . . .	25,402		
Cowra . . . . .	7,076	Maryborough . . . . .	19,659		
Port Macquarie . . . . .	7,063	Mackay . . . . .	18,640		
Muswellbrook . . . . .	6,312	Gladstone . . . . .	12,426		
Deniliquin . . . . .	6,239	Gympie . . . . .	11,279		
Cootamundra . . . . .	6,219	Warwick . . . . .	10,065		
Singleton . . . . .	6,188				

(a) Excludes full-blood Aborigines. (b) See table on page 125. The capital city (metropolitan area) population in each State comprises the populations of a number of separately incorporated local government areas and/or parts of local government areas.

**Classification of urban centres by size**

The following table classifies the urban centres in each State and Territory of Australia into grades of size of population at the census of 30 June 1966.

A table showing the aggregate urban population at the 1961 census of all cities and towns outside the metropolitan area of each State with 2,000 or more and 3,000 or more urban inhabitants was included in Year Book No. 51, page 267. A table showing similar data for the 1954 census was included in Year Book No. 47, page 295 and one for the 1947 census in Year Book No. 40, page 334. Comparisons between these various tables can be made only if allowance is made for changes in the status and structure of local government areas and for changes in the manner of determining urban population at each census.

## URBAN CENTRES: NUMBER AND POPULATION(a), BY SIZE, STATES AND TERRITORIES, CENSUS, 30 JUNE 1966

Population size	New South Wales			Victoria			Queensland		
	No. of urban centres	Population	Percentage of State population	No. of urban centres	Population	Percentage of State population	No. of urban centres	Population	Percentage of State population
500,000 and over	1	2,446,345	57.78	1	2,110,168	65.54	1	718,822	43.21
100,000-499,999	2	396,089	9.36	1	105,059	3.26	..	..	..
75,000-99,999	..	..	..	..	..	..	..	..	..
50,000-74,999	1	(b)3,829	0.09	1	56,290	1.75	3	(b)158,261	9.51
25,000-49,999	3	(c)79,212	1.87	2	(c)50,861	1.58	3	100,104	6.02
20,000-24,999	4	87,859	2.08	1	23,198	0.72	2	44,971	2.70
15,000-19,999	6	100,086	2.36	4	66,790	2.07	1	16,877	1.01
10,000-14,999	8	98,356	2.32	4	47,626	1.48	3	33,770	2.03
5,000-9,999	29	(d)205,146	4.85	16	(d)122,076	3.79	9	60,361	3.63
2,500-4,999	31	(e)104,922	2.47	26	(e)83,243	2.59	22	76,246	4.58
2,000-2,499	21	47,518	1.12	9	19,909	0.62	11	23,817	1.43
1,000-1,999	56	(f)80,280	1.90	46	(f)62,634	1.95	28	41,682	2.51
Less than 1,000(g)	10	7,048	0.17	7	5,301	0.16	3	2,026	0.12
500,000 and over	1	2,446,345	57.78	1	2,110,168	65.54	1	718,822	43.21
100,000 " " "	3	2,842,434	67.14	2	2,215,227	68.81	1	718,822	43.21
75,000 " " "	3	2,842,434	67.14	2	2,215,227	68.81	1	718,822	43.21
50,000 " " "	4	(b)2,846,263	67.23	3	2,271,517	70.55	4	(b)877,083	52.72
25,000 " " "	7	(c)2,925,475	69.10	5	(c)2,322,378	72.13	7	977,187	58.74
20,000 " " "	11	3,013,334	71.18	6	2,345,576	72.85	9	1,022,158	61.44
15,000 " " "	17	3,113,420	73.54	10	2,412,366	74.93	10	1,039,035	62.45
10,000 " " "	25	3,211,776	75.86	14	2,459,992	76.41	13	1,072,805	64.48
5,000 " " "	54	(d)3,416,922	80.71	30	(d)2,582,068	80.20	22	1,133,166	68.11
2,500 " " "	85	(e)3,521,844	83.18	56	(e)2,665,311	82.79	44	1,209,412	72.69
2,000 " " "	106	3,569,362	84.30	65	2,685,220	83.40	55	1,233,229	74.12
1,000 " " "	162	(f)3,649,642	86.20	111	(f)2,747,854	85.35	83	1,274,911	76.63
Total urban population	172	3,656,690	86.37	118	2,753,155	85.51	86	1,276,937	76.75
Population size	South Australia			Western Australia			Tasmania		
	No. of urban centres	Population	Percentage of State population	No. of urban centres	Population	Percentage of State population	No. of urban centres	Population	Percentage of State population
500,000 and over	1	727,916	66.67	..	..	..	..	..	..
100,000-499,999	..	..	..	1	499,969	59.76	1	119,469	32.16
75,000-99,999	..	..	..	..	..	..	..	..	..
50,000-74,999	..	..	..	..	..	..	1	60,456	16.28
25,000-49,999	..	..	..	..	..	..	..	..	..
20,000-24,999	1	22,121	2.03	..	..	..	..	..	..
15,000-19,999	2	32,817	3.01	2	35,367	4.23	1	18,042	4.86
10,000-14,999	2	21,921	2.01	2	23,544	2.81	1	14,874	4.00
5,000-9,999	3	21,490	1.97	2	15,028	1.80	2	12,612	3.40
2,500-4,999	8	30,464	2.79	12	42,223	5.05	5	17,697	4.76
2,000-2,499	5	10,819	0.99	1	2,066	0.25	2	4,390	1.18
1,000-1,999	23	32,089	2.94	15	21,058	2.52	8	11,652	3.14
Less than 1,000(g)	4	2,075	0.19	1	981	0.12	2	1,789	0.48
500,000 and over	1	727,916	66.67	..	..	..	..	..	..
100,000 " " "	1	727,916	66.67	1	499,969	59.76	1	119,469	32.16
75,000 " " "	1	727,916	66.67	1	499,969	59.76	1	119,469	32.16
50,000 " " "	1	727,916	66.67	1	499,969	59.76	2	179,925	48.44
25,000 " " "	1	727,916	66.67	1	499,969	59.76	2	179,925	48.44
20,000 " " "	2	750,037	68.69	1	499,969	59.76	2	179,925	48.44
15,000 " " "	4	782,854	71.70	3	535,336	63.98	3	197,967	53.30
10,000 " " "	6	804,775	73.71	5	558,880	66.80	4	212,841	57.30
5,000 " " "	9	826,265	75.67	7	573,908	68.59	6	225,453	60.70
2,500 " " "	17	856,729	78.46	19	616,131	73.64	11	243,150	65.46
2,000 " " "	22	867,548	79.45	20	618,197	73.89	13	247,540	66.64
1,000 " " "	45	899,637	82.39	35	639,255	76.40	21	259,192	69.78
Total urban population	49	901,712	82.58	36	640,236	76.52	23	260,981	70.26

For footnotes see next page.

**URBAN CENTRES: NUMBER AND POPULATION(a), BY SIZE, STATES AND TERRITORIES, CENSUS, 30 JUNE 1966—continued**

Population size	Northern Territory			Australian Capital Territory			Australia		
	No. of urban centres	Population	Percentage of Territory population	No. of urban centres	Population	Percentage of Territory population	No. of urban centres	Population	Percentage of Australian population
500,000 and over .	..	..	..	..	..	..	4	6,003,251	51.97
100,000-499,999 .	..	..	..	..	..	..	5	1,120,586	9.70
75,000-99,999 .	..	..	..	1	92,308	96.14	1	92,308	0.80
50,000-74,999 .	..	..	..	..	..	..	5	278,836	2.41
25,000-49,999 .	..	..	..	..	..	..	7	230,177	1.99
20,000-24,999 .	1	20,413	54.53	..	..	..	9	198,562	1.72
15,000-19,999 .	..	..	..	..	..	..	16	269,979	2.34
10,000-14,999 .	..	..	..	..	..	..	20	240,091	2.08
5,000-9,999 .	1	6,037	16.13	..	..	..	61	442,750	3.83
2,500-4,999 .	..	..	..	..	..	..	103	354,795	3.07
2,000-2,499 .	..	..	..	..	..	..	49	108,519	0.94
1,000-1,999 .	2	2,303	6.15	..	..	..	177	251,698	2.18
Less than 1,000(g)	..	..	..	..	..	..	27	19,220	0.17
500,000 and over .	..	..	..	..	..	..	4	6,003,251	51.97
100,000 " " .	..	..	..	..	..	..	9	7,123,837	61.68
75,000 " " .	..	..	..	1	92,308	96.14	10	7,216,145	62.47
50,000 " " .	..	..	..	1	92,308	96.14	15	7,494,981	64.89
25,000 " " .	..	..	..	1	92,308	96.14	22	7,725,158	66.88
20,000 " " .	1	20,413	54.53	1	92,308	96.14	31	7,923,720	68.60
15,000 " " .	1	20,413	54.53	1	92,308	96.14	47	8,193,699	70.94
10,000 " " .	1	20,413	54.53	1	92,308	96.14	67	8,433,790	73.02
5,000 " " .	2	26,450	70.66	1	92,308	96.14	128	8,876,540	76.85
2,500 " " .	2	26,450	70.66	1	92,308	96.14	231	9,231,335	79.92
2,000 " " .	2	26,450	70.66	1	92,308	96.14	280	9,339,854	80.86
1,000 " " .	4	28,753	76.81	1	92,308	96.14	457	9,591,552	83.04
<b>Total urban population</b>	<b>4</b>	<b>28,753</b>	<b>76.81</b>	<b>1</b>	<b>92,308</b>	<b>96.14</b>	<b>484</b>	<b>9,610,772</b>	<b>83.21</b>

(a) Excludes full-blood Aborigines. (b) Includes that part of urban Gold Coast in this State. Total population of Gold Coast, 53,183. (c) Includes that part of urban Albury-Wodonga in this State. Total population of Albury-Wodonga 32,032. (d) Includes that part of urban Echuca-Moama in this State. Total population of Echuca-Moama, 8,010. (e) Includes that part of urban Yarrawonga-Mulwala in this State. Total population of Yarrawonga-Mulwala, 3,990. (f) Includes that part of urban Barham-Koondrook in this State. Total population of Barham-Koondrook, 1,743. (g) Urban centres so classified on grounds other than population and density.

In the foregoing table those parts of urban centres which are located in adjoining States are classified each according to its respective State, the particulars for each part being included opposite the size grade applicable to the whole area. The urban centres concerned are: Gold Coast (Queensland-New South Wales); and Albury-Wodonga, Echuca-Moama, Yarrawonga-Mulwala, and Barham-Koondrook (New South Wales-Victoria).

#### Principal cities of the world

The following table shows the population of the world's largest cities at the latest available date. Since the way in which cities are delimited differs from country to country, the table shows data for the urban agglomeration, where available, as well as data for the so-called city proper. The urban agglomeration is defined in the United Nations *Demographic Yearbook* 1966 (page 24), from which most of the figures in the table have been taken, as including the suburban fringe or thickly settled territory lying outside of, but adjacent to, the city boundaries. (See also the Technical Notes on Statistical Tables and footnotes to the table in the *Demographic Yearbook*.)

## POPULATION OF THE WORLD'S LARGEST CITIES

City	Country	Year	Population ('000)	
			City proper	Urban agglomeration
New York	U.S.A.	1965	(a)7,943	(b)11,348
Tokyo	Japan	1965	8,893	10,870
London	England	1966	..	7,914
Paris	France	1962	2,790	7,369
Buenos Aires	Argentina	1960	2,967	7,000
Shanghai	China	1957	6,900	..
Los Angeles	U.S.A.	1965	..	(b)6,776
Chicago	U.S.A.	1965	..	(b)6,637
Moscow	U.S.S.R.	1966	6,395	6,463
Bombay	India	1966	4,784	..
Calcutta	India	1966	3,049	4,703
Philadelphia	U.S.A.	1965	(a)2,047	(a)(b)4,667
Cairo	United Arab Republic	1966	(a)4,197	..
Sao Paulo	Brazil	1966	4,098	..
Peking	China	1957	4,010	..
Detroit	U.S.A.	1965	..	(b)3,972
Rio de Janeiro	Brazil	1966	3,909	..
Seoul	Korea	1966	(a)3,800	..
Leningrad	U.S.S.R.	1966	3,261	3,665
Mexico City	Mexico	1966	3,287	..
Tientsin	China	1957	3,220	..
Boston	U.S.A.	1965	..	3,199
Osaka	Japan	1965	..	3,156
San Francisco	U.S.A.	1965	723	(b)2,935
Djakarta	Indonesia	1961	2,907	..
Delhi	India	1966	2,440	2,793
Madrid	Spain	1965	..	2,599
Sydney	Australia	1967	..	(c)2,592
Rome	Italy	1965	..	2,485
Manchester	England	1966	625	(d)2,457
Washington	U.S.A.	1965	802	(a)(b)2,413
Shenyang(e)	China	1957	2,411	..
Birmingham	England	1966	1,101	(d)2,393
Pittsburgh	U.S.A.	1965	..	(b)2,367
Montreal	Canada	1965	..	2,321
Teheran	Iran	1963	2,317	..
Melbourne	Australia	1967	..	(c)2,277
Santiago	Chile	1965	..	2,248
St Louis	U.S.A.	1965	699	(b)2,239
West Berlin(f)	Germany	1966	2,191	..
Wuhan	China	1957	2,146	..
Chungking	China	1957	2,121	..
Toronto	Canada	1965	..	2,066
Cleveland	U.S.A.	1965	811	(b)1,971
Budapest	Hungary	1965	1,944	..
Nagoya	Japan	1965	..	1,935
Singapore	Singapore	1966	1,914	..
Karachi	Pakistan	1961	1,913	..
Madras	India	1966	1,896	..
Hamburg	Germany	1965	1,857	..
Baltimore	U.S.A.	1965	(a)945	(a)(b)1,857
Athens	Greece	1961	628	1,853
Canton	China	1957	1,840	..
Newark	U.S.A.	1965	..	(a)(b)1,827

(a) Provisional. (b) 'Standard metropolitan statistical area'; see U.N. *Demographic Year Book* for exact areas included. (c) Statistical Division. (d) 1965. (e) Formerly Mukden. (f) East Berlin, 1965, population of city proper, 1,073,647.

### Mean population

Mean populations are calculated for twelve-month periods to provide a satisfactory average basis for calculations requiring allowance for the continuous change in population figures during such periods. From 1901 onwards the mean population for any year has been calculated by the formula:

$$\text{Mean population} = \frac{a + 4b + 2c + 4d + e}{12}$$

where *a*, *b*, *c*, *d*, and *e*, respectively, are the populations at the end of the quarter immediately preceding the year and at the end of each of the four succeeding quarters; e.g. in the case of a calendar year, 31 December of the preceding year, and 31 March, 30 June, 30 September and 31 December of the year under consideration. This formula gives a close approximation to the mean of a theoretical population progressing smoothly through the five values *a*, *b*, *c*, *d*, and *e*.

The following tables show the mean populations for the calendar and financial years 1958 to 1967.

MEAN POPULATION(a): CALENDAR YEARS, STATES AND TERRITORIES  
1958 TO 1967

Year ended 31 Dec.—	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
1958 . .	3,696,049	2,717,371	1,436,156	896,987	699,915	335,382	21,746	41,110	9,844,716
1959 . .	3,762,339	2,783,951	1,464,469	921,106	711,737	341,423	23,623	46,618	10,055,266
1960 . .	3,834,085	2,857,032	1,491,114	944,861	722,900	346,913	25,107	52,562	10,274,574
1961 . .	3,913,967	2,926,075	1,516,334	970,118	737,596	353,628	26,272	58,852	10,502,842
1962(b) .	3,986,796	2,983,715	1,551,249	987,867	766,205	355,682	46,034	66,180	10,743,728
1963(b) .	4,050,230	3,041,442	1,578,309	1,010,500	788,457	360,590	48,330	73,300	10,951,158
1964(b) .	4,109,559	3,105,685	1,610,809	1,037,495	808,300	364,554	51,528	80,499	11,168,429
1965(b) .	4,176,686	3,165,594	1,644,028	1,066,884	826,481	367,970	54,142	88,417	11,390,202
1966(b) .	4,240,306	3,221,409	1,674,357	1,094,567	848,837	371,632	56,672	96,502	11,604,282
1967(b) .	4,309,068	3,277,224	1,702,689	1,111,675	876,997	376,588	59,447	103,725	11,817,413

MEAN POPULATION(a): FINANCIAL YEARS, STATES AND TERRITORIES  
1957-58 TO 1966-67

Year ended 30 June—	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
1958 . .	3,660,738	2,687,115	1,422,349	886,021	693,568	332,046	21,239	39,283	9,742,359
1959 . .	3,729,030	2,749,994	1,450,535	908,354	705,869	338,628	22,507	43,429	9,948,346
1960 . .	3,796,452	2,819,650	1,478,129	933,619	717,316	344,111	24,573	50,013	10,163,863
1961 . .	3,875,921	2,893,417	1,503,703	957,136	729,770	350,077	25,673	55,232	10,390,929
1962(b) .	3,952,259	2,956,769	1,539,634	979,241	755,770	353,175	45,282	62,674	10,644,804
1963(b) .	4,020,774	3,011,833	1,563,347	998,510	777,413	358,180	46,960	69,557	10,846,574
1964(b) .	4,078,917	3,073,384	1,594,993	1,023,448	798,824	362,758	50,010	76,966	11,059,300
1965(b) .	4,142,568	3,136,319	1,626,935	1,052,098	817,157	366,366	52,793	84,400	11,278,636
1966(b) .	4,209,710	3,194,035	1,660,076	1,081,864	837,290	369,600	55,418	92,624	11,500,617
1967(b) .	4,272,703	3,249,913	1,688,078	1,103,973	862,130	373,916	58,081	99,925	11,708,719

(a) Includes Aborigines from year ended 30 June 1962. Population estimates subsequent to the 1961 census are based on a method which omits holiday, business or other short-term movements between States and Territories. As a consequence, marked quarterly seasonal movements in some States due to interstate holiday movements are reflected in the mean population figures for the States prior to 1962 (and 1961-62) but not in those for 1962 (1961-62) and subsequent years.  
(b) Includes Aborigines.

### Elements of increase

The two factors which contribute to the growth of a population are 'natural increase', i.e. the excess of births over deaths, and 'net migration', i.e. the excess of arrivals over departures. The 'total increase' of the population is obtained by combining natural increase with the increase by net migration. However, comparison of the total increase so obtained with that derived by subtracting the population recorded at one census from that recorded at the next census reveals differences which can be attributed partly to differences in the coverage of the census enumerations, and partly to deficiencies in the records of the elements of increase.

## Elements of increase, 1941 to 1967

In the following table particulars are given of the elements of increase for each five-year period from 1941 to 1965 and for each of the years 1963 to 1967.

POPULATION(a): ELEMENTS OF INCREASE, BY SEX  
AUSTRALIA, 1941 TO 1967

<i>Period</i>	<i>Natural increase (b)(c)</i>	<i>Net overseas migration gain (d)</i>	<i>Increase in total population (a)(e)</i>
<b>MALES</b>			
1941-45 . . . . .	142,605	5,325	151,358
1946-50 . . . . .	255,335	217,728	469,579
1951-55 . . . . .	287,685	240,481	522,372
1956-60 . . . . .	328,616	214,210	539,256
1961-65 . . . . .	331,032	200,463 (a)	519,623
1963 . . . . .	67,924	36,219 (f)	101,573
1964 . . . . .	61,816	52,058 (f)	111,349
1965 . . . . .	58,696	54,511 (f)	110,667
1966 . . . . .	56,735	44,906 (f)	101,085
1967 . . . . . (f)	60,172	49,618 (f)	109,790
<b>FEMALES</b>			
1941-45 . . . . .	195,073	2,484	201,253
1946-50 . . . . .	274,112	135,356	407,705
1951-55 . . . . .	312,017	173,343	481,972
1956-60 . . . . .	351,241	190,812	540,839
1961-65 . . . . .	356,400	199,425 (a)	553,784
1963 . . . . .	72,871	35,426 (f)	107,850
1964 . . . . .	66,739	47,284 (f)	113,598
1965 . . . . .	64,443	50,345 (f)	114,312
1966 . . . . .	61,962	42,020 (f)	103,894
1967 . . . . . (f)	66,421	42,291 (f)	108,712
<b>PERSONS</b>			
1941-45 . . . . .	337,678	7,809	352,611
1946-50 . . . . .	529,447	353,084	877,284
1951-55 . . . . .	599,702	413,824	1,004,344
1956-60 . . . . .	679,857	405,022	1,080,095
1961-65 . . . . .	687,432	399,888 (a)	1,073,407
1963 . . . . .	140,795	71,645 (f)	209,423
1964 . . . . .	128,555	99,342 (f)	224,947
1965 . . . . .	123,139	104,856 (f)	224,979
1966 . . . . .	118,697	86,926 (f)	204,979
1967 . . . . . (f)	126,593	91,909 (f)	218,502

(a) Includes Aborigines from 30 June 1961. (b) Excess of births registered over deaths registered. From September 1939 to June 1947, deaths of defence personnel whether overseas or in Australia are included. (c) Includes Aborigines from 1 January 1967. (d) Excess of recorded overseas arrivals over recorded overseas departures. Excludes troop movements for the period September 1939 to June 1947. (e) Increase in total population as recorded at censuses or as estimated for intercensal periods. It includes, in addition to the recorded figures for natural increase and net overseas migration gain, adjustments for differences between the population as estimated and as recorded at census dates up to the census of 30 June 1966, and for the exclusion of Aboriginal births and deaths between 30 June 1961 and January 1967. (f) Includes Aborigines.

**Rate of population growth**

In the following two tables natural increase refers to the excess of births over deaths (including deaths of Australian defence personnel), net migration refers to excess of overseas arrivals over departures excluding overseas movement of defence personnel for the period September 1939 to June 1947, and total increase is the sum of natural increase and net migration together with differences disclosed by results of population censuses up to 30 June 1966.

Annual rates of natural increase, net migration and total increase, for single years, represent the increase during the year expressed as a proportion (per cent) of the population at the beginning of the year. These rates are slightly higher than those calculated as a proportion (per cent) of the mean population for the year.

Average annual rates of increase for periods greater than one year have been calculated in the following manner.

The average annual rate of total increase is computed by the formula:

$$P_t = P_0 (1 + r)^t$$

where  $P_0$  and  $P_t$  are the populations at the beginning and end respectively of a  $t$ -year period and  $r$  is the average annual rate of growth.

The average annual rate of natural increase and net migration is computed by dividing the average annual rate of total increase between its components in proportion to the fraction of total increase due to each component during the period. Differences between the sum of the rates of natural increase and of net migration and the rate of total increase are due to the intercensal adjustment.

**POPULATION(a): ANNUAL RATE OF GROWTH, AUSTRALIA  
1941 TO 1967  
(Per cent)**

<i>Period</i>	<i>Natural increase (b)</i>	<i>Net migration</i>	<i>Total increase (c)</i>
<b>Average annual rate—</b>			
1941-45 . . .	0.94	0.02	0.98
1946-50 . . .	1.36	0.91	2.26
1951-55 . . .	1.38	0.95	2.31
1956-60 . . .	1.40	0.83	2.22
1961-65 . . .	1.27	0.74	(c) 1.98
<b>Annual rate—</b>			
1963 . . .	1.30	0.66	(d) 1.93
1964 . . .	1.16	0.90	(d) 2.03
1965 . . .	1.09	0.93	(d) 1.99
1966 . . .	1.03	0.75	(d) 1.78
1967 . . .	(b) 1.08	0.79	(d) 1.87

(a) Population on which rates calculated includes Aborigines from 30 June 1961. (b) Includes Aborigines from 1 January 1967. (c) Includes Aborigines from 30 June 1961. (d) Includes Aborigines.

The average annual rate of population growth during the present century has been 1.72 per cent, but the results from year to year have deviated widely from this figure. In the following table the period 1 January 1901 to 31 December 1967 has been arranged into certain defined groups of years according to the occurrence of influences markedly affecting the growth of population.

POPULATION(a): PERIODIC RATES OF GROWTH, AUSTRALIA  
1901 TO 1967

Period	Interval (years)	Total increase (‘000)	Average annual numerical increase (‘000)	Average annual rate of population growth (per cent)		
				Natural increase	Net migration	Total
1901 to 1913 . . .	13	1,128	87	1.55	0.49	2.04
1914 to 1923 . . .	10	862	86	1.49	0.15	1.64
1924 to 1929 . . .	6	680	113	1.26	0.62	1.88
1930 to 1939 . . .	10	569	57	0.82	0.02	0.85
1940 to 1946 . . .	7	513	73	0.98	0.01	1.01
1947 to 1952 . . .	6	1,222	204	1.37	1.19	2.54
1953 to 1961 . . .	9	1,862	207	1.40	0.79	2.17
1962 to 1967 . . .	6 (b)	1,286 (b)	214 (c)	1.17	0.77 (b)	1.92

(a) Includes Aborigines from 1962. (b) Includes Aborigines. (c) Includes Aborigines from 1 January 1967.

Rates of population growth from 1886 are shown for each State and Territory of Australia in the annual bulletin, *Demography*. Estimated rates of growth of the population of Australia in comparison with those for other countries of the world for the years 1958–1966 are shown in the table on pages 173–4.

### Density

From certain aspects, population may be less significant in respect of its absolute amount than in its relation to the area of the country. Australia, with an area of 2,967,909 square miles and a population in December 1967 of 11,928,889, has a density of only 4.02 persons to the square mile, and is, therefore, one of the most sparsely populated countries of the world. For other continents and sub-continents, the densities in 1966 were approximately as follows: Europe (excluding U.S.S.R.), 236; Asia (excluding U.S.S.R.), 176; Latin America, 31; U.S.S.R., 26; Africa, 28; and Northern America, 26. The population density of Australia in 1966 was 3.91, about one-seventh of that of Northern America, of Africa and of the U.S.S.R.; about one-eighth of that of Latin America; about one-forty-fifth of that of Asia (excluding U.S.S.R.), and about one-sixtieth of that of Europe (excluding U.S.S.R.).

Because of the large area of Australia and the unsuitability for settlement of much of the country, the density of population must necessarily increase slowly. In Australia as a whole the figure has increased from 1.29 per square mile in 1901 to 4.02 in 1967. The rise in density from 1901 to 1967 in each State and Territory was: New South Wales 4.45 to 14.05, Victoria 13.77 to 37.59, Queensland 0.76 to 2.58, South Australia 0.95 to 2.94, Western Australia 0.20 to 0.91, Tasmania 6.68 to 14.39, Northern Territory 0.01 to 0.12, and Australian Capital Territory 2.05 (in 1911) to 115.20. When comparing the density of population of the several States, consideration should be given to the average annual rainfall distribution in each State as an indication of the climatic influence upon probable population numbers. The proportion of the area of Australia receiving an average of less than 10 inches of rainfall is 39 per cent; that of the various States is: New South Wales, 20 per cent; Victoria, nil; Queensland, 13 per cent; South Australia, 83 per cent; Western Australia, 58 per cent; and Tasmania, nil.

The number and density of population of the principal countries and continental groups of the world are shown in the tables on pages 172–4.



## Sex distribution

The number of males to each hundred females has been adopted as a measure of the 'masculinity' of the population. With the exception of some dislocation arising from the two World Wars, there was a continuous diminution of the masculinity of the population until 1945. This resulted from the increasing proportion of the population in the higher age groups, in which females preponderate owing to their greater longevity, and the general long-term fall in the birth rate. At the 1947 census the numbers of the sexes were practically equal, but during the following decade there was an increase in masculinity owing to the greater number of males as compared with females in net overseas migration, and the recovery of the birth rate in the post-war period from the low levels of the 1930s. In more recent years, however, the trend has declined again.

POPULATION(a): MASCULINITY, STATES AND TERRITORIES, DECEMBER 1900 TO 1967  
(Number of males per 100 females)

31 Dec.-	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
1900 . . .	111.14	101.23	125.33	101.95	157.54	107.97	753.60	(b)	110.55
1910 . . .	109.23	98.71	119.02	103.12	132.90	104.14	486.32	(b)	107.87
1920 . . .	104.31	97.38	112.00	99.83	114.55	101.67	270.04	116.70	103.47
1930 . . .	103.39	99.14	110.66	100.97	117.17	101.53	263.66	118.69	103.85
1940 . . .	100.98	97.85	108.48	98.91	110.38	102.74	240.31	124.62	101.81
1950 . . .	100.88	99.27	106.02	101.83	106.07	102.70	188.05	123.33	101.83
1960 . . .	101.38	101.35	104.16	102.24	103.99	102.88	147.82	111.51	102.22
1963(c) . .	100.82	100.68	103.26	101.37	103.87	102.15	125.82	109.11	101.60
1964(c) . .	100.75	100.64	103.13	101.19	103.97	101.98	124.61	108.43	101.53
1965(c) . .	100.68	100.52	102.99	101.03	103.99	101.83	123.36	108.70	101.43
1966(c) . .	100.64	100.46	102.83	100.91	103.94	101.71	121.93	107.56	101.36
1967(c) . .	100.65	100.50	102.75	100.93	103.82	101.73	120.91	106.80	101.35

(a) Includes Aborigines from 1963.

(b) Part of New South Wales prior to 1911.

(c) Includes Aborigines.

The masculinity of the population in the principal countries of the world is shown in the table on pages 173-4.

## Age distribution

The next table shows the changes which have taken place in the age distribution of the population of Australia since 1871.

POPULATION(a): PROPORTIONAL AGE DISTRIBUTION, BY SEX, AUSTRALIA  
1871 TO 1966  
(Per cent)

Census	Males				Females				Persons			
	Under 15 years	15 years and under 65	65 years and over	Total	Under 15 years	15 years and under 65	65 years and over	Total	Under 15 years	15 years and under 65	65 years and over	Total
1871 . . .	38.84	59.11	2.05	100	46.02	52.60	1.38	100	42.09	56.17	1.74	100
1881 . . .	36.36	60.81	2.83	100	41.86	56.03	2.11	100	38.89	58.61	2.50	100
1891 . . .	34.80	62.01	3.19	100	39.38	58.09	2.53	100	36.92	60.19	2.89	100
1901 . . .	33.89	61.80	4.31	100	36.51	59.88	3.61	100	35.14	60.88	3.98	100
1911 . . .	30.84	64.82	4.34	100	32.52	63.28	4.20	100	31.65	64.08	4.27	100
1921 . . .	31.64	63.88	4.48	100	31.79	63.83	4.38	100	31.71	63.86	4.43	100
1933 . . .	27.53	66.09	6.38	100	27.42	65.99	6.59	100	27.48	66.04	6.48	100
1947 . . .	25.49	67.08	7.43	100	24.62	66.71	8.67	100	25.06	66.89	8.05	100
1954 . . .	28.81	63.82	7.37	100	28.23	62.52	9.25	100	28.52	63.18	8.30	100
1961 . . .	30.61	62.16	7.23	100	29.85	60.33	9.82	100	30.23	61.26	8.51	100
1966 . . .	29.88	63.03	7.09	100	28.86	61.13	10.01	100	29.37	62.09	8.54	100

(a) Excludes full-blood Aborigines.

### General characteristics of the population

Particulars of the characteristics of the population of Australia at the 1966 census compared with the 1961 census and for the individual States and Territories at the 1966 census are shown in this section. Information concerning the industry, occupational status, and occupations of the population as recorded at the 1966 census is given in the chapter Employment and Unemployment, and on dwellings in the chapter Housing and Building.

The characteristics dealt with in the following pages are: age; marital status; country of birth; period of residence in Australia of overseas born; nationality; religion. Further details are available in a series of mimeographed bulletins which are listed in the chapter Miscellaneous. All tables exclude particulars of full-blood Aborigines.

#### POPULATION: AGE (GROUPED AGES)(a), BY SEX, AUSTRALIA CENSUSES, 1961 AND 1966

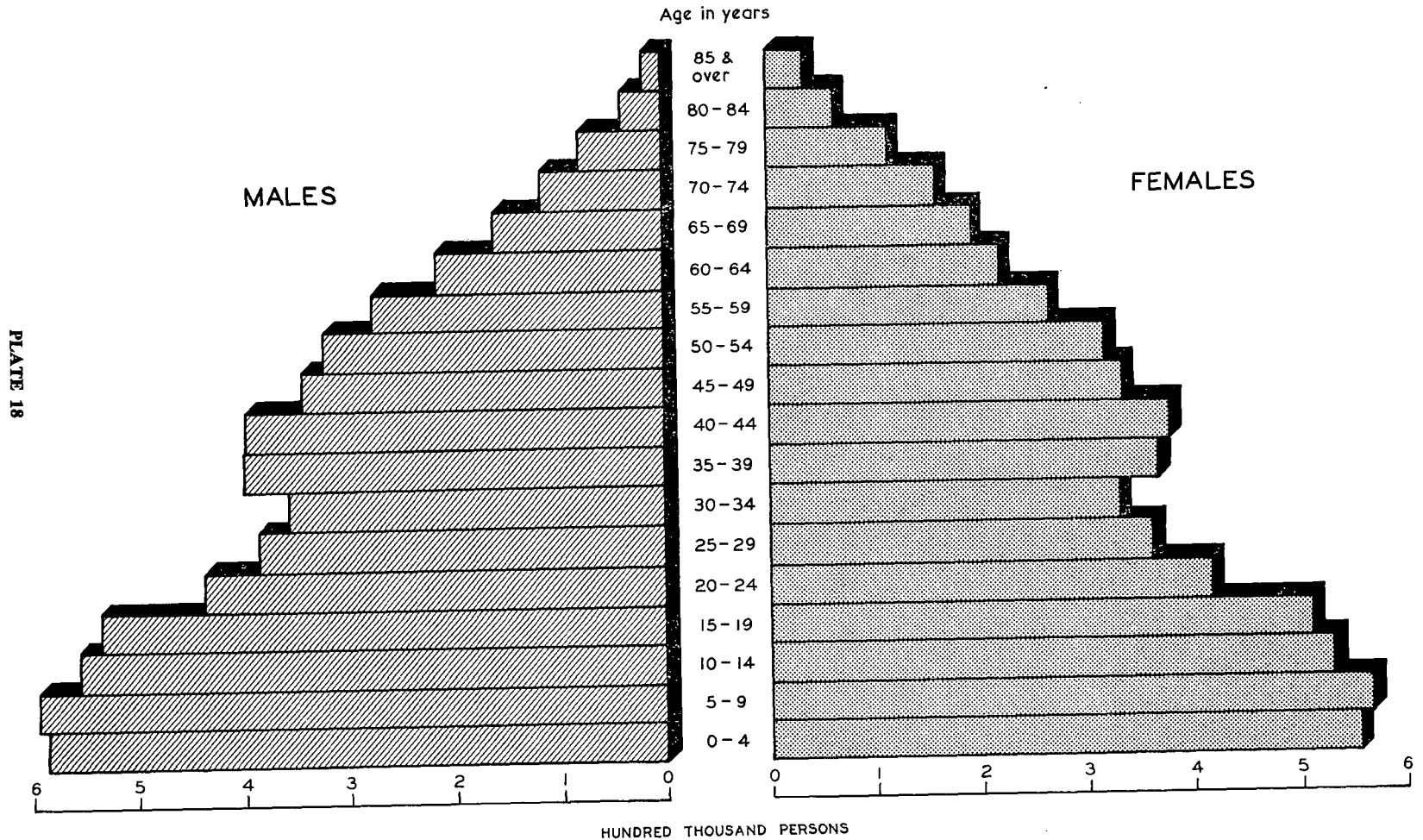
Age last birthday (years)	Census, 30 June 1961			Census, 30 June 1966			Increase 1961-1966
	Males	Females	Persons	Males	Females	Persons	
0-4 . . . . .	567,742	541,751	1,109,493	585,949	557,195	1,143,144	33,651
5-9 . . . . .	536,046	511,475	1,047,521	595,538	567,358	1,162,896	115,375
10-14 . . . . .	522,407	497,577	1,019,984	556,251	530,197	1,086,448	66,464
15-19 . . . . .	414,788	394,145	808,933	536,848	511,378	1,048,226	239,293
20-24 . . . . .	361,531	335,907	697,438	436,709	417,232	853,941	156,503
25-29 . . . . .	342,443	313,628	656,071	384,336	361,729	746,065	89,994
30-34 . . . . .	386,175	351,793	737,968	355,654	331,700	687,354	-50,614
35-39 . . . . .	395,247	372,669	767,916	397,463	367,099	764,562	-3,354
40-44 . . . . .	343,973	334,554	678,527	396,536	377,215	773,751	95,224
45-49 . . . . .	335,890	321,941	657,831	343,033	334,639	677,672	19,841
50-54 . . . . .	293,004	275,023	568,027	323,810	317,824	641,634	73,607
55-59 . . . . .	238,051	225,330	463,381	276,100	266,916	543,016	79,635
60-64 . . . . .	190,805	210,048	400,853	215,590	219,759	435,349	34,496
65-69 . . . . .	149,130	184,654	333,784	161,376	195,020	356,396	22,612
70-74 . . . . .	116,939	148,048	264,987	115,084	160,887	275,971	10,984
75-79 . . . . .	69,223	95,724	164,947	79,634	116,753	196,387	31,440
80-84 . . . . .	33,069	52,627	85,696	38,568	64,296	102,864	17,168
85 and over . . . . .	15,789	29,040	44,829	17,880	36,906	54,786	9,957
Total . . . . .	5,312,252	5,195,934	10,508,186	5,816,359	5,734,103	11,550,462	1,042,276

(a) Recorded ages adjusted by the distribution of ages 'not stated'. Minus sign (-) denotes decrease.

A graph showing the number of males and females in each age group at the 1966 census appears on plate 18, over the page.

# POPULATION, BY AGE GROUP: AUSTRALIA

## CENSUS 1966



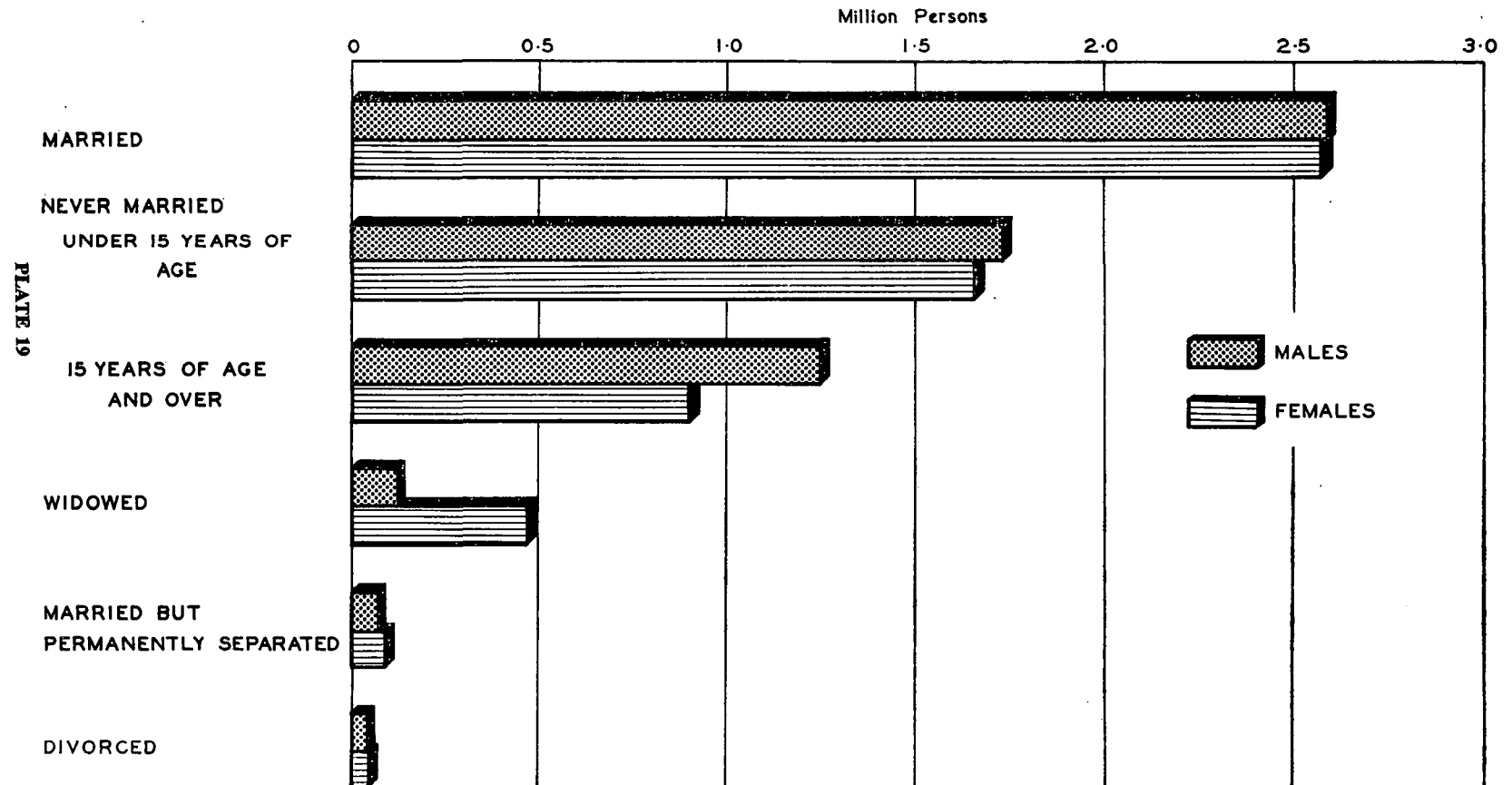
POPULATION: AGE (GROUPED AGES)(a), BY SEX, STATES AND TERRITORIES  
CENSUS, 30 JUNE 1966

Age last birthday (years)	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
MALES									
0-4	206,643	164,283	87,400	55,233	43,524	20,496	2,462	5,908	585,949
5-9	209,902	164,216	88,546	57,933	45,791	21,338	2,045	5,767	595,538
10-14	195,459	153,220	82,926	55,045	44,022	19,562	1,407	4,610	556,251
15-19	193,411	147,914	77,905	52,779	40,714	17,674	1,386	5,065	536,848
20-24	162,734	120,447	62,831	39,564	31,032	12,958	2,564	4,579	436,709
25-29	142,848	107,745	53,016	33,684	28,135	11,980	2,627	4,301	384,336
30-34	132,878	100,508	48,339	31,879	25,488	10,936	1,925	3,701	355,654
35-39	148,178	112,493	53,150	37,644	28,204	11,986	1,943	3,865	397,463
40-44	147,939	111,196	54,096	38,248	27,700	12,001	1,541	3,815	396,536
45-49	129,423	94,051	48,902	33,167	22,907	10,661	1,054	2,868	343,033
50-54	121,365	88,808	46,696	30,973	22,747	10,321	874	2,026	323,810
55-59	102,843	76,214	40,792	24,961	20,634	8,543	638	1,435	276,100
60-64	78,580	60,411	32,034	19,221	17,462	6,571	463	848	215,590
65-69	58,797	44,600	26,341	14,023	12,023	4,759	309	524	161,376
70-74	42,383	32,010	18,727	10,633	7,513	3,329	145	344	115,084
75-79	29,984	21,117	13,097	7,761	5,020	2,404	65	186	79,634
80-84	14,619	9,923	6,221	3,988	2,481	1,235	26	75	38,368
85 and over	6,476	4,748	2,878	1,794	1,294	636	14	40	17,880
Under 21	839,931	655,694	349,978	229,385	180,202	81,746	7,663	22,327	2,366,926
21-64	1,132,272	845,812	426,655	280,946	218,158	93,281	13,286	26,481	3,036,891
65 and over	152,259	112,398	67,264	38,199	28,331	12,363	559	1,169	412,542
Total males	2,124,462	1,613,904	843,897	548,530	426,691	187,390	21,508	49,977	5,816,359
FEMALES									
0-4	196,456	156,298	83,251	52,255	41,286	19,610	2,374	5,665	557,195
5-9	200,318	156,371	83,892	55,704	43,428	20,349	1,912	5,384	567,358
10-14	187,027	145,505	78,602	52,295	42,129	18,809	1,356	4,474	530,197
15-19	182,904	141,802	74,820	50,428	38,580	17,211	1,155	4,478	511,378
20-24	155,196	117,449	58,843	38,424	28,476	12,703	1,938	4,203	417,232
25-29	135,261	101,986	49,324	32,388	25,912	11,304	1,683	3,871	361,729
30-34	123,340	93,874	45,546	30,219	23,930	10,224	1,254	3,313	331,700
35-39	137,283	103,804	49,769	34,800	25,986	10,983	1,074	3,400	367,099
40-44	141,860	106,657	50,690	36,640	25,535	11,524	900	3,409	377,215
45-49	127,512	92,074	47,725	31,769	22,142	10,323	712	2,382	334,639
50-54	120,698	88,037	45,205	29,669	22,103	9,777	535	1,800	317,824
55-59	101,483	74,603	37,883	24,517	18,848	8,003	395	1,184	266,916
60-64	82,352	62,578	31,768	19,696	15,732	6,513	278	842	219,759
65-69	73,603	55,726	29,124	17,461	12,652	5,616	190	648	195,020
70-74	60,620	46,650	23,082	15,565	9,709	4,704	95	462	160,887
75-79	45,040	33,357	16,428	11,253	6,895	3,440	46	294	116,753
80-84	24,731	18,155	8,756	6,622	3,986	1,875	20	151	64,296
85 and over	13,676	10,696	5,080	3,640	2,653	1,077	8	76	36,906
Under 21	799,395	625,144	333,190	219,045	171,055	78,667	7,110	20,853	2,254,459
21-64	1,092,295	815,894	404,128	269,759	203,032	88,666	8,456	23,552	2,905,782
65 and over	217,670	164,584	82,470	54,541	35,895	16,712	359	1,631	573,862
Total females	2,109,360	1,605,622	819,788	543,345	409,982	184,045	15,925	46,036	5,734,103
PERSONS									
0-4	403,099	320,581	170,651	107,488	84,810	40,106	4,836	11,573	1,143,144
5-9	410,220	320,587	172,438	113,637	89,219	41,687	3,957	11,151	1,162,896
10-14	382,486	298,725	161,528	107,340	86,151	38,371	2,763	9,084	1,086,448
15-19	376,315	289,716	152,725	103,207	79,294	34,885	2,541	9,543	1,048,226
20-24	317,930	237,896	121,674	77,988	59,508	25,661	4,502	8,782	853,941
25-29	278,109	209,731	102,340	66,072	54,047	23,284	4,310	8,172	746,065
30-34	256,218	194,382	93,885	62,098	49,418	21,160	3,179	7,014	687,354
35-39	285,461	216,297	102,919	72,444	54,190	22,969	3,017	7,265	764,562
40-44	289,799	217,853	104,786	74,888	53,235	23,525	2,441	7,224	773,751
45-49	256,935	186,125	96,627	64,936	45,049	20,984	1,766	5,250	677,672
50-54	242,063	176,845	91,901	60,642	44,850	20,098	1,409	3,826	641,634
55-59	204,326	150,817	78,675	49,478	39,482	16,546	1,053	2,639	543,016
60-64	160,932	122,989	63,802	38,917	33,194	13,084	741	1,690	435,349
65-69	132,400	100,326	55,465	31,484	24,675	10,375	499	1,172	356,396
70-74	103,003	78,660	41,809	26,198	17,222	8,033	240	806	275,971
75-79	75,024	54,474	29,525	19,014	11,915	5,844	111	480	196,387
80-84	39,350	28,078	14,977	10,610	6,467	3,110	46	226	102,864
85 and over	20,152	15,444	7,958	5,434	3,947	1,713	22	116	54,786
Under 21	1,639,326	1,280,838	683,168	448,430	351,257	160,413	14,773	43,180	4,621,385
21-64	2,224,567	1,661,706	830,783	550,705	421,190	181,947	21,742	50,033	5,942,673
65 and over	369,929	276,982	149,734	92,740	64,226	29,075	918	2,800	986,404
Grand total	4,233,822	3,219,526	1,663,685	1,091,875	836,673	371,435	37,433	96,013	11,550,462

(a) Recorded ages adjusted by the distribution of ages 'not stated'.

# POPULATION, BY MARITAL STATUS: AUSTRALIA

CENSUS 1966



## POPULATION: MARITAL STATUS, BY SEX, AUSTRALIA, CENSUSES, 1961 AND 1966

Marital status	Census, 30 June 1961			Census, 30 June 1966			Increase 1961-1966
	Males	Females	Persons	Males	Females	Persons	
Never married—							
Under 15 years of age . . . .	1,626,195	1,550,803	3,176,998	1,737,738	1,654,750	3,392,488	215,490
15 years of age and over . . . .	1,098,450	770,048	1,868,498	1,246,214	899,354	2,145,568	277,070
Total never married . . . . .	2,724,645	2,320,851	5,045,496	2,983,952	2,554,104	5,538,056	492,560
Married . . . . .	2,364,710	2,344,754	4,709,464	2,592,236	2,578,488	5,170,724	461,260
Married but permanently separated . . . .	68,172	78,367	146,539	75,149	87,218	162,367	15,828
Divorced . . . . .	38,640	43,339	81,979	42,885	51,143	94,028	12,049
Widowed . . . . .	116,085	408,623	524,708	122,137	463,150	585,287	60,579
Grand total . . . . .	5,312,252	5,195,934	10,508,186	5,816,359	5,734,103	11,550,462	1,042,276

## POPULATION: MARITAL STATUS, STATES AND TERRITORIES, CENSUS, 30 JUNE 1966

Marital status	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Australia
MALES									
Never married—									
Under 15 years of age . . . .	612,004	481,719	258,872	168,211	133,337	61,396	5,914	16,285	1,737,738
15 years of age and over . . . .	457,700	344,297	187,210	110,592	91,188	37,078	6,525	11,624	1,246,214
Total never married . . . . .	1,069,704	826,016	446,082	278,803	224,525	98,474	12,439	27,909	2,983,952
Married . . . . .	960,219	725,320	361,792	249,048	185,239	81,811	7,986	20,821	2,592,236
Married but permanently separated(a) . . . .	30,071	19,938	11,102	5,478	5,534	2,090	498	438	75,149
Divorced . . . . .	17,459	9,755	5,813	4,237	3,741	1,233	310	337	42,885
Widowed . . . . .	47,009	32,875	19,108	10,964	7,652	3,782	275	472	122,137
Total males . . . . .	2,124,462	1,613,904	843,897	548,530	426,691	187,390	21,508	49,977	5,816,359
FEMALES									
Never married—									
Under 15 years of age . . . .	583,801	458,174	245,745	160,254	126,843	58,768	5,642	15,523	1,654,750
15 years of age and over . . . .	330,621	260,301	129,239	81,731	60,192	27,287	2,563	7,420	899,354
Total never married . . . . .	914,422	718,475	374,984	241,985	187,035	86,055	8,205	22,943	2,554,104
Married . . . . .	954,624	722,266	361,189	248,731	183,053	81,320	6,806	20,499	2,578,488
Married but permanently separated(a) . . . .	35,619	24,134	12,376	6,201	5,986	2,200	293	409	87,218
Divorced . . . . .	22,194	12,436	6,028	4,851	3,774	1,293	163	404	51,143
Widowed . . . . .	182,501	128,311	65,211	41,577	30,134	13,177	458	1,781	463,150
Total females . . . . .	2,109,360	1,605,622	819,788	543,345	409,982	184,045	15,925	46,036	5,734,103
PERSONS									
Never married—									
Under 15 years of age . . . .	1,195,805	939,893	504,617	328,465	260,180	120,164	11,556	31,808	3,392,488
15 years of age and over . . . .	788,321	604,598	316,449	192,323	151,380	64,365	9,088	19,044	2,145,568
Total never married . . . . .	1,984,126	1,544,491	821,066	520,788	411,560	184,529	20,644	50,852	5,538,056
Married . . . . .	1,914,843	1,447,586	722,981	497,779	368,292	163,131	14,792	41,320	5,170,724
Married but permanently separated(a) . . . .	65,690	44,072	23,478	11,679	11,520	4,290	791	847	162,367
Divorced . . . . .	39,653	22,191	11,841	9,088	7,515	2,526	473	741	94,028
Widowed . . . . .	229,510	161,186	84,319	52,541	37,786	16,959	733	2,253	585,287
Grand total . . . . .	4,233,822	3,219,526	1,663,685	1,091,875	836,673	371,435	37,433	96,013	11,550,462

(a) Legally or otherwise.

**POPULATION: COUNTRY OF BIRTH, BY SEX, AUSTRALIA  
CENSUSES, 1961 AND 1966**

Country of birth	Census, 30 June 1961			Census, 30 June 1966			Increase 1961-1966
	Males	Females	Persons	Males	Females	Persons	
Australia . . . .	4,325,005	4,404,401	8,729,406	4,663,212	4,756,330	9,419,542	690,136
New Zealand . . . .	23,377	23,634	47,011	26,174	26,311	52,485	5,474
Europe—							
United Kingdom and							
Republic of Ireland(a)	400,491	354,911	755,402	474,427	434,237	908,664	153,262
Germany . . . .	57,579	51,736	109,315	55,799	52,910	108,709	- 606
Greece . . . .	43,593	33,740	77,333	73,936	66,153	140,089	62,756
Italy . . . .	134,624	93,672	228,296	150,138	117,187	267,325	39,029
Malta . . . .	22,628	16,709	39,337	31,028	24,076	55,104	15,767
Netherlands . . . .	56,811	45,272	102,083	55,189	44,360	99,549	- 2,534
Poland . . . .	36,395	23,654	60,049	36,496	25,145	61,641	1,592
Other . . . .	134,185	90,212	224,397	147,921	104,509	252,430	28,033
Total, Europe . . . .	886,306	709,906	1,596,212	1,024,934	868,577	1,893,511	297,299
Other countries . . . .	77,564	57,993	135,557	102,039	82,885	184,924	49,367
Total born outside							
Australia . . . .	987,247	791,533	1,778,780	1,153,147	977,773	2,130,920	352,140
Grand total . . . .	5,312,252	5,195,934	10,508,186	5,816,359	5,734,103	11,550,462	1,042,276

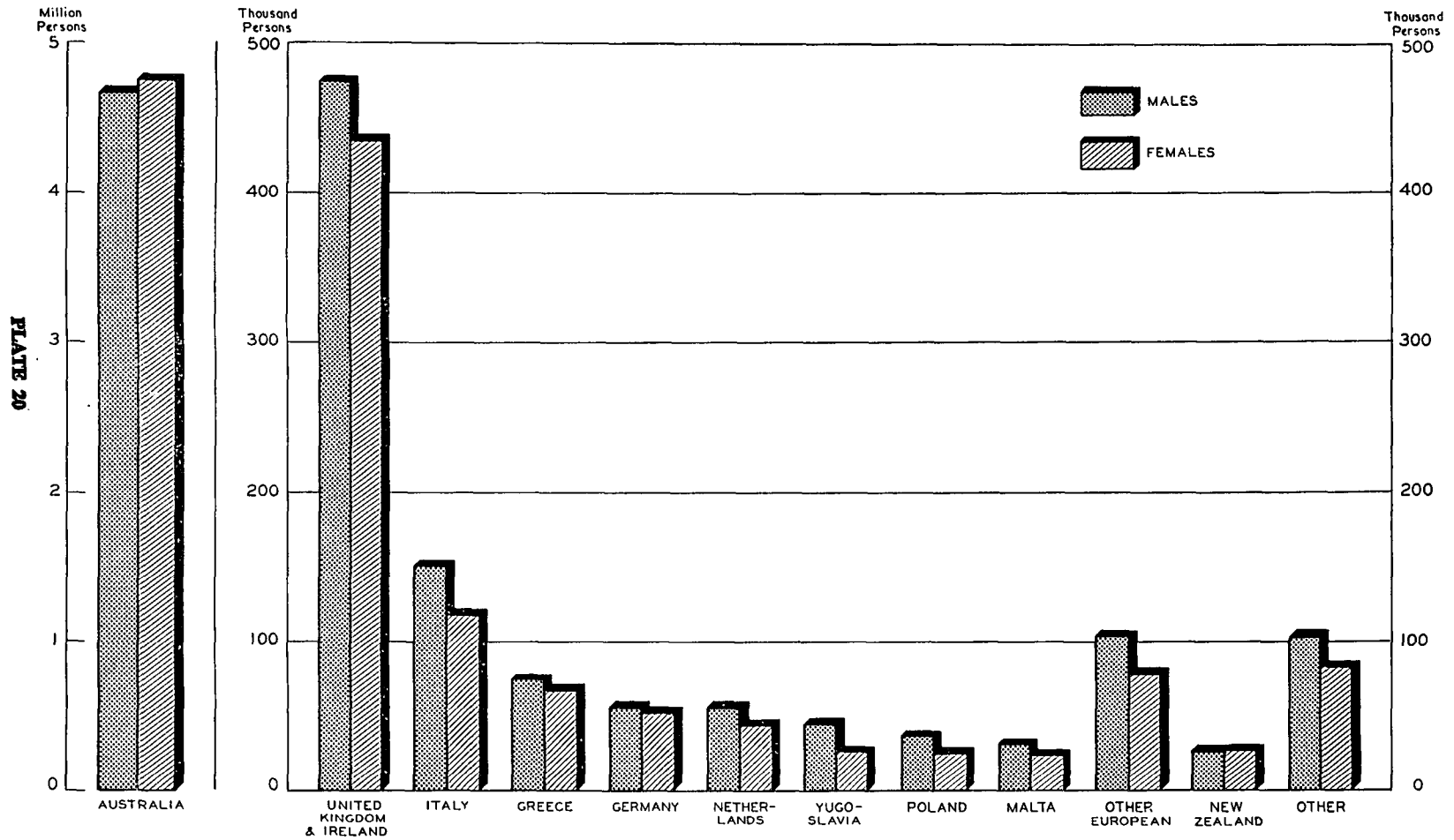
(a) Includes Ireland (undefined).  
Minus sign (-) denotes decrease.

**POPULATION: COUNTRY OF BIRTH, BY SEX, STATES AND TERRITORIES  
CENSUS, 30 JUNE 1966**

Country of birth	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
<b>MALES</b>									
Australia . . . .	1,727,351	1,249,368	731,943	416,965	318,198	167,531	15,896	35,960	4,663,212
New Zealand . . . .	12,534	5,738	4,139	1,080	1,431	617	211	424	26,174
Europe—									
United Kingdom and									
Republic of									
Ireland(a) . . . .	159,307	124,415	55,938	62,756	54,932	9,911	1,939	5,229	474,427
Germany . . . .	18,202	18,982	4,863	8,189	2,939	1,137	420	1,067	55,799
Greece . . . .	25,792	32,884	2,546	7,834	3,113	451	798	518	73,936
Italy . . . .	41,430	61,091	11,972	17,130	16,005	918	472	1,120	150,138
Malta . . . .	12,919	14,804	1,315	1,276	476	56	19	163	31,028
Netherlands . . . .	15,273	19,092	5,593	6,703	5,755	1,809	177	787	55,189
Poland . . . .	11,197	13,986	2,394	4,519	2,775	1,064	70	491	36,496
Other countries in									
Europe . . . .	57,837	45,656	11,864	15,855	10,657	2,374	808	2,870	147,921
Total, Europe . . . .	341,957	330,910	96,485	124,262	96,652	17,720	4,703	12,245	1,024,934
Other countries . . . .	42,620	27,888	11,330	6,223	10,410	1,522	698	1,348	102,039
Total born out-									
side Australia . . . .	397,111	364,536	111,954	131,565	108,493	19,859	5,612	14,017	1,153,147
Total males . . . .	2,124,462	1,613,904	843,897	548,530	426,691	187,390	21,508	49,977	5,816,359
<b>FEMALES</b>									
Australia . . . .	1,772,444	1,289,560	729,886	428,962	319,684	168,051	13,115	34,628	4,756,330
New Zealand . . . .	13,437	5,945	3,469	1,108	1,237	620	144	351	26,311
Europe—									
United Kingdom and									
Republic of									
Ireland(a) . . . .	145,672	114,991	50,174	59,274	49,188	9,190	1,148	4,600	434,237
Germany . . . .	17,409	18,288	4,163	8,024	2,996	879	167	984	52,910
Greece . . . .	22,702	31,391	1,851	6,826	2,330	304	399	350	66,153
Italy . . . .	31,445	50,128	8,300	13,718	12,136	530	174	756	117,187
Malta . . . .	10,160	11,648	831	982	284	23	6	142	24,076
Netherlands . . . .	11,848	15,554	4,275	5,740	4,614	1,558	88	683	44,360
Poland . . . .	7,537	10,711	1,401	2,734	1,952	503	15	292	25,145
Other countries in									
Europe . . . .	41,814	34,556	6,825	10,845	6,976	1,258	172	2,063	104,509
Total, Europe . . . .	288,587	287,267	77,820	108,143	80,476	14,245	2,169	9,870	868,577
Other countries . . . .	34,892	22,850	8,613	5,132	8,585	1,129	497	1,187	82,885
Total born out-									
side Australia . . . .	336,916	316,062	89,902	114,383	90,298	15,994	2,810	11,408	977,773
Total females . . . .	2,109,360	1,605,622	819,788	543,345	409,982	184,045	15,925	46,036	5,734,103

# POPULATION, BY BIRTHPLACE: AUSTRALIA

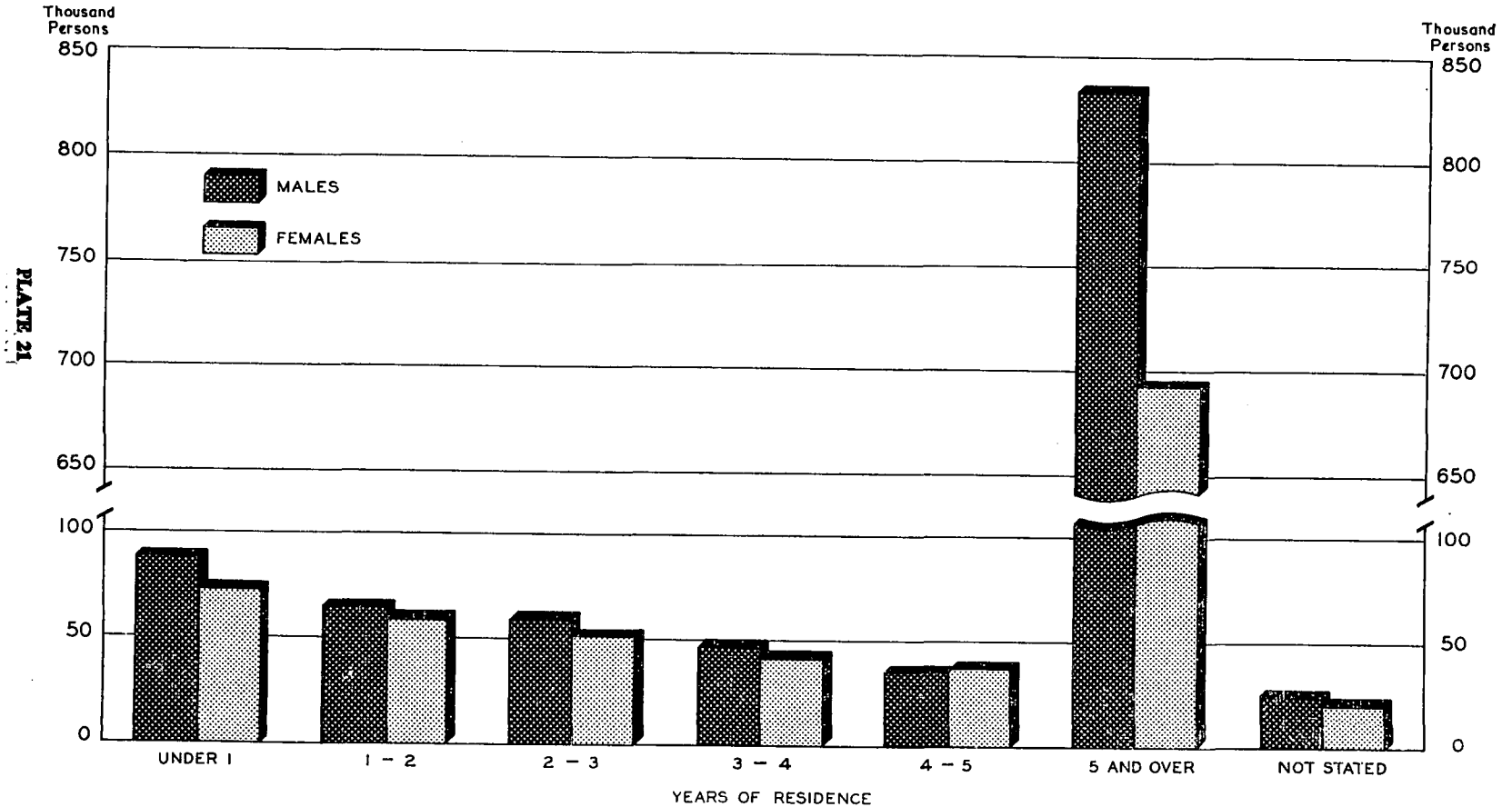
## CENSUS 1966





# OVERSEAS BORN POPULATION, BY PERIOD OF RESIDENCE IN AUSTRALIA

CENSUS 1966



POPULATION(a): COUNTRY OF BIRTH, BY SEX, STATES AND TERRITORIES  
CENSUS, 30 JUNE 1966—continued

Country of birth	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
PERSONS									
Australia . . .	3,499,795	2,538,928	1,461,829	845,927	637,882	335,582	29,011	70,588	9,419,542
New Zealand . . .	25,971	11,683	7,608	2,188	2,668	1,237	355	775	52,485
Europe—									
United Kingdom and Republic of Ireland(a) . . .	304,979	239,406	106,112	122,030	104,120	19,101	3,087	9,829	908,664
Germany . . .	35,611	37,270	9,026	16,213	5,935	2,016	587	2,051	108,709
Greece . . .	48,494	64,275	4,397	14,660	5,443	755	1,197	868	140,089
Italy . . .	72,875	111,219	20,272	30,848	28,141	1,448	646	1,876	267,325
Malta . . .	23,079	26,452	2,146	2,258	760	79	25	305	55,104
Netherlands . . .	27,121	34,646	9,868	12,443	10,369	3,367	265	1,470	99,549
Poland . . .	18,734	24,697	3,795	7,253	4,727	1,567	85	783	61,641
Other countries in Europe . . .	99,651	80,212	18,689	26,700	17,633	3,632	980	4,933	252,430
Total, Europe . . .	630,544	618,177	174,305	232,405	177,128	31,965	6,872	22,115	1,893,511
Other countries . . .	77,512	50,738	19,943	11,355	18,995	2,651	1,195	2,535	184,924
Total born outside Australia . . .	734,027	680,598	201,856	245,948	198,791	35,853	8,422	25,425	2,130,920
Grand total . . .	4,233,822	3,219,526	1,663,685	1,091,875	836,673	371,435	37,433	96,013	11,550,462

(a) Includes Ireland (undefined).

POPULATION: OVERSEAS BORN, BY PERIOD OF RESIDENCE IN AUSTRALIA, AND SEX  
CENSUSES, 1961 AND 1966

Period of residence (years)	Census, 30 June 1961			Census, 30 June 1966			Increase 1961-1966
	Males	Females	Persons	Males	Females	Persons	
Under 1 . . .	72,162	51,169	123,331	88,608	73,252	161,860	38,529
1 and under 2 . . .	48,600	38,366	86,966	65,980	58,361	124,341	37,375
2 " " 3 . . .	47,126	42,901	90,027	58,366	51,963	110,329	20,302
3 " " 4 . . .	37,736	41,254	78,990	46,104	41,934	88,038	9,048
4 " " 5 . . .	42,600	41,284	83,884	35,623	37,279	72,902	-10,982
5 years and over . . .	717,961	560,573	1,278,534	833,170	693,902	1,527,072	248,538
Not stated . . .	21,062	15,986	37,048	25,296	21,082	46,378	9,330
Total . . .	987,247	791,533	1,778,780	1,153,147	977,773	2,130,920	352,140

Minus sign (-) denotes decrease.

**POPULATION: OVERSEAS-BORN, BY PERIOD OF RESIDENCE IN AUSTRALIA(a), AND SEX  
STATES AND TERRITORIES, CENSUS, 30 JUNE 1966**

<i>Period of residence in Australia (years)</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Australia</i>
<b>MALES</b>									
Under 1 year . . .	30,942	24,474	7,846	12,235	9,872	1,488	553	1,198	88,608
1 and under 2 . . .	22,333	20,061	5,622	10,332	5,488	965	396	783	65,980
2 " " 3 . . .	18,920	19,153	4,874	8,834	4,625	782	396	782	58,366
3 " " 4 . . .	15,277	15,352	3,484	5,961	4,565	526	260	679	46,104
4 " " 5 . . .	12,700	11,349	2,829	4,349	3,096	505	261	534	35,623
5 years and over . . .	287,679	266,236	84,168	87,919	78,664	15,095	3,569	9,840	833,170
Not stated . . .	9,260	7,911	3,131	1,935	2,183	498	177	201	25,296
<b>Total males</b>	<b>397,111</b>	<b>364,536</b>	<b>111,954</b>	<b>131,565</b>	<b>108,493</b>	<b>19,859</b>	<b>5,612</b>	<b>14,017</b>	<b>1,153,147</b>
<b>FEMALES</b>									
Under 1 year . . .	24,837	21,213	6,205	11,062	7,563	1,078	288	1,006	73,252
1 and under 2 . . .	19,462	17,973	4,688	9,742	4,678	873	255	690	58,361
2 " " 3 . . .	16,321	17,784	3,908	8,262	4,007	712	237	732	51,963
3 " " 4 . . .	13,876	14,184	2,951	5,757	3,938	494	154	580	41,934
4 " " 5 . . .	13,287	12,884	2,561	4,441	2,902	488	177	539	37,279
5 years and over . . .	240,865	225,351	67,141	73,586	65,626	11,983	1,631	7,719	693,902
Not stated . . .	8,268	6,673	2,448	1,533	1,584	366	68	142	21,082
<b>Total females</b>	<b>336,916</b>	<b>316,062</b>	<b>89,902</b>	<b>114,383</b>	<b>90,298</b>	<b>15,994</b>	<b>2,810</b>	<b>11,408</b>	<b>977,773</b>
<b>PERSONS</b>									
Under 1 year . . .	55,779	45,687	14,051	23,297	17,435	2,566	841	2,204	161,860
1 and under 2 . . .	41,795	38,034	10,310	20,074	10,166	1,838	651	1,473	124,341
2 " " 3 . . .	35,241	36,937	8,782	17,096	8,632	1,494	633	1,514	110,329
3 " " 4 . . .	29,153	29,536	6,435	11,718	8,503	1,020	414	1,259	88,038
4 " " 5 . . .	25,987	24,233	5,390	8,790	5,998	993	438	1,073	72,902
5 years and over . . .	528,544	491,587	151,309	161,505	144,290	27,078	5,200	17,559	1,527,072
Not stated . . .	17,528	14,584	5,579	3,468	3,767	864	245	343	46,378
<b>Grand total</b>	<b>734,027</b>	<b>680,598</b>	<b>201,856</b>	<b>245,948</b>	<b>198,791</b>	<b>35,853</b>	<b>8,422</b>	<b>25,425</b>	<b>2,130,920</b>

(a) Period of residence in Australia and not the particular State of Territory in which persons were enumerated.

**POPULATION: NATIONALITY (i.e. ALLEGIANCE), BY SEX  
AUSTRALIA, CENSUSES, 1961 AND 1966**

<i>Nationality</i>	<i>Census, 30 June 1961</i>			<i>Census, 30 June 1966</i>			<i>Increase 1961-1966</i>
	<i>Males</i>	<i>Females</i>	<i>Persons</i>	<i>Males</i>	<i>Females</i>	<i>Persons</i>	
<b>British(a)—</b>							
Born in Australia . . .	4,325,005	4,404,401	8,729,406	4,663,212	4,756,330	9,419,542	690,136
Born outside Australia . . .	686,611	568,692	1,255,303	871,263	748,582 (b)	1,619,845	364,542
<b>Total British.</b> . . .	<b>5,011,616</b>	<b>4,973,093</b>	<b>9,984,709</b>	<b>5,534,475</b>	<b>5,504,912</b>	<b>11,039,387</b>	<b>1,054,678</b>
<b>Foreign—</b>							
Dutch . . .	41,216	34,601	75,817	25,941	22,014	47,955	-27,862
German . . .	34,317	26,172	60,489	24,262	18,559	42,821	-17,668
Greek . . .	32,763	28,238	61,001	53,344	53,333	106,677	45,676
Hungarian . . .	8,210	5,816	14,026	3,411	2,353	5,764	-8,262
Italian . . .	86,941	67,068	154,009	81,632	71,781	153,413	-596
Latvian, Lithuanian and Estonian . . .	4,176	2,936	7,112	1,751	1,068	2,819	-4,293
Polish . . .	12,939	9,474	22,413	7,784	5,998	13,782	-8,631
Yugoslav . . .	17,745	9,637	27,382	24,024	14,229	38,253	10,871
Other (incl. Stateless) . . .	62,329	38,899	101,228	59,735	39,856	99,591	-1,637
<b>Total foreign</b> . . .	<b>300,636</b>	<b>222,841</b>	<b>523,477</b>	<b>281,884</b>	<b>229,191 (b)</b>	<b>511,075</b>	<b>-12,402</b>
<b>Grand total</b> . . .	<b>5,312,252</b>	<b>5,195,934</b>	<b>10,508,186</b>	<b>5,816,359</b>	<b>5,734,103</b>	<b>11,550,462</b>	<b>1,042,276</b>

(a) All persons of individual citizenship status who, by virtue of the *Nationality and Citizenship Act 1948-1966*, are deemed to be British subjects. Includes naturalised British. For purposes of this table Irish nationality is included with British.

(b) Figures differ slightly from those on the graph opposite because of revisions.

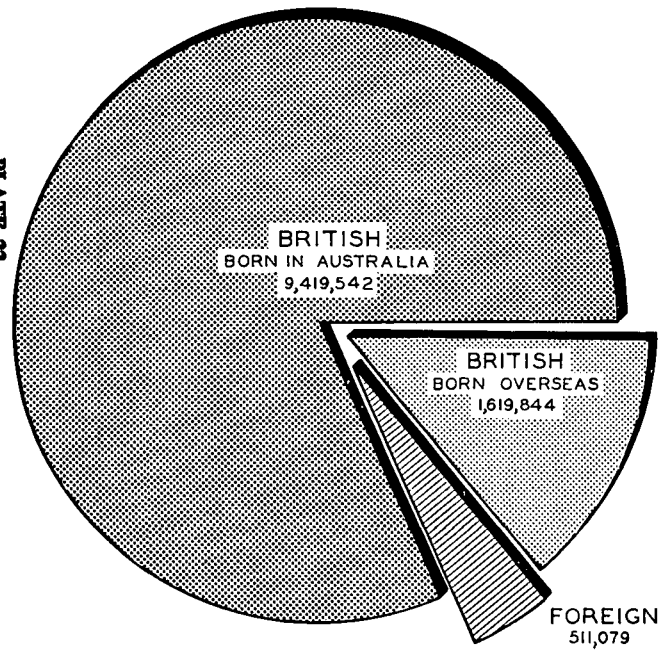
Minus sign (-) denotes decrease.

# POPULATION, BY NATIONALITY: AUSTRALIA

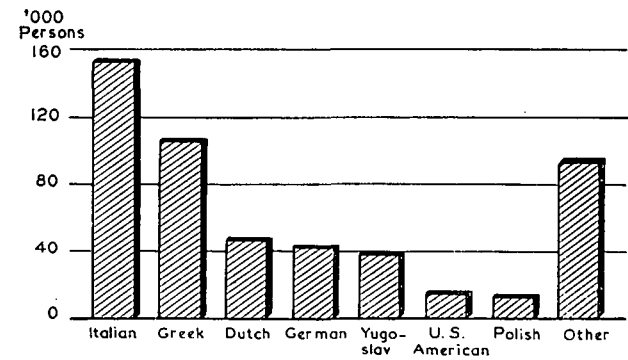
CENSUS 1966

(PERSONS)

PLATE 22



## FOREIGN



**POPULATION: NATIONALITY, BY SEX, STATES AND TERRITORIES  
CENSUS, 30 JUNE 1966**

<i>Nationality</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
<b>MALES</b>									
<b>British(a)—</b>									
Born in Australia	1,727,351	1,249,368	731,943	416,965	318,198	167,531	15,896	35,960	4,663,212
Born outside Australia	297,512	255,273	94,489	103,460	90,412	16,345	3,801	9,971	871,263
<b>Total British</b>	<b>2,024,863</b>	<b>1,504,641</b>	<b>826,432</b>	<b>520,425</b>	<b>408,610</b>	<b>183,876</b>	<b>19,697</b>	<b>45,931</b>	<b>5,534,475</b>
<b>Foreign—</b>									
Dutch	7,863	8,655	2,623	3,548	2,148	685	76	343	25,941
German	8,728	8,529	1,748	3,085	956	467	262	487	24,262
Greek	18,468	26,104	1,042	4,994	1,499	325	574	338	53,344
Hungarian	1,448	1,230	222	304	77	48	21	61	3,411
Italian	22,944	37,499	3,714	9,224	6,723	550	230	748	81,632
Latvian, Lithuanian and Estonian	592	555	126	243	152	48	6	29	1,751
Polish	2,477	2,838	510	934	560	257	17	191	7,784
Yugoslav	10,521	8,029	1,078	1,566	1,957	270	74	529	24,024
Other countries	26,558	15,824	6,402	4,207	4,009	864	551	1,320	59,735
<b>Total foreign</b>	<b>99,599</b>	<b>109,263</b>	<b>17,465</b>	<b>28,105</b>	<b>18,081</b>	<b>3,514</b>	<b>1,811</b>	<b>4,046</b>	<b>281,884</b>
<b>Total males</b>	<b>2,124,462</b>	<b>1,613,904</b>	<b>843,897</b>	<b>548,530</b>	<b>426,691</b>	<b>187,390</b>	<b>21,508</b>	<b>49,977</b>	<b>5,816,359</b>
<b>FEMALES</b>									
<b>British(a)—</b>									
Born in Australia	1,772,444	1,289,560	729,886	428,962	319,684	168,051	13,115	34,628	4,756,330
Born outside Australia	258,431	219,718	78,726	90,495	77,089	13,795	2,066	8,262	748,582
<b>Total British</b>	<b>2,030,875</b>	<b>1,509,278</b>	<b>808,612</b>	<b>519,457</b>	<b>396,773</b>	<b>181,846</b>	<b>15,181</b>	<b>42,890</b>	<b>5,504,912</b>
<b>Foreign—</b>									
Dutch	6,640	7,394	2,046	3,129	1,837	580	35	353	22,014
German	6,619	6,903	1,042	2,597	570	325	81	422	18,559
Greek	18,339	27,337	901	4,869	1,066	231	317	279	53,333
Hungarian	1,008	949	77	216	38	23	3	38	2,353
Italian	19,298	34,030	2,780	8,538	6,099	363	108	565	71,781
Latvian, Lithuanian and Estonian	389	342	69	148	80	24	..	16	1,068
Polish	1,905	2,414	305	677	400	160	4	133	5,998
Yugoslav	5,801	5,678	346	926	1,080	108	3	287	14,229
Other countries	18,491	11,297	3,610	2,788	2,039	385	193	1,053	39,856
<b>Total foreign</b>	<b>78,485</b>	<b>96,344</b>	<b>11,176</b>	<b>23,888</b>	<b>13,209</b>	<b>2,199</b>	<b>744</b>	<b>3,146</b>	<b>229,191</b>
<b>Total females</b>	<b>2,109,360</b>	<b>1,605,622</b>	<b>819,788</b>	<b>543,345</b>	<b>409,982</b>	<b>184,045</b>	<b>15,925</b>	<b>46,036</b>	<b>5,734,103</b>
<b>PERSONS</b>									
<b>British(a)—</b>									
Born in Australia	3,499,795	2,538,928	1,461,829	845,927	637,882	335,582	29,011	70,588	9,419,542
Born outside Australia	555,943	474,991	173,215	193,955	167,501	30,140	5,867	18,233	1,619,845
<b>Total British</b>	<b>4,055,738</b>	<b>3,013,919</b>	<b>1,635,044</b>	<b>1,039,882</b>	<b>805,383</b>	<b>365,722</b>	<b>34,878</b>	<b>88,821</b>	<b>11,039,387</b>
<b>Foreign—</b>									
Dutch	14,503	16,049	4,669	6,677	3,985	1,265	111	696	47,955
German	15,347	15,432	2,790	5,682	1,526	792	343	909	42,827
Greek	36,801	53,441	1,943	9,863	2,565	556	891	617	106,671
Hungarian	2,457	2,179	299	520	115	71	24	99	5,764
Italian	42,242	71,529	6,494	17,762	12,822	913	338	1,313	153,413
Latvian, Lithuanian and Estonian	981	897	195	391	232	72	6	45	2,819
Polish	4,382	5,252	815	1,611	960	417	21	324	13,782
Yugoslav	16,322	13,707	1,424	2,492	3,037	378	77	816	38,253
Other countries	45,049	27,121	10,012	6,995	6,048	1,249	744	2,373	99,591
<b>Total foreign</b>	<b>178,084</b>	<b>205,607</b>	<b>28,641</b>	<b>51,993</b>	<b>31,290</b>	<b>5,713</b>	<b>2,555</b>	<b>7,192</b>	<b>511,075</b>
<b>Grand total</b>	<b>4,233,822</b>	<b>3,219,526</b>	<b>1,663,685</b>	<b>1,091,875</b>	<b>836,673</b>	<b>371,435</b>	<b>37,433</b>	<b>96,013</b>	<b>11,550,462</b>

(a) All persons of individual citizenship status who, by virtue of the *Nationality and Citizenship Act 1948-1966*, are deemed to be British subjects. Includes naturalised British. For purposes of this table Irish nationality is included with British.

**POPULATION: RELIGIOUS DENOMINATIONS, BY SEX, AUSTRALIA  
CENSUSES, 1961 AND 1966**

Religious denomination	Census 30 June 1961			Census 30 June 1966			Increase 1961-1966
	Males	Females	Persons	Males	Females	Persons	
<b>Christian—</b>							
Baptist . . . . .	70,990	78,638	149,628	78,053	87,434	165,487	15,859
Brethren . . . . .	7,265	8,228	15,493	7,434	8,082	15,516	23
Catholic, Roman(a) . . . . .	602,763	536,886	1,139,649	581,934	522,035	1,103,969	-35,680
Catholic(a) . . . . .	730,093	750,242	1,480,335	947,796	984,365	1,932,161	451,826
Churches of Christ . . . . .	45,115	50,518	95,633	48,207	54,338	102,545	6,912
Church of England . . . . .	1,834,732	1,834,208	3,668,940	1,929,663	1,947,810	3,877,473	208,533
Congregational . . . . .	34,679	38,847	73,526	35,911	40,677	76,588	3,062
Orthodox . . . . .	84,965	69,959	154,924	135,618	119,875	255,493	100,569
Lutheran . . . . .	82,453	77,729	160,182	90,019	87,305	177,324	17,142
Methodist . . . . .	528,003	548,392	1,076,395	548,392	575,918	1,124,310	47,915
Presbyterian . . . . .	482,503	494,218	976,721	511,993	531,577	1,043,570	66,849
Salvation Army . . . . .	24,379	26,735	51,114	27,078	29,423	56,501	5,387
Seventh-day Adventist . . . . .	14,313	17,320	31,633	16,948	20,669	37,617	5,984
Protestant (undefined) . . . . .	50,515	48,048	98,563	52,956	52,267	105,223	6,660
Other (including Christian undefined) . . . . .	48,626	52,779	101,405	63,769	67,492	131,261	29,856
<b>Total Christian . . . . .</b>	<b>4,641,394</b>	<b>4,632,747</b>	<b>9,274,141</b>	<b>5,075,771</b>	<b>5,129,267</b>	<b>10,205,038</b>	<b>930,897</b>
<b>Non-Christian—</b>							
Hebrew . . . . .	29,571	29,758	59,329	31,301	31,970	63,271	3,942
Other . . . . .	6,547	2,928	9,475	8,515	4,597	13,112	3,637
<b>Total non-Christian . . . . .</b>	<b>36,118</b>	<b>32,686</b>	<b>68,804</b>	<b>39,816</b>	<b>36,567</b>	<b>76,383</b>	<b>7,579</b>
<b>Indefinite . . . . .</b>	<b>13,495</b>	<b>11,267</b>	<b>24,762</b>	<b>19,641</b>	<b>16,409</b>	<b>36,050</b>	<b>11,288</b>
<b>No religion . . . . .</b>	<b>25,206</b>	<b>12,344</b>	<b>37,550</b>	<b>60,524</b>	<b>33,567</b>	<b>94,091</b>	<b>56,541</b>
<b>No reply . . . . .</b>	<b>596,039</b>	<b>506,890</b>	<b>1,102,929</b>	<b>620,607</b>	<b>518,293</b>	<b>1,138,900</b>	<b>35,971</b>
<b>Grand total . . . . .</b>	<b>5,312,252</b>	<b>5,195,934</b>	<b>10,508,186</b>	<b>5,816,359</b>	<b>5,734,103</b>	<b>11,550,462</b>	<b>1,042,276</b>

(a) So described in individual census schedules.

Minus sign (—) denotes decrease.

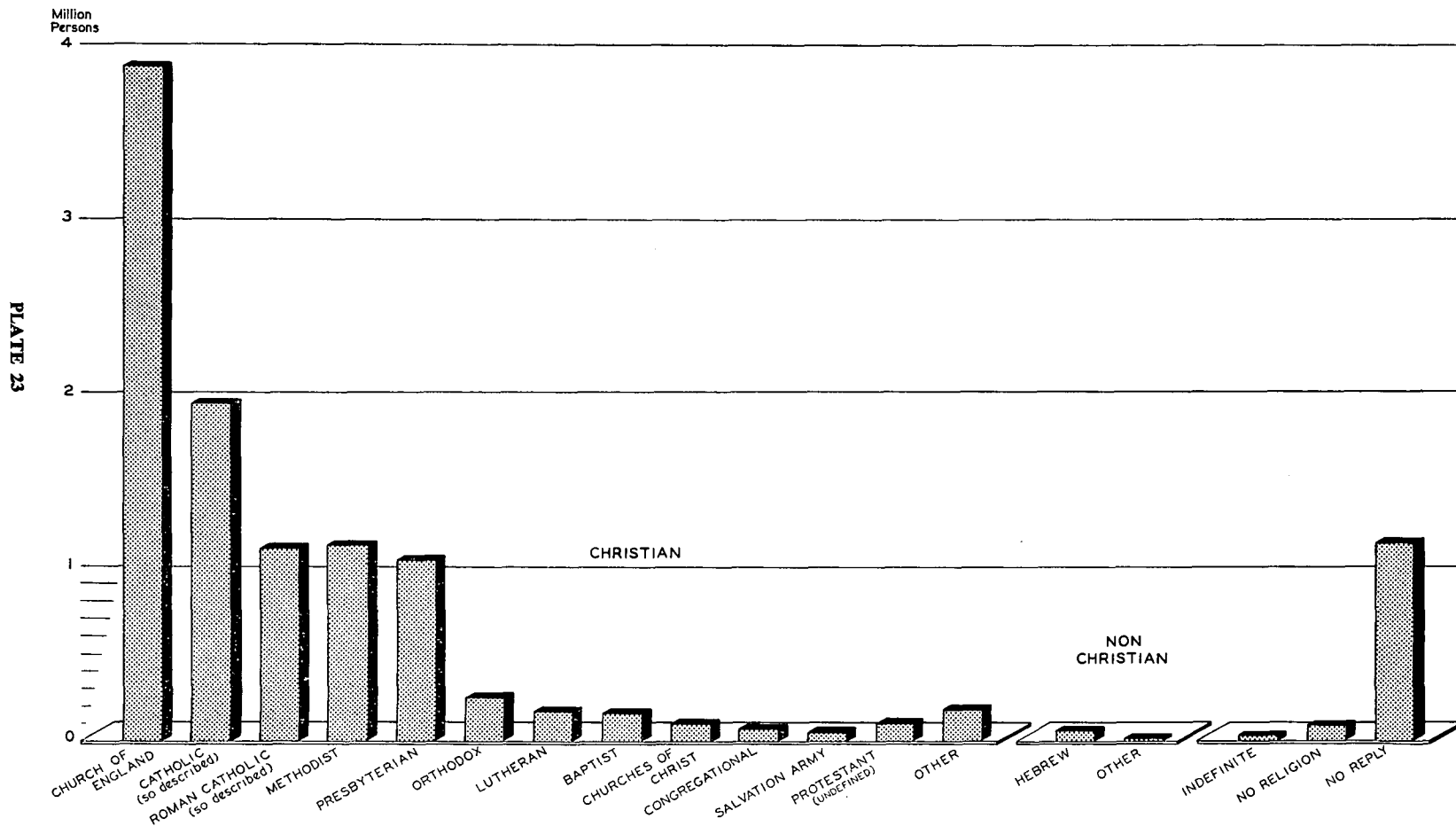
**POPULATION: RELIGIOUS DENOMINATIONS, BY SEX, STATES AND TERRITORIES  
CENSUS, 30 JUNE 1966**

Religious denomination	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
<b>MALES</b>									
<b>Christian—</b>									
Baptist . . . . .	26,230	19,469	12,425	10,342	5,118	3,719	208	542	78,053
Brethren . . . . .	2,101	1,605	1,521	270	393	1,508	6	30	7,434
Catholic, Roman(a) . . . . .	233,111	134,108	88,219	40,016	60,705	16,309	3,599	5,867	581,934
Catholic(a) . . . . .	355,058	314,704	125,365	72,153	48,389	19,749	1,903	10,475	947,796
Churches of Christ . . . . .	6,452	18,560	4,217	11,884	5,369	1,328	85	312	48,207
Church of England . . . . .	804,794	455,772	263,810	141,408	159,309	83,101	5,736	15,733	1,929,663
Congregational . . . . .	10,720	5,394	4,751	8,561	4,016	2,145	90	234	35,911
Orthodox . . . . .	51,538	52,279	7,432	14,852	6,560	880	1,032	1,045	135,618
Lutheran . . . . .	15,434	19,052	20,721	29,487	2,640	922	499	1,264	90,019
Methodist . . . . .	149,199	135,296	88,239	110,976	39,423	20,994	1,610	2,655	548,392
Presbyterian . . . . .	173,208	188,067	93,169	21,286	22,080	8,648	1,164	4,371	511,993
Salvation Army . . . . .	8,313	6,954	4,358	3,542	2,388	1,288	116	119	27,078
Seventh-day Adventist . . . . .	6,457	3,220	3,242	1,339	1,927	663	26	74	16,948
Protestant (undefined) . . . . .	13,745	22,046	5,603	6,556	3,470	980	243	313	52,956
Other (including Christian undefined) . . . . .	17,602	16,554	13,132	6,863	5,818	2,584	746	470	63,769
<b>Total Christian . . . . .</b>	<b>1,873,962</b>	<b>1,393,080</b>	<b>736,204</b>	<b>479,535</b>	<b>367,605</b>	<b>164,818</b>	<b>17,063</b>	<b>43,504</b>	<b>5,075,771</b>
<b>Non-Christian—</b>									
Hebrew . . . . .	12,627	15,456	839	622	1,510	119	10	118	31,301
Other . . . . .	2,871	2,699	1,052	678	768	199	126	122	8,515
<b>Total non-Christian . . . . .</b>	<b>15,498</b>	<b>18,155</b>	<b>1,891</b>	<b>1,300</b>	<b>2,278</b>	<b>318</b>	<b>136</b>	<b>240</b>	<b>39,816</b>
<b>Indefinite . . . . .</b>	<b>6,993</b>	<b>5,078</b>	<b>2,631</b>	<b>1,908</b>	<b>1,558</b>	<b>1,212</b>	<b>117</b>	<b>144</b>	<b>19,641</b>
<b>No religion . . . . .</b>	<b>21,384</b>	<b>17,569</b>	<b>7,422</b>	<b>5,379</b>	<b>5,060</b>	<b>1,345</b>	<b>481</b>	<b>1,884</b>	<b>60,524</b>
<b>No reply . . . . .</b>	<b>206,625</b>	<b>180,022</b>	<b>95,749</b>	<b>60,408</b>	<b>50,190</b>	<b>19,697</b>	<b>3,711</b>	<b>4,205</b>	<b>620,607</b>
<b>Total males . . . . .</b>	<b>2,124,462</b>	<b>1,613,904</b>	<b>843,897</b>	<b>548,530</b>	<b>426,691</b>	<b>187,390</b>	<b>21,508</b>	<b>49,977</b>	<b>5,816,359</b>

# POPULATION, BY RELIGIOUS DENOMINATION: AUSTRALIA

CENSUS 1966

(PERSONS)



POPULATION: RELIGIOUS DENOMINATIONS, BY SEX, STATES AND TERRITORIES  
CENSUS, 30 JUNE 1966—continued

Religious denomination	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
FEMALES									
Christian—									
Baptist . . . . .	29,543	21,950	13,607	11,893	5,602	4,040	195	604	87,434
Brethren . . . . .	2,363	1,741	1,702	272	406	1,554	10	34	8,082
Catholic, Roman(a) . . . . .	213,187	119,839	78,339	34,952	53,836	14,526	2,471	4,885	522,035
Catholic(a) . . . . .	373,423	320,844	133,746	73,455	50,729	20,505	1,595	10,068	984,365
Churches of Christ . . . . .	7,488	20,703	4,770	13,460	6,127	1,373	77	340	54,338
Church of England . . . . .	817,272	467,306	258,730	144,746	156,844	82,927	4,561	15,424	1,947,810
Congregational . . . . .	12,297	6,426	5,198	9,727	4,359	2,385	88	197	40,677
Orthodox . . . . .	45,068	48,108	6,464	12,901	5,275	634	646	779	119,875
Lutheran . . . . .	14,585	18,585	19,516	29,794	2,513	820	342	1,150	87,305
Methodist . . . . .	156,534	144,004	91,352	116,507	41,417	22,090	1,436	2,578	575,918
Presbyterian . . . . .	179,876	199,041	95,323	21,401	21,975	8,850	878	4,233	531,577
Salvation Army . . . . .	9,055	7,796	4,686	3,762	2,534	1,373	100	117	29,423
Seventh-day Adventist . . . . .	7,980	3,929	3,715	1,660	2,430	834	28	93	20,669
Protestant (undefined) Other (including Christian undefined) . . . . .	13,495	22,410	5,354	6,420	3,209	944	171	264	52,267
<i>Total Christian . . . . .</i>	<i>1,900,950</i>	<i>1,420,021</i>	<i>736,265</i>	<i>488,406</i>	<i>363,602</i>	<i>165,514</i>	<i>13,301</i>	<i>41,208</i>	<i>5,129,267</i>
Non-Christian—									
Hebrew . . . . .	13,286	15,602	790	627	1,486	88	6	85	31,970
Other . . . . .	1,583	1,491	601	413	298	79	68	64	4,597
<i>Total non-Christian . . . . .</i>	<i>14,869</i>	<i>17,093</i>	<i>1,391</i>	<i>1,040</i>	<i>1,784</i>	<i>167</i>	<i>74</i>	<i>149</i>	<i>36,567</i>
Indefinite . . . . .	5,907	4,400	2,026	1,593	1,216	1,063	90	114	16,409
No religion . . . . .	11,812	10,396	3,536	2,993	2,759	675	214	1,182	33,567
No reply . . . . .	175,822	153,712	76,570	49,313	40,621	16,626	2,246	3,383	518,293
<i>Total females . . . . .</i>	<i>2,109,360</i>	<i>1,605,622</i>	<i>819,788</i>	<i>543,345</i>	<i>409,982</i>	<i>184,045</i>	<i>15,925</i>	<i>46,036</i>	<i>5,734,103</i>
PERSONS									
Christian—									
Baptist . . . . .	55,773	41,419	26,032	22,235	10,720	7,759	403	1,146	165,487
Brethren . . . . .	4,464	3,346	3,223	542	799	3,062	16	64	15,516
Catholic, Roman(a) . . . . .	446,298	253,947	166,558	74,968	114,541	30,835	6,070	10,752	1,103,969
Catholic(a) . . . . .	728,481	635,548	259,111	145,608	99,118	40,254	3,498	20,543	1,932,161
Churches of Christ . . . . .	13,940	39,263	8,987	25,344	11,496	2,701	162	652	102,545
Church of England . . . . .	1,622,066	923,078	522,540	286,154	316,153	166,028	10,297	31,157	3,877,473
Congregational . . . . .	23,017	11,820	9,949	18,288	8,375	4,530	178	431	76,588
Orthodox . . . . .	96,606	100,387	13,896	27,753	11,835	1,514	1,678	1,824	255,493
Lutheran . . . . .	30,019	37,637	40,237	59,281	5,153	1,742	841	2,414	177,324
Methodist . . . . .	305,733	279,300	179,591	227,483	80,840	43,084	3,046	5,233	1,124,310
Presbyterian . . . . .	353,084	387,108	188,492	42,687	44,055	17,498	2,042	8,604	1,043,570
Salvation Army . . . . .	17,368	14,750	9,044	7,304	4,922	2,661	216	236	56,501
Seventh-day Adventist . . . . .	14,437	7,149	6,957	2,999	4,357	1,497	54	167	37,617
Protestant (undefined) Other (including Christian undefined) . . . . .	27,240	44,456	10,957	12,976	6,679	1,924	414	577	105,223
<i>Total Christian . . . . .</i>	<i>3,774,912</i>	<i>2,813,101</i>	<i>1,472,469</i>	<i>967,941</i>	<i>731,207</i>	<i>330,332</i>	<i>30,364</i>	<i>84,712</i>	<i>10,205,038</i>
Non-Christian—									
Hebrew . . . . .	25,913	31,058	1,629	1,249	2,996	207	16	203	63,271
Other . . . . .	4,454	4,190	1,653	1,091	1,066	278	194	186	13,112
<i>Total non-Christian . . . . .</i>	<i>30,367</i>	<i>35,248</i>	<i>3,282</i>	<i>2,340</i>	<i>4,062</i>	<i>485</i>	<i>210</i>	<i>389</i>	<i>76,383</i>
Indefinite . . . . .	12,900	9,478	4,657	3,501	2,774	2,275	207	258	36,050
No religion . . . . .	33,196	27,965	10,958	8,372	7,819	2,020	695	3,066	94,091
No reply . . . . .	382,447	333,734	172,319	109,721	90,811	36,323	5,957	7,588	1,138,900
<i>Grand total . . . . .</i>	<i>4,233,822</i>	<i>3,219,526</i>	<i>1,663,685</i>	<i>1,091,875</i>	<i>836,673</i>	<i>371,435</i>	<i>37,433</i>	<i>96,013</i>	<i>11,550,462</i>

(a) So described in individual census schedules.



### The Aboriginal population of Australia

In Year Book No. 17, pages 951-61, a brief account was given of the Australian Aboriginal population, its origin, its numbers as estimated from time to time and the steps taken for its protection. On pages 914-16 of Year Book No. 22 particulars were shown for each of the States and Territories of Australia at successive periods, while a special article dealing with the estimated number and distribution of the native population at the date of first settlement of the white race in the continent appeared on pages 687-96 of Year Book No. 23.

Aborigines have been enumerated in all censuses of the Commonwealth, but the degree of coverage and information obtained has varied substantially since 1911. Since the census taken in 1933 the adequacy of the particulars obtained has improved progressively as a result of an increasing number of Aborigines coming into contact with more populated areas.

At the 1966 Census extensive arrangements were made to obtain as full a coverage of full-blood Aborigines as possible and to enumerate fully those Aborigines 'out of contact'. Throughout Australia the assistance of Aboriginal welfare bodies, mission superintendents, station owners, patrol officers, and police was sought in an effort to include all Aborigines and to obtain complete information about them, e.g. in the Northern Territory information was obtained from missions and settlements concerning Aborigines normally resident at such locations but who were absent at the time of the Census, and of Aborigines resident at such locations but who normally resided elsewhere. The two sets of information were then reconciled to produce what is considered to be a fairly complete and accurate coverage of Aborigines in the Territory.

The following table shows particulars of the Aboriginal population of Australia at the censuses of 30 June, 1954, 1961, and 1966. Because of some doubt about the accuracy of separate figures for full-blood and half-blood Aborigines as shown in previous issues of the Year Book, their separate publication has been discontinued.

ABORIGINAL POPULATION(a): STATES AND TERRITORIES  
CENSUSES, 1954, 1961 AND 1966

State or Territory	Census, 1954			Census, 1961			Census, 1966		
	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons
New South Wales	6,278	5,935	12,213	7,494	7,222	14,716	7,343	6,876	14,219
Victoria	691	704	1,395	899	897	1,796	856	934	1,790
Queensland	8,368	7,781	16,149	10,146	9,550	19,696	9,644	9,359	19,003
South Australia	1,675	1,537	3,212	2,607	2,277	4,884	2,914	2,591	5,505
Western Australia	6,564	6,135	12,699	8,351	7,925	16,276	9,505	8,934	18,439
Tasmania	50	43	93	24	14	38	19	17	36
Northern Territory	5,990	5,798	11,788	9,013	8,747	17,760	10,651	10,468	21,119
Australian Capital Territory	100	73	173	78	65	143	52	44	96
Australia	29,716	28,006	57,722	38,612	36,697	75,309	40,984	39,223	80,207

(a) Persons of 50 per cent or more Aboriginal blood. Enumerated population only (see below).

Prior to the 1966 census Aborigines 'out of contact' were not enumerated, and estimates of these were made by authorities responsible for native welfare. It is estimated that at the 1954 census 12,956 full-blood Aborigines (of which 2,311 were estimated to be in Queensland, 1,760 in South Australia, 3,516 in Western Australia, and 5,369 in the Northern Territory) were not contacted by census collectors and were not included in the census. Increasing numbers however, were coming into contact, and it is estimated that at the 1961 census 2,000 full-blood Aborigines in Western Australia and 1,944 in the Northern Territory were not contacted by census collectors. At the 1966 Census efforts were made to obtain complete coverage (see text above table).

Torres Strait Islanders are not included in the above table, but are included in the census figures shown elsewhere in this chapter. At the 1966 census they numbered 5,403 persons.

### Overseas arrivals and departures

In this section summary figures are given of the total movement of overseas passengers, and full details are given in respect of permanent arrivals and departures. For information on passengers in other categories, see Chapter 12, Transport, Communication and Travel.

More detailed statistics of overseas arrivals and departures, covering country of residence, country of embarkation or disembarkation, mode of travel, month of arrival or departure, etc., are shown in the tables of Section II, Overseas Arrivals and Departures, of the annual bulletin *Demography*. Monthly and quarterly mimeographed bulletins, containing the latest available statistics of overseas arrivals and departures, are also issued.

**Overseas arrivals and departures since 1936**

Earlier issues of the Year Book contain, in summary form, tables showing the increase of population by net migration from 1861 to the latest date, while information for individual years from 1881 is published in the annual bulletin *Demography*. The following table shows, for Australia, arrivals and departures since 1936, and refers to total movement irrespective of length of stay. Air crews and ships' crews, persons passing through Australia on board the same ship or flight, and also persons on short pleasure cruises in the south-west Pacific commencing and finishing in Australia on ships not then engaged in regular voyages, are excluded from Australian statistics of overseas arrivals and departures. A graph showing arrivals and departures from 1946 to 1967 appears on plate 24, over the page.

**OVERSEAS ARRIVALS AND DEPARTURES, BY SEX: AUSTRALIA, 1936 TO 1967**

Period	Total arrivals			Total departures			Excess of arrivals over departures		
	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons
1936-40(a)	161,774	159,538	321,312	140,901	137,283	278,184	20,873	22,255	43,128
1941-45(a)	35,422	28,503	63,925	30,097	26,019	56,116	5,325	2,484	7,809
1946-50(a)	398,507	303,413	701,920	180,779	168,057	348,836	217,728	135,356	353,084
1951-55	581,300	446,566	1,027,866	340,819	273,223	614,042	240,481	173,343	413,824
1956-60	695,445	568,652	1,264,097	481,235	377,840	859,075	214,210	190,812	405,022
1961-65	1,107,419	896,215	2,003,634	906,956	696,790	1,603,746	200,463	199,425	399,888
1963	211,430	169,297	380,727	175,211	133,871	309,082	36,219	35,426	71,645
1964	252,669	199,688	452,357	200,611	152,404	353,015	52,058	47,284	99,342
1965	292,184	232,952	525,136	237,673	182,607	420,280	54,511	50,345	104,856
1966	313,219	244,372	557,591	268,313	202,352	470,665	44,906	42,020	86,926
1967	361,345	275,825	637,170	311,727	233,534	545,261	49,618	42,291	91,909

(a) Excludes movements of defence personnel from September 1939 to June 1947.

**Excess of arrivals over departures**

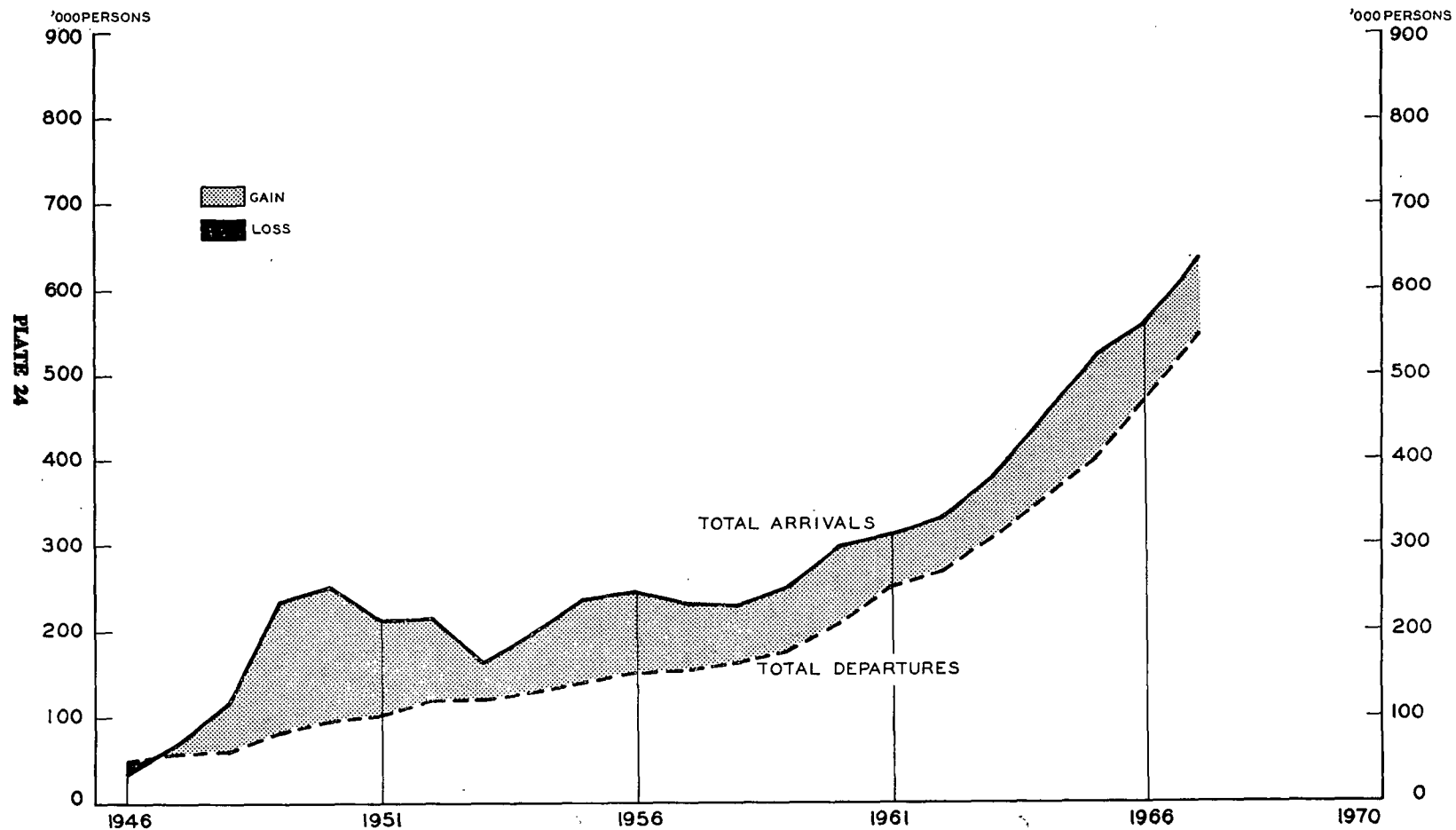
The excess of total overseas arrivals over departures is one of the elements of population increase taken into account in preparing the estimated population for other than census dates (see page 117 of this chapter). It is necessary to use statistics of total overseas arrivals and departures for this purpose, because Australian population statistics relate to the total population present in Australia at the date of the census or estimate, and not the population normally resident in Australia (which would include those temporarily overseas and exclude those temporarily visiting Australia). The two following tables give particulars of the net gain or loss of population due to overseas migration, according to age and marital status and according to country of birth.

**EXCESS OF ARRIVALS OVER DEPARTURES, BY SEX: AGE DISTRIBUTION AND MARITAL STATUS, AUSTRALIA, 1966 AND 1967**

Age and marital status	1966			1967		
	Males	Females	Persons	Males	Females	Persons
<b>AGE DISTRIBUTION</b>						
Age last birthday on arrival or departure—						
0-4	5,936	5,647	11,583	6,081	5,525	11,606
5-14	10,843	9,489	20,332	9,686	8,451	18,137
15-24	9,431	8,457	17,888	12,237	9,650	21,887
25-44	15,661	13,779	29,440	17,673	13,366	31,039
45-64	2,204	3,310	5,514	2,990	3,973	6,963
65 and over	831	1,338	2,169	951	1,326	2,277
<b>Total</b>	<b>44,906</b>	<b>42,020</b>	<b>86,926</b>	<b>49,618</b>	<b>42,291</b>	<b>91,909</b>
<b>MARITAL STATUS</b>						
Never married—						
Under 15 years of age	16,779	15,136	31,915	15,767	13,976	29,743
15 years of age and over	10,265	6,096	16,361	15,033	7,409	22,442
Married	17,369	18,877	36,246	18,108	19,126	37,234
Widowed	258	1,526	1,784	249	1,272	1,521
Divorced	235	385	620	461	508	969
<b>Total</b>	<b>44,906</b>	<b>42,020</b>	<b>86,926</b>	<b>49,618</b>	<b>42,291</b>	<b>91,909</b>

# OVERSEAS ARRIVALS AND DEPARTURES: AUSTRALIA

1946 TO 1967



**EXCESS OF ARRIVALS OVER DEPARTURES, BY SEX: COUNTRY OF BIRTH  
AUSTRALIA, 1965 TO 1967**

Country of birth	1965			1966			1967		
	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons
<b>Africa—</b>									
Commonwealth countries . . . . .	471	443	914	723	583	1,306	963	854	1,817
South Africa . . . . .	142	182	324	98	134	232	127	186	313
Other . . . . .	645	629	1,274	817	594	1,411	798	673	1,471
<b>America—</b>									
Canada . . . . .	394	358	752	247	360	607	420	323	743
Other Commonwealth countries . . . . .	72	55	127	83	74	157	126	52	178
United States of America . . . . .	1,009	760	1,769	644	608	1,252	1,425	874	2,299
Other . . . . .	179	137	316	159	189	348	146	163	309
<b>Asia—</b>									
Ceylon, India, Pakistan . . . . .	647	598	1,245	956	1,010	1,966	1,188	1,042	2,230
Malaysia and Singapore . . . . .	140	213	353	326	382	708	573	521	1,094
Other Commonwealth countries . . . . .	164	272	436	347	438	785	333	485	818
China . . . . .	17	255	272	35	160	195	213	331	544
Other . . . . .	1,389	958	2,347	1,905	1,398	3,303	2,375	1,826	4,201
<b>Europe—</b>									
Malta . . . . .	2,527	2,241	4,768	296	728	1,024	256	513	769
United Kingdom and Ireland . . . . .	34,134	31,671	65,805	30,617	28,706	59,323	25,893	22,978	48,871
Other Commonwealth countries . . . . .	130	112	242	141	120	261	110	103	213
Austria . . . . .	322	237	559	170	141	311	127	87	214
Germany . . . . .	441	640	1,081	528	502	1,030	1,287	1,049	2,336
Greece . . . . .	7,867	7,612	15,479	4,899	4,646	9,545	1,971	2,302	4,273
Italy . . . . .	3,784	3,965	7,749	3,979	3,706	7,685	6,071	5,128	11,199
Netherlands . . . . .	295	268	563	210	246	456	370	254	624
Poland . . . . .	503	612	1,115	289	311	600	131	303	434
Spain . . . . .	277	212	489	212	176	388	346	237	583
Yugoslavia . . . . .	3,604	2,170	5,774	4,252	2,835	7,087	4,438	3,067	7,505
Other . . . . .	971	738	1,709	1,262	934	2,196	2,293	1,697	3,990
<b>Oceania—</b>									
Australia . . . . .	-7,881	-7,217	-15,098	-10,897	-9,349	-20,246	-7,096	-6,435	-13,531
New Zealand . . . . .	1,461	1,432	2,893	1,934	1,648	3,582	3,405	2,693	6,098
Papua and New Guinea . . . . .	377	301	678	156	256	412	456	322	778
Other Commonwealth countries . . . . .	-52	79	27	77	148	225	155	113	268
Other . . . . .	4	44	48	39	20	59	18	18	36
At sea or not stated . . . . .	478	368	846	402	316	718	700	532	1,232
<b>Grand total . . . . .</b>	<b>54,511</b>	<b>50,345</b>	<b>104,856</b>	<b>44,906</b>	<b>42,020</b>	<b>86,926</b>	<b>49,618</b>	<b>42,291</b>	<b>91,909</b>

Minus sign (—) indicates excess of departures over arrivals.

### Classification of travellers

Since 1 July 1924 overseas travellers have been classified according to declared intention in regard to residence into two principal categories, distinguishing movements for short terms from movements for longer periods (including permanently). Prior to 1957 these categories were *temporary* and *permanent*. Thereafter the categories were entitled *short-term* and *permanent and long-term*, but the basis of classification was not changed and the figures are directly comparable for the whole period. For short-term movements overseas visitors and Australian residents were identified separately.

Revised questions for travellers were introduced in mid-1958, and these enabled the separation, from 1 January 1959, of permanent from other long-term movements and also the identification among the permanent departures of former settlers departing.

The principal categories of travellers are as follows.

**Permanent movement**—consists of persons arriving with stated intention of settling permanently in Australia (settlers), and Australian residents departing with stated intention of residing permanently abroad; the latter include *former settlers*, i.e. persons who, on departure from Australia, stated that they had come to Australia to settle, had stayed for a period of twelve months or more and were now departing permanently.

**Long-term movement**—consists of the arrival of visitors and the departure of residents with stated intention of staying (in Australia or in a country abroad respectively) for twelve months or more; and the departure of visitors and the return of Australian residents who have stayed (in Australia or in a country abroad respectively) for twelve months or more.

**Short-term movement**—consists of all other movements, including the movement of Australian troops irrespective of period of stay, and U.S. troops visiting Australia on rest and recreation leave.

This classification is based on statements made by the traveller on arrival in, or departure from, Australia. They represent the traveller's intention at that time. Many travellers subsequently change their intentions, and this must be borne in mind in interpreting the statistics.

The numbers so classified since 1 January 1941, on the basis of declared intention as to residence, and since 1 January 1961, on this basis supplemented by additional particulars as to stated purpose of journey, are as follows.

### OVERSEAS ARRIVALS AND DEPARTURES: CLASSIFICATION OF TRAVELLERS AUSTRALIA, 1941 TO 1967

#### ARRIVALS

Period	Permanent and long-term movement				Short-term movement				
	Per- manent  Settlers arriving	Long-term  Residents returning	Overseas visitors arriving	Total permanent and long-term arrivals	Residents returning	Overseas visitors arriving			Total arrivals
						In transit	Other	Total	
1941-45	n.a.	n.a.	n.a.	32,624	11,150	n.a.	n.a	20,151	63,925
1946-50	n.a.	n.a.	n.a.	457,988	108,736	n.a.	n.a.	135,196	701,920
1951-55	n.a.	n.a.	n.a.	570,090	216,949	77,825	163,002	240,827	1,027,866
1956-60	n.a.	n.a.	n.a.	615,767	309,611	84,206	254,513	338,719	1,264,097
1961-65	575,992	111,288	73,848	761,128	585,203	143,424	513,879	657,303	2,003,634
1963	108,150	22,205	13,813	144,168	111,182	27,348	98,029	125,377	380,727
1964	134,464	23,641	15,020	173,125	131,354	31,583	116,295	147,878	452,357
1965	147,507	26,260	17,497	191,264	160,544	34,071	139,257	173,328	525,136
1966	141,033	28,292	19,234	188,559	181,770	32,593	154,669	187,262	557,591
1967	135,019	35,655	21,637	192,311	223,038	36,299	185,522	221,821	637,170

#### DEPARTURES

Period	Permanent and long-term movement						Short-term movement		
	Permanent		Total per- manent depart- ures	Long-term		Total per- manent and long-term depart- ures	Residents departing	Overseas visitors departing	Total de- partures
	Former settlers departing	Other residents departing		Residents departing	Overseas visitors departing				
1941-45	n.a.	n.a.	n.a.	n.a.	n.a.	22,399	9,163	24,554	56,116
1946-50	n.a.	n.a.	n.a.	n.a.	n.a.	105,968	101,787	141,081	348,836
1951-55	n.a.	n.a.	n.a.	n.a.	n.a.	155,509	212,978	245,555	614,042
1956-60	n.a.	n.a.	n.a.	n.a.	n.a.	210,807	306,118	342,150	859,075
1961-65	48,491	33,989	82,480	189,526	63,593	335,599	593,119	675,028	1,603,746
1963	9,102	7,176	16,278	38,317	12,729	67,324	112,427	129,331	309,082
1964	7,828	7,255	15,083	40,958	13,085	69,126	133,248	150,641	353,015
1965	14,803	6,110	20,913	46,313	12,429	79,655	161,692	178,933	420,280
1966	18,343	7,965	26,308	54,321	11,999	92,628	183,161	194,876	470,665
1967	22,302	8,502	30,804	52,148	12,801	95,753	217,746	231,762	545,261

#### Permanent movement

In the following paragraphs particulars are given of the persons who on arrival in Australia stated that they came intending to settle, and of Australian residents who on their departure from Australia stated their intention of residing permanently abroad, classified according to country of birth, nationality, occupation, age, marital status, State or Territory of intended residence (arrivals) or of last residence (departures), and country of birth and of last residence (arrivals) or of intended residence (departures).

*Country of birth*

**OVERSEAS ARRIVALS AND DEPARTURES—PERMANENT MOVEMENT  
COUNTRY OF BIRTH, AUSTRALIA, 1966 AND 1967  
(Persons)**

Country of birth	1966			Departures	1967			Departures
	Arrivals				Arrivals			
	Assisted (a)	Other	Total		Assisted (a)	Other	Total	
Africa—								
Commonwealth countries . . .	311	1,002	1,313	106	290	1,524	1,814	102
South Africa . . . . .	198	217	415	162	239	228	467	155
Other . . . . .	228	1,371	1,599	77	189	1,388	1,577	68
America—								
Commonwealth countries . . .	81	889	970	254	252	835	1,087	325
United States of America . . .	1,276	1,082	2,358	753	1,140	1,237	2,377	827
Other . . . . .	301	87	388	38	105	230	335	51
Asia—								
Ceylon, India, Pakistan . . .	392	1,598	1,990	126	387	1,838	2,225	113
Other Commonwealth countries . . .	284	1,076	1,360	268	253	1,354	1,607	244
Other . . . . .	177	3,229	3,406	370	317	4,080	4,397	301
Europe—								
Malta . . . . .	1,271	906	2,177	263	1,007	737	1,744	375
United Kingdom and Ireland . . . . .	68,685	6,821	75,506	11,806	59,488	7,096	66,584	15,340
Other Commonwealth countries . . .	263	33	296	21	219	34	253	61
Austria . . . . .	721	111	832	193	574	112	686	180
Belgium . . . . .	257	37	294	43	252	37	289	52
Germany . . . . .	3,035	576	3,611	926	3,227	708	3,935	818
Greece . . . . .	3,498	9,827	13,325	301	2,672	5,332	8,004	431
Italy . . . . .	885	10,559	11,444	436	1,370	13,223	14,593	530
Netherlands . . . . .	1,439	568	2,007	755	1,293	452	1,745	770
Poland . . . . .	185	805	990	190	199	497	696	157
Spain . . . . .	569	664	1,233	138	759	362	1,121	73
Yugoslavia . . . . .	2,580	5,434	8,014	299	3,434	5,126	8,560	396
Other . . . . .	2,562	1,183	3,745	815	3,953	1,389	5,342	827
Oceania—								
Australia . . . . .	356	315	671	6,812	305	231	536	7,516
New Zealand . . . . .	33	2,320	2,353	980	44	3,774	3,818	981
Other Commonwealth countries . . .	6	184	190	146	9	355	364	70
Other . . . . .		27	27	5	1	20	21	12
At sea or not stated . . . . .	150	369	519	25	269	573	842	29
Total . . . . .	89,743	51,290	141,033	26,308	82,247	52,772	135,019	30,804

(a) For details of assisted passage schemes see pages 159–64.

*Nationality*

**OVERSEAS ARRIVALS AND DEPARTURES—PERMANENT MOVEMENT  
NATIONALITY, AUSTRALIA, 1966 AND 1967  
(Persons)**

Nationality	1966			Departures	1967			Departures
	Arrivals				Arrivals			
	Assisted (a)	Other	Total		Assisted (a)	Other	Total	
British—								
Country of citizenship—								
Australia . . . . .	233	638	871	6,810	223	1,109	1,332	8,470
Canada . . . . .	54	778	832	297	60	825	885	344
Ceylon, India, Pakistan . . .	3	1,224	1,227	47	2	1,498	1,500	35
Ireland(b) . . . . .	1,045	181	1,226	205	1,261	191	1,452	315
Malta . . . . .	1,170	869	2,039	246	909	730	1,639	365
New Zealand . . . . .	8	2,433	2,441	915	23	4,031	4,054	901
South Africa(b) . . . . .	104	131	235	119	135	159	294	106
United Kingdom and colonies . . . . .	66,785	8,018	74,803	10,533	58,025	8,553	66,578	13,835
Other countries . . . . .	45	843	888	271	87	730	817	212
Citizenship not stated . . . . .	3,449	637	4,086	1,942	2,498	700	3,198	1,599
Total, British . . . . .	72,896	15,752	88,648	21,385	63,223	18,526	81,749	26,182

For footnotes see next page.

**OVERSEAS ARRIVALS AND DEPARTURES—PERMANENT MOVEMENT  
NATIONALITY, AUSTRALIA, 1966 AND 1967—continued  
(Persons)**

Nationality	1966				1967			
	Arrivals			Departures	Arrivals			Departures
	Assisted (a)	Other	Total		Assisted (a)	Other	Total	
American (U.S.) . . . . .	1,322	1,166	2,488	908	1,193	1,309	2,502	942
Austrian . . . . .	710	101	811	186	591	102	693	162
Belgian . . . . .	255	33	288	38	215	30	245	40
Dutch . . . . .	1,503	646	2,149	787	1,359	511	1,870	713
German . . . . .	2,782	506	3,288	845	3,006	636	3,642	702
Greek . . . . .	3,498	10,090	13,588	295	2,693	5,488	8,181	357
Italian . . . . .	882	10,810	11,692	396	1,427	13,303	14,930	443
Lebanese . . . . .	2	1,742	1,744	17	7	2,066	2,073	17
Polish(c) . . . . .	56	757	813	102	86	456	542	86
Russian(d) . . . . .	2	120	122	16	1	100	101	29
Spanish . . . . .	578	646	1,224	142	804	383	1,187	68
Yugoslav . . . . .	2,327	5,439	7,766	213	3,237	5,203	8,440	256
Stateless(e) . . . . .	398	314	712	24	300	160	460	61
Other . . . . .	2,532	3,168	5,700	954	4,105	4,299	8,404	746
<b>Grand total . . . . .</b>	<b>89,743</b>	<b>51,290</b>	<b>141,033</b>	<b>26,308</b>	<b>82,247</b>	<b>52,772</b>	<b>135,019</b>	<b>30,804</b>

(a) For details of assisted passage schemes see pages 159-64. (b) Included with 'British nationality' for the purpose of this table. (c) Includes Stateless, who were formerly Polish. (d) Includes 'Stateless' who were formerly Russian. (e) Stateless, former nationality not stated, or other than Polish or Russian.

**Occupation**

**OVERSEAS ARRIVALS AND DEPARTURES—PERMANENT MOVEMENT  
OCCUPATION AND SEX, AUSTRALIA, 1966 AND 1967**

Occupation group	1966				1967			
	Arrivals		Departures		Arrivals		Departures	
	Males	Females	Males	Females	Males	Females	Males	Females
Professional, technical, and related workers . . . . .	4,229	2,438	1,530	964	4,236	2,456	1,671	1,026
Administrative, executive, and managerial workers . . . . .	2,250	278	624	61	2,214	288	669	86
Clerical workers . . . . .	2,159	4,806	624	1,328	2,349	4,879	684	1,632
Sales workers . . . . .	1,785	1,038	440	236	1,757	854	529	279
Farmers, fishermen, hunters, timber getters, and related workers . . . . .	2,871	193	213	3	2,275	60	271	10
Miners, quarrymen, and related workers . . . . .	527	..	68	..	340	..	79	..
Workers in transport and communication . . . . .	3,349	409	473	69	3,217	384	542	93
Craftsmen and production-process workers . . . . .	18,662	2,425	3,710	411	18,773	2,198	4,210	513
Labourers . . . . .	8,906	..	786	..	8,523	..	982	..
Service (protective and other), sport, and recreation workers . . . . .	1,948	5,258	378	343	1,886	4,349	420	448
Occupation inadequately described or not stated . . . . .	3,380	336	238	32	2,772	335	265	36
Persons not in work force—								
Children and students . . . . .	24,672	22,245	4,400	3,940	23,595	21,544	5,141	4,769
Others . . . . .	1,073	25,796	329	5,108	1,102	24,633	382	6,067
<b>Total . . . . .</b>	<b>75,811</b>	<b>65,222</b>	<b>13,813</b>	<b>12,495</b>	<b>73,039</b>	<b>61,980</b>	<b>15,845</b>	<b>14,959</b>

*Age and marital status***OVERSEAS ARRIVALS AND DEPARTURES—PERMANENT MOVEMENT, BY SEX, AGE DISTRIBUTION, AND MARITAL STATUS, AUSTRALIA, 1967**

Age last birthday at time of arrival or departure	Arrivals				Departures			
	Never married	Married	Widowed or divorced	Total	Never married	Married	Widowed or divorced	Total
MALES								
0- 4 . . . . .	9,118	..	..	9,118	1,951	..	..	1,951
5-14 . . . . .	12,516	..	..	12,516	2,729	..	..	2,729
15-24 . . . . .	14,645	2,951	27	17,623	2,277	488	4	2,769
25-44 . . . . .	7,607	19,428	368	27,403	1,688	4,531	87	6,306
45-64 . . . . .	345	4,662	268	5,275	159	1,418	97	1,674
65 and over . . . . .	39	799	266	1,104	21	279	116	416
Total . . . . .	44,270	27,840	929	73,039	8,825	6,716	304	15,845
FEMALES								
0- 4 . . . . .	8,472	..	..	8,472	1,779	..	..	1,779
5-14 . . . . .	11,621	..	..	11,621	2,637	..	..	2,637
15-24 . . . . .	7,924	6,652	38	14,614	1,507	1,273	13	2,793
25-44 . . . . .	2,525	16,981	462	19,968	810	4,320	158	5,288
45-64 . . . . .	293	3,856	1,452	5,601	143	1,214	432	1,789
65 and over . . . . .	75	570	1,059	1,704	37	201	435	673
Total . . . . .	30,910	28,059	3,011	61,980	6,913	7,008	1,038	14,959
PERSONS								
0- 4 . . . . .	17,590	..	..	17,590	3,730	..	..	3,730
5-14 . . . . .	24,137	..	..	24,137	5,366	..	..	5,366
15-24 . . . . .	22,569	9,603	65	32,237	3,784	1,761	17	5,562
25-44 . . . . .	10,132	36,409	830	47,371	2,498	8,851	245	11,594
45-64 . . . . .	638	8,518	1,720	10,876	302	2,632	529	3,463
65 and over . . . . .	114	1,369	1,325	2,808	58	480	551	1,089
Total . . . . .	75,180	55,899	3,940	135,019	15,738	13,724	1,342	30,804

*State or Territory of intended residence (arrivals) or last residence (departures).* The following table shows the number of settlers arriving in Australia by State or Territory of intended residence and the number of Australian residents departing permanently by State or Territory of last residence, for the years 1965 to 1967. Settlers are asked, on or before arrival, the State or Territory of Australia in which they next intend to stay for twelve months or more. The statements represent the settlers' intentions at the time and may not be realised. The allocation to States and Territories in the table is based on these statements, except that settlers proceeding to the migrant reception centre, Bonegilla, Victoria, are allocated, as far as is practicable, to the State or Territory of their placement from the centre. Residents departing permanently are asked the State or Territory in which they last stayed for twelve months or more.

**OVERSEAS ARRIVALS AND DEPARTURES—PERMANENT MOVEMENT  
SETTLERS ARRIVING AND RESIDENTS DEPARTING, BY STATE OR TERRITORY OF  
INTENDED RESIDENCE (ARRIVALS) OR LAST RESIDENCE (DEPARTURES), 1965 TO 1967  
(Persons)**

<i>State or Territory of intended residence (arrivals) or last residence (departures)</i>	<i>Settlers arriving</i>			<i>Residents departing</i>		
	<i>1965</i>	<i>1966</i>	<i>1967</i>	<i>1965</i>	<i>1966</i>	<i>1967</i>
New South Wales . . . . .	51,158	45,803	44,281	6,835	8,217	9,936
Victoria . . . . .	43,636	39,372	37,735	5,043	5,997	6,920
Queensland . . . . .	10,556	8,768	9,309	2,213	2,830	3,261
South Australia . . . . .	22,567	21,116	14,331	2,422	3,437	4,265
Western Australia . . . . .	11,612	16,694	18,379	1,581	2,020	2,309
Tasmania . . . . .	1,787	1,899	1,878	349	458	462
Northern Territory . . . . .	376	340	327	97	99	114
Australian Capital Territory . . . . .	1,156	1,123	1,145	314	388	440
Not stated(a) . . . . .	4,659	5,918	7,634	2,059	2,862	3,097
<i>Total</i> . . . . .	<i>147,507</i>	<i>141,033</i>	<i>135,019</i>	<i>20,913</i>	<i>26,308</i>	<i>30,804</i>

(a) Includes also settlers passing through the migrant reception centre who were not placed in time for allocation to States.



*Country of birth and country of residence.* The principal countries of birth combined with the principal countries of last residence (arrivals) or intended residence (departures) are shown in the following table for the year 1967.

**OVERSEAS ARRIVALS AND DEPARTURES—PERMANENT MOVEMENT  
SETTLERS ARRIVING AND RESIDENTS DEPARTING, BY COUNTRY OF BIRTH AND  
COUNTRY OF LAST RESIDENCE (ARRIVALS) OR  
OF INTENDED RESIDENCE (DEPARTURES), 1967**

Country of birth	Country of last residence (arrivals) or intended residence (departures)(a)									
	Canada	Malta	New Zealand	United Kingdom and Ireland	Germany	Greece	Italy	South Africa	U.S.A.	Yugoslavia and other countries
<b>SETTLERS ARRIVING</b>										
Australia . . . . .	5	6	51	295	12	4	25	8	49	3
Canada . . . . .	627	..	36	105	9	..	1	7	42	..
Malta . . . . .	10	1,577	5	140	1	..	..	1	2	..
New Zealand . . . . .	9	5	3,621	102	5	..	2	1	15	..
United Kingdom and Ireland . . . . .	233	20	1,043	63,748	147	7	11	148	183	..
Other Commonwealth countries . . . . .	26	1	77	1,133	26	5	7	30	10	..
Germany . . . . .	23	..	13	266	3,347	11	21	25	46	3
Greece . . . . .	3	..	9	27	149	7,679	7	3	3	18
Italy . . . . .	18	1	9	156	293	..	13,698	4	16	5
Netherlands . . . . .	10	1	51	37	11	..	..	19	15	..
Yugoslavia . . . . .	11	..	11	43	537	8	198	5	10	5,512
Other European countries . . . . .	63	1	80	629	469	8	93	37	63	14
United States of America . . . . .	21	..	26	66	13	3	7	4	2,081	1
Other countries . . . . .	26	6	61	332	123	46	91	272	51	3
At sea or not stated . . . . .	1	2	5	71	45	14	216	5	4	137
<b>Total . . . . .</b>	<b>1,086</b>	<b>1,621</b>	<b>5,098</b>	<b>67,150</b>	<b>5,187</b>	<b>7,785</b>	<b>14,377</b>	<b>569</b>	<b>2,590</b>	<b>5,696</b>
<b>AUSTRALIAN RESIDENTS DEPARTING PERMANENTLY</b>										
Australia . . . . .	718	82	1,910	1,591	124	45	93	73	656	11
Canada . . . . .	219	..	11	23	..	..	1	2	36	..
Malta . . . . .	12	318	4	30	..	..	5	..	4	..
New Zealand . . . . .	17	1	863	37	2	..	2	1	12	..
United Kingdom and Ireland . . . . .	238	6	1,608	12,765	5	..	7	171	197	..
Other Commonwealth countries . . . . .	22	1	34	118	2	2	5	32	18	..
Germany . . . . .	51	..	45	39	534	..	2	14	67	..
Greece . . . . .	63	..	8	4	2	262	..	1	81	1
Italy . . . . .	50	..	12	7	3	..	382	1	52	1
Netherlands . . . . .	34	..	63	11	5	..	..	44	40	..
Yugoslavia . . . . .	93	..	17	2	9	..	10	1	44	204
Other European countries . . . . .	136	1	64	66	30	1	18	9	155	..
United States of America . . . . .	8	..	1	11	1	..	..	8	736	..
Other countries . . . . .	39	..	24	49	2	7	10	106	61	..
At sea or not stated . . . . .	1	1	3	7	1	1	2	1	4	..
<b>Total . . . . .</b>	<b>1,701</b>	<b>410</b>	<b>4,667</b>	<b>14,760</b>	<b>720</b>	<b>318</b>	<b>537</b>	<b>464</b>	<b>2,163</b>	<b>217</b>

(a) For a period of twelve months or more.

*Former settlers and other residents departing permanently—country of intended residence.* The principal countries of intended residence of persons departing permanently during the years 1966 and 1967 are shown in the following table for 'former settlers' departing permanently (see definition on page 153) and other residents departing permanently.

**OVERSEAS DEPARTURES—PERMANENT MOVEMENT  
COUNTRY OF INTENDED RESIDENCE<sup>(a)</sup>  
AUSTRALIA, 1966 AND 1967**

Country of intended residence(a)	1966			1967		
	Former settlers	Other residents	Total	Former settlers	Other residents	Total
Canada . . . . .	741	506	1,247	884	817	1,701
New Zealand . . . . .	2,861	2,522	5,383	2,601	2,066	4,667
Papua and New Guinea . . . . .	187	1,447	1,634	200	1,464	1,664
United Kingdom and Ireland . . . . .	9,362	1,283	10,645	13,050	1,710	14,760
Other Commonwealth countries . . . . .	514	562	1,076	731	656	1,387
<i>Total, Commonwealth countries</i>	<i>13,665</i>	<i>6,320</i>	<i>19,985</i>	<i>17,466</i>	<i>6,713</i>	<i>24,179</i>
Germany . . . . .	679	142	821	580	140	720
Italy . . . . .	345	112	457	422	115	537
Netherlands . . . . .	561	174	735	564	175	739
Other European countries . . . . .	1,230	237	1,467	1,239	264	1,503
United States of America . . . . .	1,128	683	1,811	1,357	806	2,163
Other countries . . . . .	735	297	1,032	674	289	963
<i>Total, foreign countries</i>	<i>4,678</i>	<i>1,645</i>	<i>6,323</i>	<i>4,836</i>	<i>1,789</i>	<i>6,625</i>
<b>Grand total . . . . .</b>	<b>18,343</b>	<b>7,965</b>	<b>26,308</b>	<b>22,302</b>	<b>8,502</b>	<b>30,804</b>

(a) For a period of twelve months or more.

### Assisted migration into Australia

Detailed statistics of assisted migration into Australia are shown in *Australian Immigration: Consolidated Statistics* published by the Department of Immigration.

Immigration has always been a major factor in Australia's economic growth. Since the 1939-45 War immigration programmes have been pursued as a central feature of government policies for national development. Since 1945 successive Australian governments have borne a substantial part of the passage costs of selected migrants from overseas countries. This assistance has in some cases been matched or partly matched by contributions from the government of the emigration country and from international funds. The trend in recent years has been towards financial assistance by the Australian Government with a nominal personal contribution by the migrant. The basis of operation has varied from country to country—bilateral migration agreements have been negotiated with some countries, migration arrangements have been made through the Intergovernmental Committee for European Migration (ICEM) with other countries, and in other instances unilateral assistance has been given by the Australian Government. The following table shows the numbers of persons who were assisted to come to Australia by the Australian Government under all assisted passage schemes during the period 1946 to 1967.

#### ASSISTED MIGRATION: AUSTRALIA, 1946 TO 1967

Period	Nominated and selected (assisted) arrivals
1946-50 . . . . .	273,195
1951-55 . . . . .	275,241
1956-60 . . . . .	305,517
1961-65 . . . . .	337,132
1963 . . . . .	62,914
1964 . . . . .	79,604
1965 . . . . .	93,653
1966 . . . . .	89,743
1967 . . . . .	82,247

Details of the joint scheme of assisted immigration arrived at by agreement between the Commonwealth and State Governments, which operated from 1920 to 1939, were published in earlier issues of the Year Book (see No. 38, page 576). After the outbreak of hostilities in 1939 it was decided to discontinue the grant of assisted passages for the duration of the war.

### Migration from Britain

At the conclusion of the 1939-45 War two migration agreements were negotiated between the Australian and British Governments and signed on 5 March 1946. These agreements came into operation on 31 March 1947 and provided respectively for granting free passages to British ex-service-men and their dependants and assisted passages to other residents of Britain wishing to settle permanently in Australia. The free passage agreement was terminated on 28 February 1955, but the assisted passage agreement has continued in operation by renewal from time to time. It is now valid until 31 May 1972.

*Assisted passages.* Under the present agreement the British Government contributes £Stg150,000 per annum towards the cost of the movement of migrants to Australia. Each migrant 19 years of age or over contributes £Stg10 towards his passage costs. Migrants under 19 years of age make no contribution. The Australian Government meets the balance of the overall transport costs.

Eligibility for consideration for assisted passages is confined generally to citizens of the United Kingdom and colonies, normally resident in Britain. Within those broad conditions of eligibility the following six categories of applicants may be granted assisted passages under current arrangements: *personal nominees*—persons sponsored by relatives or friends already established in Australia who provide accommodation for their nominees; *group nominees*—workers and their dependants sponsored or selected to meet labour requirements specifically notified by public and private employers; *Commonwealth nominees*—workers and their dependants selected to meet labour requirements within industry generally in Australia; *'bring out a Briton' nominees*—persons sponsored by special voluntary committees formed throughout Australia to stimulate the flow of British migrants through community effort; *single men and women and married couples without children*—persons with a minimum capital of £Stg25 each, selected without specific nomination, who are prepared to make their own accommodation arrangements upon arrival; *'nest-egg families'*—families with a minimum capital of £Stg1,000 and prepared to make their own accommodation arrangements on arrival.

Hostels are operated by the Australian Government and also by the State Governments to provide transit or temporary accommodation for certain groups of newly arrived migrants.

*Number of arrivals.* The numbers of British migrants who came to Australia under the Free and Assisted Passage Agreement during the period January 1947 to June 1967 are given in the following table according to the State or Territory of intended residence.

UNITED KINGDOM FREE AND ASSISTED PASSAGE AGREEMENT: NUMBER OF  
MIGRANTS(a), STATES AND TERRITORIES OF INTENDED RESIDENCE  
JANUARY 1947 TO JUNE 1967

Period	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	A.C.T. and N.T.	Cwth nomi- nees(b)	Total
January 1947 to June 1962	88,483	98,369	45,929	36,070	35,389	12,483	4,067	107,148	427,938
1962-63	8,093	6,118	2,980	4,512	5,294	677	271	13,755	41,700
1963-64	12,272	10,791	4,272	10,509	4,894	909	316	10,667	54,630
1964-65	18,353	12,737	4,997	11,155	5,259	1,166	336	16,685	70,688
1965-66	15,256	10,249	4,410	12,205	8,510	1,173	393	18,558	70,754
1966-67	13,894	9,652	4,040	9,330	12,040	1,209	395	20,010	70,570
<b>Total, January 1947 to June 1967</b>	<b>156,351</b>	<b>147,916</b>	<b>66,628</b>	<b>83,781</b>	<b>71,386</b>	<b>17,617</b>	<b>5,778</b>	<b>186,823</b>	<b>736,280</b>

(a) Includes child migrants as shown below.

(b) See text above for explanation.

### Child migration from Britain

The pre-war arrangements under which child migrants were brought to Australia under the sponsorship of various religious denominations and voluntary organisations were resumed in 1947. Under current arrangements these young migrants receive assisted passages and special maintenance provisions involving the British Government and the Australian and State Governments. From the beginning of 1947 to 30 June 1967 a total of 8,144 British child and youth migrants arrived under sponsorship, 5,730 to New South Wales, 1,375 to Western Australia, 584 to Victoria, and 455 to other States. These arrivals are included in the table above.

**Maltese migration**

The Australian Government and the Government of Malta entered into an agreement on 28 April 1965, under which financial assistance is granted jointly towards the movement to Australia of approved migrants from Malta. The agreement supersedes earlier ones signed in 1948 and 1956. ICEM (Intergovernmental Committee for European Migration—see page 163) is associated with the assisted migration arrangements under this agreement. Up to 30 June 1967 a total of 38,386 Maltese had arrived under the assisted passage scheme.

**Netherlands migration**

Details of early agreements between the Netherlands and Australia were given in Year Books No. 39, page 567, and No. 53, page 196. The Australia-Netherlands Migration and Settlement Agreement was signed on 1 June 1965. In accordance with Article II of that agreement an 'Australian-Netherlands Assisted Passage Migration Arrangement' was negotiated to come into force concurrently with the agreement. The agreement is for a basic period of five years but will then continue indefinitely subject to termination at one year's notice by either Party. The 'Arrangement' will normally run for the same period as the 'Agreement' but may be terminated at 180 days notice by either party. Passage costs are met by the Australian Government, the migrants and in certain circumstances the Netherlands Government. The Australian Government is responsible for the reception of assisted migrants and for general assistance towards their settlement in Australia. ICEM is associated with the assisted migration arrangements under this agreement. Up to 30 June 1967, 71,236 Dutch assisted migrants had arrived in Australia.

**Italian migration**

A migration agreement between Italy and Australia came into operation on 1 August 1951 and continued in operation under extensions until 31 January 1964. A new Migration and Settlement Agreement was signed on 26 September 1967, and an assisted migration arrangement was entered into in conjunction with this Agreement. This provides for the movement to Australia under assisted passage arrangements of selected Italian workers in categories and numbers as agreed between the Australian and Italian Governments. Dependants of selected workers are also moved under assisted passage arrangements. Provision is also made for movement as nominated dependants of the wives and dependent children of any selected workers who move in advance of their families; and of the unmarried sisters, unmarried daughters, fiancées and proxy wives of Australian residents. Passage costs are met by the migrant and the Australian Government. The Australian Government is responsible for the reception of assisted migrants and for general assistance towards their settlement in Australia. ICEM is associated with the assisted migration arrangements under this agreement. Up to 30 June 1967, 41,596 Italian assisted migrants had settled in Australia.

**German migration**

On 29 August 1952 a migration agreement was signed between the Federal Republic of Germany and Australia under which selected German workers and their dependants could receive assisted passages to Australia. The agreement was renewed for five years from 29 August 1957, but assisted migration under the terms of the 1957 agreement continued until a new agreement was signed on 21 June 1965, to run indefinitely subject to one year's notice of termination by either party. Passage costs are met by the migrant, the Australian Government, and in certain circumstances the German Government. The Australian Government is responsible for the reception of assisted migrants and for general assistance towards their settlement in Australia. ICEM is associated with the assisted migration arrangements under this agreement. Up to 30 June 1967, 81,869 German assisted migrants had settled in Australia.

**Austrian migration**

Late in 1952 arrangements were made between the Austrian Government, the Australian Government and ICEM under which selected Austrian workers and their dependants could receive assisted passages to Australia. These arrangements still apply. Contributions to passage costs are made by the migrant and the Australian Government. The Australian Government is responsible for the reception of assisted migrants and for general assistance towards their settlement in Australia. Up to 30 June 1967, 19,865 Austrian assisted migrants had settled in Australia.

**Greek migration**

Late in 1952 arrangements were made between the Greek Government, the Australian Government and ICEM under which selected Greek workers and their dependants could receive assisted passages to Australia. These arrangements still apply. Contributions to passage costs are made by the migrant

and the Greek and Australian Governments. The Australian Government is responsible for the reception of assisted migrants and for general assistance towards their settlement in Australia. Up to 30 June 1967, 45,309 Greek assisted migrants had settled in Australia.

#### **Spanish migration**

In 1958 arrangements were made between the Spanish Government, the Australian Government and ICEM under which selected Spanish workers and their dependants could receive assisted passages to Australia. At the request of the Spanish authorities these arrangements, so far as workers are concerned, were temporarily suspended in March 1963. Since then certain female dependants nominated by Spanish assisted migrants already in Australia have continued to arrive in Australia as assisted migrants. Negotiations with the Spanish Government have resulted in approval in principle of the resumption of worker movements on a limited scale. Dependants of selected workers will also be moved under assisted passage arrangements. The Australian Government is responsible for the reception of assisted migrants and for general assistance towards their settlement in Australia. Up to 30 June 1967, 8,168 Spanish assisted migrants had settled in Australia.

#### **Belgian migration**

On 1 February 1961 arrangements were made between the Belgian Government, the Australian Government and ICEM under which selected Belgian workers and their dependants could receive assisted passages to Australia. These arrangements still apply. Contributions to passage costs are made by the migrant and the Belgian and Australian Governments. The Australian Government is responsible for the reception of assisted migrants and for general assistance towards their settlement in Australia. Up to 30 June 1967, 2,062 Belgian assisted migrants had settled in Australia.

#### **Turkish migration**

An agreement with the Turkish Government was signed on 5 October 1967 to run indefinitely subject to termination at ninety days notice by either Government. This provides for the assisted passage movement to Australia of selected Turkish workers and their dependants. The numbers and categories of workers to be moved annually will be as agreed from time to time between the Australian and Turkish Governments. Passage costs are met by the Australian Government and the migrant. Transportation and reception arrangements are the responsibility of the Australian Government.

#### **Refugee migration**

By agreement with the International Refugee Organization, Geneva, on 21 July 1947, Australia undertook to provide resettlement opportunities for displaced persons. A total of 170,700 displaced persons arrived in Australia under this agreement in the following years. The International Refugee Organization was terminated in 1951 and refugee problems became the responsibility of the United Nations High Commissioner for Refugees, whose office was created by the United Nations specifically for this purpose. At about the same time ICEM was established partly to provide arrangements for the actual resettlement overseas of refugees, particularly with regard to transport.

Australia has continued to provide resettlement opportunities for refugees from Europe and elsewhere. In the period from 1945 to 30 June 1967, 311,363 refugees had been resettled in Australia including the 170,700 displaced persons mentioned above. Of the total number of refugees received by Australia since the end of World War II up to 30 June 1967, 215,247 have received financial assistance from the Australian Government towards their passage costs.

#### **General Assisted Passage Scheme**

This scheme has operated since 10 September 1954 and provides for a contribution by Australia towards passage costs to be granted to selected British and non-British workers and their dependants from a number of countries. Australia provides for the reception of migrants accepted under this scheme and for general assistance towards their settlement in Australia. From 1 July 1966 a new assisted migration programme, the Special Passage Assistance Programme, has operated in Europe. As a result the General Assisted Passage Scheme now applies only to applicants resident outside Europe, e.g. the United States of America, South America and Africa. Up to 30 June 1967, 34,663 assisted migrants had settled in Australia under the General Assisted Passage Scheme.

#### **Special Passage Assistance Programme**

This programme has applied since 1 July 1966 to selected applicants residing in Britain, Ireland, continental Europe (excluding Luxembourg and Communist countries) and Malta. Persons in those countries who are already eligible under existing assisted passage schemes are not considered for the Special Passage Assistance Programme. Approved applicants may make their own travel arrangements

or travel by sea or air on bookings made by the Department of Immigration. For those persons who travel privately and are over nineteen years, a contribution of \$25 towards passage costs is required and the extent of assistance is up to \$335. Persons under nineteen years make no contribution and receive assistance up to \$360. Approved migrants who travel on departmentally arranged bookings make the same passage contribution, and the balance of movement costs from their place of residence overseas to the port of disembarkation in Australia is met by the Australian Government. Up to 30 June 1967, 4,603 assisted migrants had settled in Australia under the Programme.

#### The Intergovernmental Committee for European Migration (ICEM)

This Committee, like the office of the United Nations High Commissioner for Refugees, was established to perform functions that had formerly been carried out by the International Refugee Organization. In addition to assuming responsibility for the resettlement of refugees, ICEM has been concerned also with the movements of national migrants from Europe. Australia was one of the sixteen foundation members of the Committee; there are now thirty-two member countries including the British Commonwealth countries of Australia, New Zealand, the United Kingdom and Malta.

The three main functions of ICEM are: the movement of national migrants and the provision of related services; the resettlement of refugees and the provision of related services; and developmental activities and technical co-operation (this includes activities such as language teaching, vocational and orientation training, and in particular measures to facilitate the acceptance of European migrants by Latin American countries).

Each member government is required to contribute an agreed percentage of the Committee's administrative expenditure. Contributions to its operational expenditure are voluntary and governments may stipulate the terms and conditions under which they are to be used.

Up to 30 June 1967 ICEM had moved 1,491,937 persons, of whom 473,055 (339,564 nationals and 133,491 refugees) had departed for Australia.

#### Summary of arrivals of assisted migrants

The following table shows the number of assisted migrants who arrived in Australia in each of the last five financial years and since January 1947. All arrivals included in this table have obtained some financial assistance from the Australian Government towards payment of their passage money. Transport to Australia for the migrants concerned has been arranged on ships under charter to the Department of Immigration, ships and aircraft under charter to the Intergovernmental Committee for European Migration, and normal commercial shipping and airlines. The arrivals under these schemes include a small number of nationals of countries other than those referred to, and stateless persons.

#### ARRIVALS UNDER ASSISTED MIGRATION SCHEMES: AUSTRALIA, JANUARY 1947 TO JUNE 1967

<i>Assisted migration scheme</i>	<i>January 1947 to June 1962</i>	<i>1962-63</i>	<i>1963-64</i>	<i>1964-65</i>	<i>1965-66</i>	<i>1966-67</i>	<i>January 1947 to June 1967</i>
Austrian . . . . .	16,750	372	594	769	824	556	19,865
Belgian . . . . .	738	414	318	155	201	236	2,062
General Assisted							
Passage(a) . . . . .	18,314	1,874	3,327	3,605	4,924	2,619	34,663
German . . . . .	67,847	1,967	2,987	2,870	3,266	2,932	81,869
Greek . . . . .	31,557	2,051	2,633	3,507	2,673	2,888	45,309
Italian . . . . .	40,448	227	195	158	281	287	41,596
Maltese . . . . .	27,443	1,501	2,665	3,655	2,368	754	38,386
Netherlands . . . . .	63,713	1,352	1,585	1,551	1,652	1,383	71,236
Refugee . . . . .	206,241	1,375	2,040	1,609	2,177	1,805	215,247
Spanish . . . . .	3,554	4,326	78	49	70	91	8,168
Special Passage Assist- ance Programme . . . . .	..	..	..	..	..	4,603	4,603
United Kingdom . . . . .	427,938	41,700	54,630	70,688	70,754	70,570	736,280
Other schemes . . . . .	28,682	..	..	..	..	..	28,682
<b>Total . . . . .</b>	<b>933,225</b>	<b>57,159</b>	<b>71,052</b>	<b>88,616</b>	<b>89,190</b>	<b>88,724</b>	<b>1,327,966</b>

(a) Mostly Scandinavians, U.S. Americans, and British nationals from countries other than the United Kingdom.

### Immigration Advisory, Planning and Publicity Councils

Three bodies have been established to advise the Minister for Immigration on the social, economic and publicity aspects of the immigration programme.

The *Immigration Advisory Council*, established in 1947, consists of representatives of major national organisations (e.g. the Australian Council of Trade Unions, the Returned Servicemen's League of Australia, and the National Youth Council) and advises the Minister on the social aspects of immigration. The *Immigration Planning Council*, established in 1949, consists of eminent persons chosen in their own right; it advises the Minister on the economic considerations affecting the immigration programme. The *Immigration Publicity Council*, established in 1962, advises on publicity and publications used in Australia and overseas. Its members represent the press (including the foreign language newspapers), radio and television interests.

### Professional migration

The Department of Immigration, working in close co-operation with the Department of Labour and National Service, provides a special service, including advisory staff in London, to encourage immigration of professionally qualified persons by giving advice and information on prospects in Australia and by putting such applicants in touch with Australian employers.

The number of professional applicants is growing (the majority come from the United Kingdom). Some difficulties being experienced in the recognition of foreign qualifications are yet to be resolved.

## The regulation of immigration into Australia

### Powers and legislation of the Commonwealth

Under section 51 (xix), (xxvii) and (xxviii) of the Commonwealth Constitution, the Parliament of the Commonwealth is empowered to make laws with respect to immigration, emigration, aliens and the influx of criminals. Immigration into Australia is regulated by the *Migration Act 1958-1966* which came into force on 1 June 1959.

Any immigrant entering Australia after the commencement of the Act without having been granted an 'entry permit' or who is not within an exempted class is a prohibited immigrant. Exempted persons include diplomatic, consular and trade representatives of other countries, and seamen who enter with leave while their ships are in Australian ports. For the purposes of the Migration Act an immigrant includes a person entering for temporary stay.

An entry permit is normally granted at the port of entry by means of a stamp in the traveller's passport or equivalent travel document. No form of application is involved. Temporary permits are granted to visitors and persons whose stay is to be of limited duration. For other persons permits are issued without limitation as to stay. A person who is refused an entry permit must not be permitted (by the carrier company) to enter Australia; otherwise the carrier company is liable to a fine of \$1,000.

The Act regulates the deportation of persons who enter Australia without an entry permit, who overstay their approved period of residence or who are convicted of crimes. It also contains provisions relating to the emigration of children and Aborigines.

The Act does *not* affect passport or visa requirements for travel to Australia. All persons who, prior to the 1958 Act, had been required before embarkation to obtain visas or other kinds of authority to proceed to Australia, are still required to obtain them. Likewise, persons who have not had to obtain prior authority to proceed to Australia are not now required to obtain such authority solely as a result of the Act. Persons previously allowed to enter without production of passports—notably British people arriving from New Zealand—are still able to do so.

The *Aliens Act 1947-1966* provides that a register of aliens shall be maintained for every State and mainland Territory of Australia. Unless exempted, aliens 16 years of age and over are required to register with the Department of Immigration and to notify the Department of their address, occupation, or employment during the month of September each year. They are required to notify marriage within thirty days of marriage taking place. The Act provides also that the consent of the Department must be obtained before an alien may change his surname.

The *Immigration (Guardianship of Children) Act* 1946–1966 provides that the Minister for Immigration becomes the legal guardian of every person under the age of 21 years who enters Australia (except for certain exempted groups) other than in the charge of, or for the purpose of living in the care of, a parent or adult relative. It is primarily administered through the child welfare authorities in each State and mainland Territory who, as the Minister's delegates under the Act, supervise the welfare of each 'immigrant child'.

### Conditions of immigration into Australia

*Admission of non-Europeans.* Australia's immigration policy is based on the need to maintain a predominantly homogeneous population. It is fundamental to the policy that people coming to Australia for residence should be capable, both economically and socially, of ready integration into the community.

Australia does not exclude from residence persons of other than European origin. Immigration laws and policy permit the Minister to authorise their entry, taking into account the qualifications of persons wishing to settle here, their ability to integrate readily into the community, and other aspects including considerations of a humanitarian nature and broad national interest.

The present policy provides, *inter alia*, that:

non-Europeans, who are the spouses, unmarried minor children, aged parents or fiancées of Australian citizens, and of other British subjects already having resident status, or eligible to enter with such status, may be admitted for permanent residence (the non-European wife and unmarried minor children of a European alien in similar circumstances may also be admitted for residence);

non-Europeans who have already been admitted under temporary permit but with the expectation of indefinite stay may, after completing five years' residence, qualify to apply for resident status and subsequently for citizenship.

The following examples of persons may be considered for entry for settlement, accompanied by their wives and children, on the basis of their general suitability and possession of qualifications positively useful to Australia:

persons with specialised technical skills for appointments for which local residents are not available;

persons of high attainment in the arts and sciences, or of prominent achievement in other ways; persons nominated by responsible authorities or institutions for specific important professional appointments, which otherwise would remain unfilled;

executives, technicians, and other specialists who have spent substantial periods in Australia—for example, with the branches here of large Asian companies—and who have qualifications or experience in positive demand here;

businessmen who in their own countries have been engaged in substantial international trading and would be able to carry on such trade from Australia;

persons who have been of particular and lasting help to Australia's interest abroad in trade or in other ways;

persons who by former residence in Australia or by association with Australia have demonstrated an interest in or identification with Australia that should make their future residence here feasible.

In addition to visitors and students, provision exists also for the entry on a limited temporary residence basis of staffs of companies, professional, technical and specialist personnel, and of persons coming for medical treatment, religious training, or as sportsmen and entertainers, and in other miscellaneous categories.

*Private students.* Young people may enter Australia for the purpose of study, irrespective of their countries of origin. The greater proportion of such private students in Australia are from Asia, the Pacific area and, to a lesser extent, from the continent of Africa (there are at present more than 10,000 Asian and other non-European private students in Australia). The objective is to provide the opportunity for young people in these areas to come to Australia for advanced secondary, tertiary,



and other post-secondary study and training which will result in qualifications in demand and of use in their countries. The student, as well as meeting other requirements of entry, must have the capacity to undertake the course of study proposed and produce evidence of enrolment and assurances as to maintenance and accommodation. The student is admitted with temporary residence status and is required to acknowledge that he is obliged to return home on completing the approved course of study or training and that authority for stay and for extensions of stay as a student is dependent upon satisfactory academic progress.

*Persons of European race.* Maltese, Cypriots, and aliens of European race desiring to settle permanently in Australia are required to obtain authority for admission from the Department of Immigration or an Australian overseas post. Their admission under the present policy is subject to clearance on health, character, and security grounds, and depends on their suitability as settlers generally.

### Passports

Australian passports are issued under the *Passports Act* 1938–1966 and Passport Regulations. Passports are obtainable on application at offices of the Commonwealth Department of Immigration in each State, the Northern Territory, and the Australian Capital Territory, from overseas offices of that Department, from any Australian diplomatic or consular mission abroad, or from the office of any Australian Government Trade Commissioner overseas. Applicants for passports must furnish evidence of their identity and nationality and pay a fee of four dollars. Approximately 95,000 Australian passports are issued each year in Australia and abroad.

### Citizenship and naturalisation

#### Commonwealth legislation

Statistics of persons granted Australian citizenship are shown in *Australian Immigration: Consolidated Statistics* published by the Department of Immigration.

The *Nationality and Citizenship Act* 1948–1967 commenced on Australia Day (26 January) 1949, and repealed all previous Commonwealth legislation on this subject. The most significant effect of the Act was the creation for the first time of the status of 'Australian Citizen'. In this respect the Act was complementary to citizenship legislation passed or about to be passed by other countries of the British Commonwealth. All Australian citizens, and the citizens of other countries of the British Commonwealth, are declared to be British subjects. The status of 'British subject' flows from the possession of citizenship of one of the Commonwealth countries. It could best be described as the connecting link between the citizenship of the countries of the British Commonwealth. Australian citizenship was automatically acquired as from 26 January 1949 by persons who were British subjects at that date and who either (a) were born in Australia or New Guinea; or (b) were naturalised in Australia; or (c) had been residing in Australia during the five years immediately preceding 26 January 1949; or (d) were born outside Australia of fathers to whom (a) or (b) above applied (provided the persons concerned had entered Australia without being placed under any immigration restriction); or (e) were women who had been married to men who became Australian citizens under the above headings (provided that the women concerned had entered Australia without being placed under immigration restriction). For the purposes of the Act, 'Australia' includes the Territories of the Commonwealth which are not Trust Territories. By an amendment of the Act in 1950 it was further provided that Nauru should be treated in the same manner as New Guinea.

Citizenship may be acquired in the following ways: (a) by birth in Australia; (b) by birth outside Australia, of a father who is an Australian citizen, provided that the birth is registered at an Australian Consulate; (c) by registration—Certificates of Registration as Australian citizens may be granted by the Minister to British subjects or Irish citizens who make application and satisfy the Minister that they can comply with specified requirements as to residence in Australia, good character and intention to reside permanently in Australia; (d) by naturalisation—Certificates of Naturalisation as Australian citizens may be granted by the Minister to aliens and protected persons who make application and can comply with requirements somewhat similar to those previously required under the *Nationality Act* 1920–1946. Requirements for naturalisation are: (i) as a rule five years residence

in Australia, but residence in other British countries or service under a British Government may be accepted (special concessions in the matter of residence qualifications are available to persons who have enlisted in the Australian armed forces; (ii) the applicants must have an adequate knowledge of the responsibilities and privileges of citizenship. Certificates do not take effect until the applicant takes the oath of allegiance. The oath is now taken, and citizenship is conferred, at public ceremonies held in the locality of the applicant's place of residence, and presided over by the mayor or equivalent head of the local government authority.

The declaration of intention to apply for naturalisation, which was introduced by the original Act of 1948, is no longer compulsory, although it can still be made if an intending applicant so desires. This change was made by the amending Acts of 1955 and 1959 under the provisions of which aliens may lodge applications on completing 4½ years residence, but may not be granted naturalisation until five years' residence has been completed.

Under the Act the independence of married women in nationality matters is recognised, and British nationality was restored to those women who had lost it through marriage to aliens prior to 26 January 1949. Such women automatically became Australian citizens if they were born in Australia or had lived here for the five years prior to the commencement of the Act. Marriage does not affect a woman's nationality. Alien women who marry Australian citizens may, however, be naturalised under somewhat easier conditions than those which apply to other aliens.

#### Persons granted Australian citizenship by naturalisation and registration during 1966-67

The following tables show the previous nationalities and the countries in which persons were ordinarily resident immediately before entering Australia and New Guinea, of persons:

- (a) who became Australian citizens by reason of the grant of certificates of naturalisation; and
- (b) who became Australian citizens by reason of the grant of certificates of registration.

#### PERSONS GRANTED AUSTRALIAN CITIZENSHIP BY NATURALISATION, 1966-67

##### NATIONALITY

Albanian . . . . .	21	Italian . . . . .	11,100
Argentinian . . . . .	11	Japanese . . . . .	30
Australian protected person . . . . .	83	Jordanian . . . . .	17
Austrian . . . . .	674	Korean . . . . .	2
Belgian . . . . .	90	Latvian . . . . .	345
Brazilian . . . . .	3	Lebanese . . . . .	410
British protected person . . . . .	13	Lithuanian . . . . .	191
Bulgarian . . . . .	32	Norwegian . . . . .	49
Burmese . . . . .	20	Peruvian . . . . .	3
Byelorussian . . . . .	39	Polish . . . . .	2,398
Chilean . . . . .	4	Portuguese . . . . .	51
Chinese . . . . .	1,086	Romanian . . . . .	164
Colombian . . . . .	1	Russian . . . . .	949
Cuban . . . . .	2	Spanish . . . . .	145
Czechoslovak . . . . .	239	Stateless . . . . .	462
Danish . . . . .	196	Swedish . . . . .	56
Dutch . . . . .	4,597	Swiss . . . . .	158
Equadorian . . . . .	1	Syrian . . . . .	10
Estonian . . . . .	105	Thai . . . . .	11
Filipino . . . . .	20	Turkish . . . . .	33
Finnish . . . . .	311	Ukrainian . . . . .	425
French . . . . .	156	United Arab Republic . . . . .	78
German . . . . .	3,401	United States American . . . . .	151
Greek . . . . .	4,673	Uruguayan . . . . .	1
Honduran . . . . .	1	Venezuelan . . . . .	9
Hungarian . . . . .	1,502	Vietnamese . . . . .	1
Indonesian . . . . .	15	Western Samoan . . . . .	3
Iranian . . . . .	11	Yugoslav . . . . .	4,028
Iraqi . . . . .	4		
Israeli . . . . .	202	Total . . . . .	38,793

PERSONS GRANTED AUSTRALIAN CITIZENSHIP BY NATURALISATION, 1966-67  
*continued*

COUNTRIES IN WHICH THESE PERSONS ORDINARILY RESIDED IMMEDIATELY  
BEFORE ENTERING AUSTRALIA OR NEW GUINEA

Albania . . . . .	8	Macao . . . . .	6
Algeria . . . . .	6	Malaysia . . . . .	14
Argentina . . . . .	26	Malta . . . . .	1
Austria . . . . .	1,934	Monaco . . . . .	3
Bahrain . . . . .	1	Morocco . . . . .	3
Belgium . . . . .	172	Nauru . . . . .	2
Bermuda . . . . .	1	New Caledonia . . . . .	21
Brazil . . . . .	55	New Hebrides . . . . .	3
British Solomon Islands . . . . .	10	New Zealand . . . . .	49
Bulgaria . . . . .	11	Nigeria . . . . .	2
Burma . . . . .	28	Norway . . . . .	54
Canada . . . . .	47	Pakistan . . . . .	2
Chile . . . . .	9	Panama . . . . .	5
China . . . . .	1,075	Papua and New Guinea . . . . .	103
Colombia . . . . .	4	Paraguay . . . . .	1
Congo . . . . .	3	Peru . . . . .	5
Cuba . . . . .	2	Philippines . . . . .	41
Cyprus . . . . .	6	Poland . . . . .	893
Czechoslovakia . . . . .	70	Portugal . . . . .	33
Denmark . . . . .	210	Portuguese Timor . . . . .	3
Estonia . . . . .	17	Rhodesia . . . . .	7
Ethiopia . . . . .	14	Romania . . . . .	114
Fiji . . . . .	15	Saudi Arabia . . . . .	3
Finland . . . . .	290	Singapore . . . . .	17
France . . . . .	454	South Africa . . . . .	25
Germany . . . . .	6,103	Spain . . . . .	122
Ghana . . . . .	5	Sudan . . . . .	3
Gibraltar . . . . .	3	Sweden . . . . .	101
Greece . . . . .	4,306	Switzerland . . . . .	295
Guam . . . . .	1	Syria . . . . .	9
Honduras . . . . .	1	Tahiti . . . . .	2
Hong Kong . . . . .	882	Tanzania . . . . .	10
Hungary . . . . .	465	Thailand . . . . .	9
Iceland . . . . .	2	The Netherlands . . . . .	4,482
India . . . . .	16	Tonga . . . . .	2
Indonesia . . . . .	140	Tunisia . . . . .	3
Iran . . . . .	7	Turkey . . . . .	47
Iraq . . . . .	3	Ukraine . . . . .	19
Ireland . . . . .	2	Union of Soviet Socialist Republics . . . . .	61
Israel . . . . .	252	United Arab Republic . . . . .	499
Italy . . . . .	12,225	United Kingdom . . . . .	293
Japan . . . . .	37	United States of America . . . . .	185
Jordan . . . . .	20	Uruguay . . . . .	6
Kenya . . . . .	12	Venezuela . . . . .	37
Korea . . . . .	2	Vietnam . . . . .	3
Kuwait . . . . .	4	West Indies . . . . .	1
Latvia . . . . .	43	Western Samoa . . . . .	1
Lebanon . . . . .	405	Yugoslavia . . . . .	1,740
Libya . . . . .	20		
Lithuania . . . . .	29		
		<b>Total . . . . .</b>	<b>38,793</b>

The numbers of persons affected by certificates of naturalisation granted in 1966-67 according to State or Territory of residence were as follows: New South Wales, 13,887; Victoria, 14,699; Queensland, 2,754; South Australia, 4,252; Western Australia, 2,043; Tasmania, 431; Northern Territory, 92; Australian Capital Territory, 529; New Guinea, 106; Total, 38,793.

## PERSONS GRANTED AUSTRALIAN CITIZENSHIP BY REGISTRATION, 1966-67

## NATIONALITY

Citizens of—		Citizens of—	
Canada . . . . .	52	Rhodesia . . . . .	37
Ceylon . . . . .	322	Singapore . . . . .	16
Cyprus . . . . .	209	South Africa . . . . .	203
India . . . . .	331	Trinidad and Tobago . . . . .	2
Ireland . . . . .	105	United Kingdom and Colonies . . . . .	3,201
Malaysia . . . . .	101	British—country of citizenship other or not stated . . . . .	318
Malta . . . . .	340		
New Zealand . . . . .	86		
Pakistan . . . . .	36	Total . . . . .	5,359

## COUNTRIES IN WHICH THESE PERSONS ORDINARILY RESIDED IMMEDIATELY BEFORE ENTERING AUSTRALIA OR NEW GUINEA

Algeria . . . . .		Libya . . . . .	
Argentina . . . . .	4	Macao . . . . .	2
Austria . . . . .	1	Malaysia . . . . .	162
Bahamas . . . . .	1	Malta . . . . .	340
Belgium . . . . .	6	Mauritius . . . . .	67
Brazil . . . . .	4	Mexico . . . . .	1
Burma . . . . .	63	Morocco . . . . .	1
Canada . . . . .	52	Nauru . . . . .	1
Ceylon . . . . .	338	New Hebrides . . . . .	2
Channel Islands . . . . .	2	New Zealand . . . . .	116
China . . . . .	18	Nigeria . . . . .	6
Cyprus . . . . .	209	Pakistan . . . . .	45
Czechoslovakia . . . . .	1	Papua and New Guinea . . . . .	7
Ethiopia . . . . .	3	Philippines . . . . .	2
Fiji . . . . .	93	Qatar . . . . .	4
Finland . . . . .	1	Rhodesia . . . . .	55
France . . . . .	7	Saudi Arabia . . . . .	4
Germany . . . . .	13	Seychelles . . . . .	3
Ghana . . . . .	6	Singapore . . . . .	121
Gibraltar . . . . .	1	South Africa . . . . .	205
Greece . . . . .	6	Spain . . . . .	2
Hong Kong . . . . .	163	Sweden . . . . .	2
Hungary . . . . .	1	Tanzania . . . . .	7
India . . . . .	479	The Netherlands . . . . .	13
Indonesia . . . . .	22	Trinidad . . . . .	2
Iran . . . . .	2	Tunisia . . . . .	3
Ireland . . . . .	70	Uganda . . . . .	1
Israel . . . . .	2	United Arab Republic . . . . .	155
Italy . . . . .	4	United Kingdom . . . . .	2,371
Japan . . . . .	1	United States of America . . . . .	16
Jordan . . . . .	1	Venezuela . . . . .	8
Kenya . . . . .	47	West Indies . . . . .	2
Kuwait . . . . .	1		
Lebanon . . . . .	4	Total . . . . .	5,359

## Persons granted Australian citizenship by naturalisation, 1945 to 1967

The numbers of persons granted Australian citizenship by naturalisation from January 1945 to June 1967, according to previous nationality, are shown in the following table.

**PERSONS GRANTED AUSTRALIAN CITIZENSHIP BY NATURALISATION  
JANUARY 1945 TO JUNE 1967**

<i>Former nationality</i>	<i>Persons granted citizenship</i>	<i>Former nationality</i>	<i>Persons granted citizenship</i>
Albanian . . . . .	1,100	Lebanese . . . . .	4,397
Austrian . . . . .	8,180	Lithuanian . . . . .	8,443
Belgian . . . . .	528	Norwegian . . . . .	1,175
Bulgarian . . . . .	1,239	Polish . . . . .	63,623
Chinese . . . . .	4,613	Portuguese . . . . .	422
Czechoslovak . . . . .	11,185	Romanian . . . . .	2,898
Danish . . . . .	2,190	Russian . . . . .	9,675
Dutch . . . . .	64,414	Spanish . . . . .	1,144
Estonian . . . . .	5,924	Stateless . . . . .	14,588
Finnish . . . . .	2,047	Swedish . . . . .	637
French . . . . .	2,009	Swiss . . . . .	1,665
German . . . . .	41,397	Syrian . . . . .	145
Greek . . . . .	45,815	Turkish . . . . .	286
Hungarian . . . . .	28,669	Ukrainian . . . . .	19,614
Indonesian . . . . .	162	United Arab Republic . . . . .	451
Israeli . . . . .	3,770	United States American . . . . .	1,180
Italian . . . . .	123,942	Yugoslav . . . . .	36,043
Japanese . . . . .	650	Others . . . . .	2,815
Latvian . . . . .	17,682	<b>Total . . . . .</b>	<b>534,717</b>

#### **Migrant integration**

An integration programme operates to aid the social settlement of migrants into the Australian community. The programme includes the following activities.

English-language tuition is arranged by the Department of Immigration to assist migrants to overcome their language problems. The services provided include instruction in Europe, English-language classes on board ships travelling to Australia, and adult education classes within Australia which are also supplemented by radio and correspondence courses. A course of instruction on gramophone records which has been developed from the radio course is also available. Approximately 613,000 migrants have taken advantage of the English-language facilities. By 30 June 1967, 13,985 migrants had enrolled in 908 language classes throughout Australia and 6,927 students had enrolled to receive instruction through the correspondence lessons.

Field surveys are undertaken which embrace sociological research studies of migrant integration and furnish information on such questions as the habits and behaviour of migrants within the community, the practical difficulties they experience during the process of integration, their ability to understand and accept their obligations and responsibilities as members of the Australian community, and the attitude of the native-born to the migrant.

Qualified social workers are employed in each State Branch of the Department of Immigration and provide a social welfare counselling and referral service. Welfare Officers are also employed in several Branches as part of this service. Accommodation Advisory Officers are available to provide information to migrants in Melbourne and Sydney.

The Good Neighbour Movement operates as a voluntary organisation throughout Australia to assist in the integration of migrants. Membership of the movement is made up of hundreds of community organisations whose activities are co-ordinated by State Councils. The Commonwealth Government assists each Council financially through grants to cover administrative expenses.

*Citizenship Conventions.* The principal occasion for community and Government to meet together and discuss the major issues involved in the successful integration of the migrant population is provided by the Citizenship Conventions convened in Canberra from time to time by the Commonwealth Government. Delegates from a wide range of community organisations and from Commonwealth and State Governments participate. The subjects discussed relate not only to the integration of migrants but also to the concept of Australian citizenship and the role of immigration in Australia's development.

### Population of External Territories

Ordinances of the individual External Territories under the control of Australia provide for a census of the population to be taken on the day prescribed for the taking of a census in the Commonwealth of Australia. The following table shows the population of the Territories of Christmas Island, Cocos (Keeling) Islands, Norfolk Island, Papua, the Trust Territory of New Guinea and the Trust Territory of Nauru at the censuses of 30 June 1961 and 30 June 1966.

On 31 January 1968 Nauru became an independent State (*see* page 23, also the chapter The Territories of Australia).

#### POPULATION: EXTERNAL TERRITORIES, 30 JUNE 1961 AND 1966

Territory	Census 30 June 1961			Census 30 June 1966		
	Males	Females	Persons	Males	Females	Persons
Christmas Island .	1,963	1,136	3,099	2,154	1,232	3,386
Cocos (Keeling) Islands .	333	273	606	375	309	684
Norfolk Island .	421	423	844	563	584	1,147
Papua—						
Indigenous population	(a)	(a)	(a)	(b)310,153	(b)281,806	(b)591,959
Non-indigenous population .	5,490	4,304	9,794	8,307	6,070	14,377
<i>Total, Papua</i> .	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>318,460</i>	<i>287,876</i>	<i>606,336</i>
Trust Territory of New Guinea—						
Indigenous population .	(a)	(a)	(a)	(b)810,154	(b)748,209	(b)1,558,363
Non-indigenous population .	9,158	6,378	15,536	11,744	8,547	20,291
<i>Total, New Guinea</i> .	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>821,898</i>	<i>756,756</i>	<i>1,578,654</i>
Trust Territory of Nauru(c) .	3,019	1,594	4,613	3,701	2,354	6,055

(a) Not available. The indigenous population was estimated to be: Papua, 513,648; Trust Territory of New Guinea, 1,433,383. (b) The 1966 Census of Papua-New Guinea was the first to include the indigenous population, and was based upon a 10 per cent sample of rural villages in the two Territories. (c) Independent State, 31 January 1968.

Further particulars concerning the indigenous populations of the Territories are given in the chapter The Territories of Australia.

### International statistics of population

In the following tables the population, density, rate of growth, natural increase and masculinity are shown in respect of all countries which had an estimated population of at least one million persons in 1966, plus Papua. The source of these figures is the 1966 *Demographic Yearbook*, which is prepared and published by the Statistical Office of the United Nations. The tables include figures varying in reliability and accuracy, there being considerable variation in the quality of demographic statistics as between countries, but this information has been shown to provide some form of guide as to the magnitude and trend of population movements in overseas countries.

Where the information available to the Statistical Office of the United Nations relates to only part of the population of a country, the population characteristic (e.g. rate of growth), or vital statistics rate (e.g. marriages), has been omitted from the tables, and this is indicated by a footnote. For fuller particulars of the differences in the quality of the statistics and their reliability and for other qualifications, reference should be made to the detailed explanations contained in the *Demographic Yearbook* of the Statistical Office of the United Nations (*see* particularly Technical Notes on Statistical Tables and footnotes to the tables).

**Population, rate of growth and density: world, continents and regions**

The following table shows for the world, continents, and regions, estimated population in 1930, 1940, 1950, 1958, 1960, and 1966. The annual rate of increase (per cent), together with the average annual increase, during the period 1960-1966, is also shown. Population figures have been adjusted for under enumeration and errors in estimation. In preparing these figures, the Population Branch of the United Nations revises, from time to time, the estimates for previous years as new data become available, for example, from a census. The figures are estimates only, and as such are subject to a substantial margin of error.

**POPULATION, DENSITY, AND RATE OF INCREASE FOR THE WORLD AND CONTINENTS—SELECTED YEARS**

*(Source: United Nations Demographic Yearbook, 1966)*

Continent and region	Population						Annual rate of increase 1960-66 (per cent)	Average annual increase 1960-66 (millions)	Density (persons per square mile) 1966
	Estimates of mid-year population (millions)								
	1930	1940	1950	1958	1960	1966			
World total	2,070	2,295	2,517	2,904	3,005	3,356	1.9	58.5	65
Africa	164	191	222	265	278	318	2.3	6.7	28
Western Africa	48	58	67	84	88	100	2.3	2.0	41
Eastern Africa	46	54	63	73	76	88	2.4	2.0	36
Northern Africa	39	44	53	63	66	76	2.4	1.7	23
Middle Africa	21	23	25	28	30	33	1.9	0.5	13
Southern Africa	10	12	14	17	18	21	2.5	0.5	21
America	242	274	329	395	413	470	2.2	9.5	28
Northern America	134	144	166	192	199	217	1.5	3.0	26
Latin America	108	130	163	203	214	253	2.8	6.5	31
Tropical South America	55	67	84	107	113	135	2.9	3.7	26
Middle America	22	27	35	45	48	59	3.5	1.8	62
Temperate South America	19	22	27	31	33	36	1.8	0.5	23
Caribbean	12	14	17	20	20	23	2.4	0.5	256
Asia	1,120	1,244	1,381	1,604	1,659	1,868	2.0	34.8	176
East Asia	591	634	684	772	794	864	1.4	11.7	189
Mainland region	501	533	563	636	654	710	1.4	9.3	166
Japan	64	71	83	92	93	99	1.0	1.0	692
Other East Asia	26	30	38	44	47	55	2.8	1.3	554
South Asia	529	610	697	832	865	1,004	2.5	23.2	166
Middle South Asia	371	422	479	566	587	681	2.5	15.7	262
South East Asia	127	150	173	210	219	255	2.6	6.0	148
South West Asia	31	38	45	56	59	68	2.4	1.5	39
Europe	355	380	392	418	425	449	0.9	4.0	236
Western Europe	108	113	123	132	135	145	1.2	1.7	381
Southern Europe	93	103	108	116	117	124	0.8	1.2	243
Eastern Europe	89	96	88	95	97	101	0.6	0.7	264
Northern Europe	65	68	73	75	76	79	0.7	0.5	124
Oceania	10.0	11.1	12.7	15.0	15.7	17.9	2.1	0.37	5
Australia and New Zealand	8.0	8.7	10.1	12.1	12.6	14.3	2.0	0.28	5
Melanesia	1.6	1.8	1.9	2.1	2.2	2.5	2.4	0.05	13
Polynesia and Micronesia	0.4	0.6	0.7	0.8	0.9	1.1	3.0	0.03	93
Union of Soviet Socialist Republics	179	195	180	207	214	233	1.4	3.2	26

**Population, density, rate of growth, natural increase, and masculinity of selected countries**

Certain details of the population of the more populous countries within continental groups are shown in the following table. As explained above, reference should be made to the detailed comments contained in the United Nations *Demographic Yearbook*, 1966, regarding geographical units used, boundaries of areas, reliability of estimates, etc.

## POPULATION, DENSITY, RATE OF INCREASE, NATURAL INCREASE, AND MASCULINITY—SELECTED COUNTRIES

(Source: United Nations *Demographic Yearbook*, 1966)

Country	Population mid-year 1966 (thousands)	Density 1966 (persons per square mile)	Annual rate of increase 1958-66 (per cent)	Natural increase		Masculinity at latest census	
				Year	Rate (per thousand population)	Year	Rate (number of males per 100 females)
<b>Africa—</b>							
Nigeria . . . . .	58,600	163	2.0	..	(a)	..	(a)
United Arab Republic, Egypt . . . . .	30,147	78	2.5	..	(a)	..	(a)
Ethiopia . . . . .	23,000	49	1.7	..	(a)	1960-61	89.1
South Africa . . . . .	18,298	39	2.4	..	(a)	1960	101.1
Congo, Democratic Republic of . . . . .	(b)15,986	18	2.2	1955-58	23.0	1955-58	(b)94.4
Sudan . . . . .	13,940	16	2.8	1956	33.2	1956	102.2
Morocco . . . . .	13,451	78	2.6	1962	27.4	1960	99.9
Algeria . . . . .	12,150	13	2.0	..	(a)	..	(a)
<b>Tanzania—</b>							
Tanganyika . . . . .	10,377	28	1.9	1957	21-22	1957	92.9
Zanzibar . . . . .	340	334	1.6	..	(a)	1958	111.2
Kenya . . . . .	9,643	44	2.9	1962	30.0	1962	98.1
Ghana . . . . .	7,945	85	2.7	1960	23-28	1960	102.2
Uganda . . . . .	7,740	85	2.5	1959	22.0	1959	100.9
Mozambique . . . . .	7,040	23	1.3	..	(a)	1960	91.8
Madagascar . . . . .	6,810	31	3.6	..	(a)	..	(a)
Angola . . . . .	5,360	10	1.7	..	(a)	1960	103.7
Cameroon . . . . .	5,350	28	2.2	1964-65	(c)24.2	..	(a)
Upper Volta . . . . .	4,955	47	2.4	1960-61	18.0	1960-61	100.8
Mali . . . . .	4,654	10	2.2	1960-61	31.0	..	(a)
Tunisia . . . . .	4,470	70	1.2	1959	21.0	1966	103.6
Southern Rhodesia . . . . .	4,400	28	3.2	1962	34.1	1962	(b)106.2
Malawi . . . . .	4,035	88	2.4	..	(a)	1966	90.5
Ivory Coast . . . . .	3,920	31	3.0	1961	22.8	..	(a)
Zambia . . . . .	3,837	13	3.0	1963	31.8	1963	(b)98.4
Guinea . . . . .	3,608	39	2.8	1955	22.0	1955	(b)90.8
Senegal . . . . .	3,580	47	2.4	1960-61	26.6	1960-61	97.1
Niger . . . . .	3,433	8	3.2	1959-60	25.0	1959-60	94.3
Burundi . . . . .	3,274	306	2.0	1965	20.5	1965	97.5
Rwanda . . . . .	(b)3,200	313	3.1	1957	38.3	..	(a)
Somalia . . . . .	2,580	10	3.4	..	(a)	..	(a)
Dahomey . . . . .	2,410	54	2.7	1961	28.0	1961	(b)96.1
Sierra Leone . . . . .	2,403	85	1.2	..	(a)	1963	98.4
Togo . . . . .	1,680	78	2.7	1961	26.0	1958-60	91.9
Libya . . . . .	1,677	3	3.7	..	(a)	1964	108.3
Central African Republic . . . . .	1,385	5	2.2	1959-60	18.0	1959-60	(b)91.5
<b>North America—</b>							
United States of America . . . . .	196,920	54	1.5	1966	9.0	1960	97.1
Mexico . . . . .	44,145	57	3.4	1960-65	34.0	1960	99.5
Canada . . . . .	19,919	5	1.9	1966	12.2	1961	102.2
Cuba . . . . .	7,833	176	2.3	1960-65	26-27	1953	105.0
Guatemala . . . . .	4,575	109	3.1	1960-65	28.0	1964	102.7
Haiti . . . . .	4,485	420	1.9	1960-65	25-26	1950	94.5
Dominican Republic . . . . .	3,750	199	3.6	1960-65	31-32	1960	101.6
El Salvador . . . . .	3,037	368	3.4	1960-65	33.0	1961	97.1
Puerto Rico . . . . .	2,668	777	1.9	1965	23.5	1960	98.0
Honduras . . . . .	2,363	54	3.3	1960-65	32-34	1961	99.3
Jamaica . . . . .	1,839	435	2.0	1960-65	31.0	1960	92.5
Nicaragua . . . . .	1,715	34	3.2	1960-65	33-34	1963	97.5
Costa Rica . . . . .	1,486	75	4.1	1960-65	36-37	1963	100.2
<b>South America—</b>							
Brazil . . . . .	84,679	26	3.0	1960-65	31.0	1960	99.7
Argentina . . . . .	22,691	21	1.6	1960-65	14.0	1960	100.6
Colombia . . . . .	18,650	41	3.2	1960-65	29-30	..	(a)
Peru . . . . .	12,012	23	3.0	1960-65	31-32	1961	98.9
Venezuela . . . . .	9,030	26	3.6	1960-65	37-38	1961	103.3
Chile . . . . .	8,750	31	2.3	1960-65	23-24	1960	96.1
Ecuador . . . . .	5,326	49	3.3	1960-65	34-35	1962	99.9
Bolivia . . . . .	3,748	8	1.4	1960-65	23.0	1950	96.2
Uruguay . . . . .	2,749	39	1.4	1960-65	15-16	1963	99.0
Paraguay . . . . .	2,094	13	2.7	1960-65	30-31	1962	97.2

For footnotes see next page.



POPULATION, DENSITY, RATE OF INCREASE, NATURAL INCREASE, AND  
MASCULINITY—SELECTED COUNTRIES—continued

Country	Population mid-year 1966 (thousands)	Density (persons per square mile)	Annual rate of increase 1958-66 (per cent)	Natural increase		Masculinity at latest census		
				Year	Rate (per thousand population)	Year	Rate (number of males per 100 females)	
Asia—								
China (mainland)	710,000	192	1.5	1957	23.0	1953	107.6	
India	498,680	422	2.4	1963-64	25.5	1961	106.2	
Indonesia	107,000	186	2.3	1962	21.6	1961	97.3	
Pakistan	105,044	287	2.1	1963	28.0	1961	111.1	
Japan	98,865	692	1.0	1966	6.9	1965	96.4	
Philippines	33,477	290	3.3		(a)	1960	101.8	
Thailand	31,508	158	3.0	1964	33.1	1960	100.4	
Turkey in Asia	29,170	101	2.6		(a)		(a)	
Korea, Republic of	29,086	764	2.8	1955-60	28.7	1966	101.3	
Iran	25,500	39	2.8		(a)	1966	107.0	
Burma	25,246	96	2.0	1955	15	1941	104.0	
Vietnam (North)	19,500	319	3.3		(a)	1960	93.4	
Vietnam, Republic of	16,543	251	3.1	1960	17		(a)	
Afghanistan	15,960	65	1.8		(a)		(a)	
China, Republic of (Formosa)	12,791	922	3.3	1966	27	1966	112.1	
Korea (North)	12,400	267	2.9		(a)		(a)	
Ceylon	11,500	453	2.6		(a)	1963	108.2	
Nepal	10,294	189	1.8	1961	20.3	1961	96.9	
Iraq	8,338	49	3.1		(a)	1965	103.7	
West Malaysia (Malaya)	8,297	163	3.1	1965	28.8	1957	106.5	
Saudi Arabia	6,870	8	1.7		(a)		(a)	
Cambodia	6,320	91	2.6	1959	21.7	1962	100.7	
Syria	5,450	75	3.0		(a)	1960	105.6	
Yemen	5,000	67	1.6		(a)		(a)	
Hong Kong	3,716	9,327	3.4	1966	19.9	1966	102.9	
Laos	2,700	28	2.5	1965	24		(a)	
Israel	2,629	329	3.5	1965	(d)16.2	1961	103.0	
Lebanon	2,460	614	2.6		(a)		(a)	
Jordan	2,040	54	3.2	1959-63	31.0	1961	103.5	
Singapore	1,914	8,529	3.0	1966	24.4	1957	111.7	
Europe—								
Germany—								
Federal Republic of	57,485	601	1.2	1965	6.7	1961	89.4	
Eastern	15,988	383	-0.2	1963	4.9	1964	84.1	
West Berlin	2,191	11,795	-0.2	1965	-6.2	1961	73.2	
East Berlin	1,079	6,936	-0.2	1963	0.6	1964	77.8	
United Kingdom	54,965	583	0.7	1966	6.1	1961	93.6	
Italy	51,859	445	0.7	1966	9.4	1961	94.0	
France	49,400	233	1.2	1966	6.8	1962	94.6	
Spain	31,871	163	0.8	1966	12.3	1960	94.2	
Poland	31,698	262	1.2	1966	9.4	1960	93.7	
Yugoslavia	19,756	199	1.2	1966	12.2	1961	95.1	
Romania	19,143	210	0.7	1966	6.1	1966	96.0	
Czechoslovakia	14,240	287	0.7	1966	5.6	1961	95.2	
Netherlands	12,455	961	1.4	1966	11.1	1960	99.2	
Hungary	10,179	282	0.4	1966	3.6	1960	93.2	
Belgium	9,528	808	0.6	1966	3.8	1961	95.8	
Portugal	9,218	259	0.7	1966	11.4	1960	91.9	
Greece	8,612	168	0.7	1966	10.2	1961	95.2	
Bulgaria	8,258	192	0.8	1966	6.6	1965	99.9	
Sweden	7,808	44	0.7	1966	5.8	1960	99.5	
Austria	7,290	225	0.5	1966	5.1	1961	87.3	
Switzerland	6,050	381	1.9	1966	8.8	1960	96.3	
Denmark	4,797	287	0.8	1966	8.1		(a)	
Finland	4,639	36	0.8	1966	7.3	1960	93.0	
Norway	3,753	31	0.8	1965	8.4	1960	99.3	
Ireland	2,885	106	0.1	1966	9.5	1966	101.1	
Turkey in Europe	2,710	298	3.1		(a)		(a)	
Albania	1,914	174	3.0	1966	25.4	1960	105.6	
Oceania—								
Australia	11,541	4	2.0	1966	10.3	1966	101.4	
New Zealand	2,676	26	2.0	1966	13.6	1966	100.8	
New Guinea (Trust Territory)	1,582	18	2.1		(a)	1966	108.9	
Papua	601	8	2.8		(a)	1966	111.3	
U.S.S.R.—								
Union of Socialist Soviet Republics	233,180	26	1.5	1966	10.9	1959	81.9	

(a) Not available or information relates to a segment of population only. (b) African population only. (c) West  
Cameroon. (d) Jewish population.

## CHAPTER 8

### VITAL STATISTICS

The tables in this chapter are confined to the principal characteristics of vital statistics for Australia and relate, in the main, to the year 1967 for marriages and 1966 for births, deaths, and infant deaths. Comparisons have been restricted, in general, to the individual years 1963 to 1967 and the five-year periods 1941-45 to 1961-65, while age data have been shown in five-year groups. Comparisons over longer periods, together with more detailed figures such as single age particulars and cross-classifications of various characteristics, will be found in the annual bulletins, *Demography* and *Causes of Death*. Current information is published in the *Monthly Review of Business Statistics*, the *Quarterly Summary of Australian Statistics*, and the *Australian Demographic Review* (a mimeographed series issued at intervals throughout the year on population and vital statistics).

Statistics of 1967 births, deaths and marriages include particulars of Aborigines. For earlier years registrations identified as those of full-blood Aborigines were excluded. Differences between the statistics now published and those formerly published which implied the exclusion of Aboriginal vital events cannot be taken as reliable statistics of births, deaths, or marriages among full-blood Aborigines, because in many areas no satisfactory administrative or other basis existed for distinguishing vital events among full-blood Aborigines from those among part-Aborigines or the rest of the population.

Vital statistics for the principal countries of the world are set out in International Vital Statistics at the end of this chapter.

#### Provisions for registration and compilation of statistics

In Australia vital statistics are compiled from information supplied for the registration of births, deaths, and marriages. Each State and Territory has an independent system of registration. Provisions for the civil registration of births, deaths, and marriages have been in force in Tasmania from 1839, in Western Australia from 1841, in South Australia from 1842, in Victoria from 1853, and in New South Wales and Queensland (then part of New South Wales) from 1856. Registration in the Territories is administered by the Commonwealth Government, registration having been taken over from South Australia in 1911 in respect of the Northern Territory and from New South Wales in 1930 in respect of the Australian Capital Territory. The authority responsible for the registration of births, deaths, and marriages occurring within his particular State or Territory is the Registrar-General (the Government Statist in Victoria) or the Principal Registrar.

Information concerning a birth is required to be supplied within 28 days in the Australian Capital Territory and the Northern Territory, 42 days in South Australia, and 60 days in other States. For the registration of a death the period allowed is 8 days in Tasmania, 10 days in South Australia, 14 days in Western Australia, Australian Capital Territory, and Northern Territory, 21 days in Victoria, and 30 days in New South Wales and Queensland.

The *Marriage Act* 1961 came into operation on 1 September 1963, placing the marriage laws of all States, the mainland Territories and Norfolk Island on a uniform basis. Provision is made for the celebration of marriage by ministers of religion registered with the Registrar of Ministers of Religion appointed in each State and Territory by the Attorney-General, and by certain civil officers. In all cases the authorised celebrant is required to register particulars of the parties married with the appropriate registering authority in each State or Territory. The celebrant is requested to register a marriage as soon as practicable and in any case not later than fourteen days after the marriage.

Information is required in all States and Territories concerning what have been commonly known as 'still-births'. These are excluded from all the tables of births and deaths in this chapter and are included only in the special tables of still-births shown on page 195. The statistics of still-births shown relate to those, in several States, of at least seven months gestation or, in other States and the two Territories, the approximate equivalent of twenty-eight weeks. The statistics relate to periods up to the end of 1966. Compulsory registration was introduced in Western Australia in 1908, the Australian Capital Territory in 1930, New South Wales in 1935, South Australia in 1937, the Northern Territory in 1949, Victoria in 1953, and Queensland in 1959.

Legislation has been adopted in most States and in the Territories for the completion of a medical certificate of cause of perinatal death for children not born alive (equivalent terms—foetal death, still-birth) and children dying within the first twenty-eight complete days of life. The purpose of this new certificate of cause of death is to make available additional information on the causes of such mortality, and it has originated from the endeavours of the medical profession and health authorities to seek further reduction of the loss of life at or around birth.

The medical certificate of cause of perinatal death came into use in Western Australia, the Australian Capital Territory, and the Northern Territory in 1963, in Tasmania and Queensland in 1967, and in South Australia in 1968. No date has yet been proclaimed for the operation of the New South Wales amending Act of 1967.

The period of gestation was 'at least twenty weeks' (or if not known, alternatively a weight of at least four hundred grammes) in the Australian Capital Territory and the Northern Territory from September 1963, in Tasmania from 15 March 1967, in Queensland from 1 October 1967, and in South Australia and Western Australia from 1 January 1968. The New South Wales legislation (yet to be proclaimed) also provides for the same criteria.

The data for the compilation of vital statistics are obtained from registry records and dispatched, through the Statistical Office in each State and Territory, to the Commonwealth Statistician. The compilation and publication of vital statistics for Australia is one of the functions of the Commonwealth Statistician. The Deputy Commonwealth Statisticians compile and publish statistics relating to their respective States.

## Marriages

### Numbers of marriages and crude marriage rates

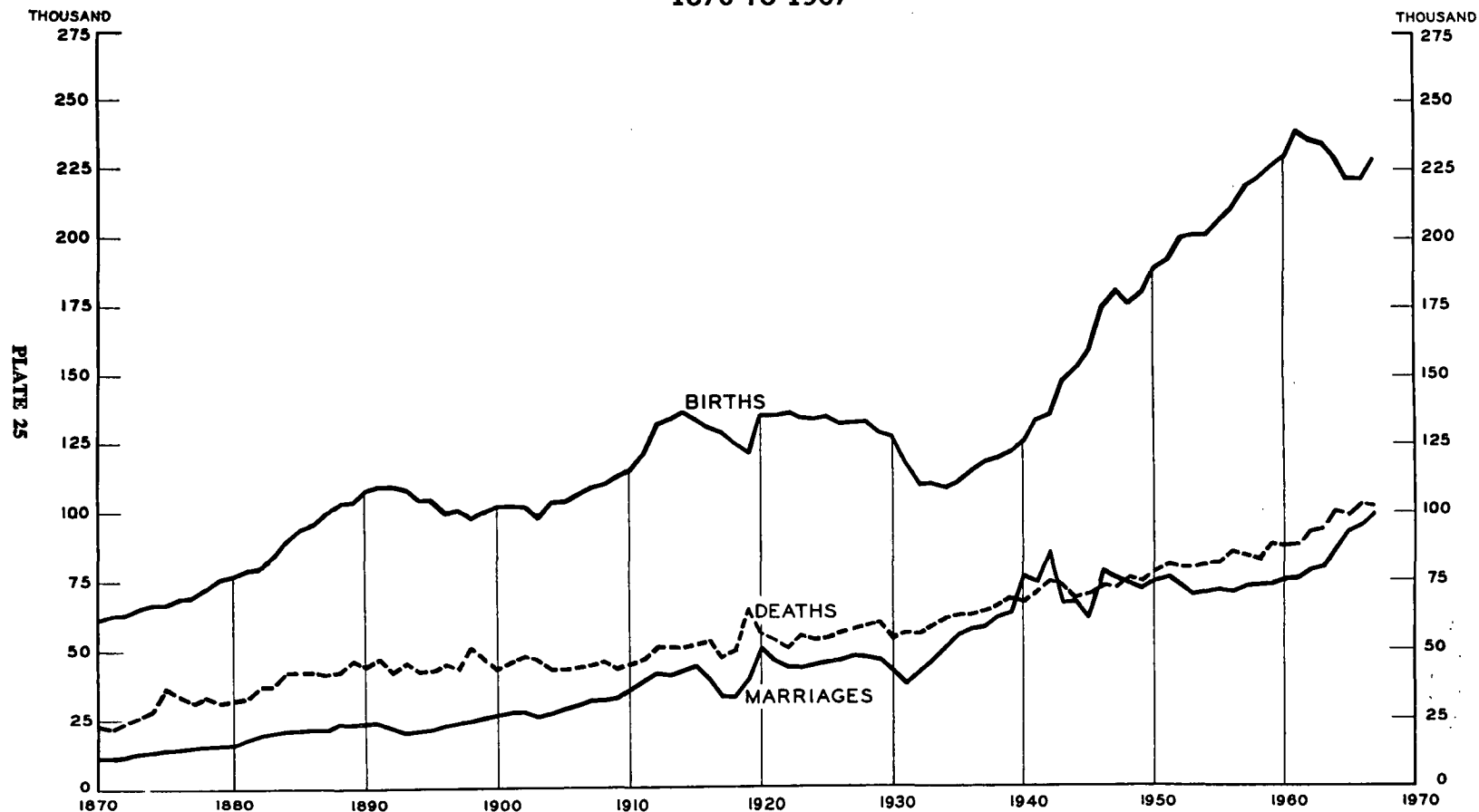
The numbers of marriages registered in each State and Territory in five-year periods from 1941–45 to 1961–65, and for each of the years 1963 to 1967, and crude marriage rates for the same periods are shown in the following tables. Annual averages for each five-year period from 1861 to 1950 were published in Year Book No. 39, page 575. The graph opposite shows the number of marriages in each year from 1870 to 1967. From the beginning of 1967 marriages of Aborigines are included. Before 1967 marriages between full-blood Aborigines were excluded. The marriage rates (number per thousand of mean population) for 1966 including marriages between Aborigines are shown in footnote (c) to the table of rates on page 178.

MARRIAGES: STATES AND TERRITORIES, 1941 TO 1967

<i>Period</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
Annual average—									
1941–45 . . .	28,506	19,450	10,563	6,517	4,668	2,097	71	109	71,981
1946–50 . . .	30,162	20,453	10,666	6,581	5,205	2,529	114	181	75,891
1951–55 . . .	28,483	20,007	10,171	6,290	5,232	2,539	146	234	73,102
1956–60 . . .	28,432	20,422	10,254	6,517	5,145	2,573	190	321	73,854
1961–65 . . .	31,788	23,262	11,437	7,514	5,768	2,700	248	533	83,250
Annual total—									
1963 . . .	30,999	22,061	11,431	7,302	5,755	2,579	260	529	80,916
1964 . . .	32,633	24,169	11,752	7,765	6,023	2,869	233	569	86,013
1965 . . .	35,176	26,421	12,967	8,680	6,448	2,888	296	670	93,546
1966 . . .	35,575	27,089	13,325	9,051	7,001	2,946	312	747	96,046
1967(a) . . .	37,077	28,004	13,634	9,434	7,430	3,213	325	883	100,000

(a) Includes Aborigines (see text above).

# BIRTHS, DEATHS AND MARRIAGES: AUSTRALIA 1870 TO 1967



NOTE. FROM 1967 INCLUDES ABORIGINES

## CRUDE MARRIAGE RATES(a): STATES AND TERRITORIES, 1941 TO 1967

<i>Period</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
<b>Average annual rate—</b>									
1941-45 . . .	9.97	9.86	10.04	10.61	9.74	8.61	7.2	7.6	9.94
1946-50 . . .	9.90	9.72	9.41	9.87	10.01	9.56	9.4	9.4	9.77
1951-55 . . .	8.41	8.34	7.91	8.11	8.44	8.35	9.1	8.2	8.29
1956-60 . . .	7.70	7.50	7.14	7.26	7.36	7.69	8.6	7.5	7.50
1961-65(b) . .	7.86	7.64	7.27	7.42	7.43	7.49	8.1	7.3	7.63
<b>Annual rate—</b>									
1963(b) . . .	7.66	7.25	7.29	7.24	7.40	7.15	8.6	7.2	7.42
1964(b) . . .	7.95	7.78	7.34	7.50	7.55	7.87	7.0	7.1	7.73
1965(b) . . .	8.43	8.35	7.94	8.16	7.91	7.85	8.4	7.6	8.25
1966(b) . . .	8.40	8.41	8.01	8.29	8.36	7.93	8.3	7.7	8.31
1967(c) . . .	8.60	8.55	8.01	8.49	8.47	8.53	5.5	8.5	8.46

(a) Number of marriages per 1,000 of mean population. (b) Recalculated from population figures revised in accordance with results of the census of 30 June 1966. (c) Number of marriages (including marriages of Aborigines) per 1,000 of mean population (including Aborigines). For 1966 the corresponding marriage rates (i.e. including marriages of Aborigines) are: New South Wales, 8.39; Victoria, 8.41; Queensland, 7.97; South Australia, 8.27; Western Australia, 8.25; Tasmania, 7.93; Northern Territory, 5.5; Australian Capital Territory, 7.7; Australia, 8.28.

NOTE. In some instances rates are based on too few marriages to warrant calculation to the second decimal place.

The crude marriage rates for Australia and the more populous countries of the world are shown for the latest available year in International Vital Statistics at the end of this chapter.

## Marriage rates based on marriageable population

As the marriage rates in some international tabulations are based on the unmarried population aged 15 years and over, the corresponding rates have been calculated for Australia for the ten census periods to 1965-67. The period in each case comprises the census year with the year immediately preceding and the year immediately following, and the figures are as follows.

**PERSONS MARRYING, PER 1,000 OF UNMARRIED  
POPULATION(a): AUSTRALIA  
1880-82 TO 1965-67**

<i>Period</i>	<i>Rate(b)</i>	<i>Period</i>	<i>Rate(b)</i>
1880-82 . . .	48.63	1932-34 . . .	42.88
1890-92 . . .	44.04	1946-48 . . .	71.24
1900-02 . . .	42.14	1953-55 . . .	65.32
1910-12 . . .	50.12	1960-62 . . .	62.27
1920-22 . . .	55.97	1965-67 . . .	68.34

(a) Excludes full-blood Aborigines. (b) Average annual number of persons who married per 1,000 unmarried persons, including widowed and divorced, aged 15 years and over.

## Age and marital status at marriage

Particulars of age at marriage in age groups, and previous marital status, of bridegrooms and brides in 1967 are given hereunder. There were 14,991 males under 21 years of age married during 1967, while the corresponding number of females was 43,145. At the other extreme there were 1,096 bridegrooms and 585 brides in the age group 65 years and over.

**AGE AND MARITAL STATUS OF BRIDEGROOMS AND BRIDES  
AUSTRALIA, 1967(a)**

Age at marriage (years)	Bridegrooms				Brides			
	Bachelors	Widowers	Divorced	Total	Spinsters	Widows	Divorced	Total
Under 20 . . .	7,545	1	..	7,546	28,141	12	4	28,157
20-24 . . .	50,610	25	117	50,752	49,509	92	434	50,035
25-29 . . .	22,010	78	693	22,781	8,680	200	1,131	10,011
30-34 . . .	5,718	119	997	6,834	2,048	218	1,047	3,313
35-39 . . .	2,473	169	1,058	3,700	930	292	973	2,195
40-44 . . .	1,185	291	1,030	2,506	514	391	858	1,763
45-49 . . .	549	357	783	1,689	306	535	682	1,523
50-54 . . .	328	445	567	1,340	214	560	426	1,200
55-59 . . .	172	478	373	1,023	116	428	193	737
60-64 . . .	107	433	193	733	77	321	83	481
65 and over . .	91	877	128	1,096	73	452	60	585
<b>Total . . .</b>	<b>90,788</b>	<b>3,273</b>	<b>5,939</b>	<b>100,000</b>	<b>90,608</b>	<b>3,501</b>	<b>5,891</b>	<b>100,000</b>

(a) Includes Aborigines.

In the following table the proportional distribution of bridegrooms and brides according to previous marital status is shown in five-year periods from 1936-40 to 1961-65 and for each of the years 1963 to 1967.

**MARITAL STATUS OF BRIDEGROOMS AND BRIDES: PROPORTIONAL  
DISTRIBUTION, AUSTRALIA, 1936 TO 1967  
(Per cent)**

Period	Bridegrooms				Brides			
	Bachelors	Widowers	Divorced	Total	Spinsters	Widows	Divorced	Total
1936-40. . .	92.59	4.82	2.59	100.00	93.94	3.38	2.68	100.00
1941-45. . .	91.44	4.77	3.79	100.00	92.11	3.93	3.96	100.00
1946-50. . .	88.82	4.74	6.44	100.00	88.71	4.74	6.55	100.00
1951-55. . .	88.77	4.63	6.60	100.00	88.04	4.81	7.15	100.00
1956-60. . .	89.86	4.18	5.96	100.00	88.80	4.47	6.73	100.00
1961-65. . .	90.55	3.68	5.77	100.00	90.04	3.87	6.09	100.00
1963 . . .	90.53	3.77	5.70	100.00	90.01	3.85	6.14	100.00
1964 . . .	90.78	3.53	5.69	100.00	90.30	3.74	5.96	100.00
1965 . . .	91.01	3.35	5.64	100.00	90.70	3.49	5.81	100.00
1966 . . .	90.83	3.34	5.83	100.00	90.69	3.45	5.86	100.00
1967(a) . . .	90.79	3.27	5.94	100.00	90.61	3.50	5.89	100.00

(a) Includes Aborigines.

The relative ages of bridegrooms and brides in 1967 are shown below in age groups of five years.

**RELATIVE AGES OF BRIDEGROOMS AND BRIDES: AUSTRALIA, 1967(a)**

Age of bride-groom (years)	Total bride-grooms	Age of bride (years)							
		Under 15	15-19	20-24	25-29	30-34	35-39	40-44	45 and over
Under 20 . . .	7,546	5	6,129	1,354	53	4	..	..	1
20-24 . . .	50,752	7	17,997	30,718	1,827	154	37	11	1
25-29 . . .	22,781	1	3,423	14,251	4,252	636	158	45	15
30-34 . . .	6,834	..	459	2,701	2,256	901	332	132	53
35-39 . . .	3,700	..	96	672	1,038	829	575	299	191
40-44 . . .	2,506	..	27	219	385	474	549	456	396
45-49 . . .	1,689	..	10	66	140	188	292	369	624
50-54 . . .	1,340	..	2	29	46	75	159	255	774
55-59 . . .	1,023	..	..	16	11	38	61	126	771
60-64 . . .	733	..	1	6	2	8	22	43	651
65 and over . .	1,096	..	..	3	1	6	10	27	1,049
<b>Total brides</b>	<b>100,000</b>	<b>13</b>	<b>28,144</b>	<b>50,035</b>	<b>10,011</b>	<b>3,313</b>	<b>2,195</b>	<b>1,763</b>	<b>4,526</b>

(a) Includes Aborigines.

The average age at marriage of brides and bridegrooms has declined during recent years. The average ages, in years, of brides for each of the five years to 1967 were: 1963, 24.42; 1964, 24.31; 1965, 24.09; 1966, 24.02; and 1967, 24.03. The average ages, in years, of bridegrooms were: 1963, 27.76; 1964, 27.58; 1965, 27.24; 1966, 27.10; and 1967, 27.01. The difference in the average age at marriage between brides and bridegrooms is generally about three years, the difference in 1967 being 2.98 years.

#### Previous marital status

The following table shows the relative marital status of bridegrooms and brides in 1967.

**MARITAL STATUS OF BRIDEGROOMS AND BRIDES**  
AUSTRALIA, 1967(a)

Marital status of bridegrooms	Total bride- grooms	Marital status of brides		
		Spinsters	Widows	Divorced
Bachelors . . .	90,788	86,540	1,119	3,129
Widowers . . .	3,273	935	1,576	762
Divorced . . .	5,939	3,133	806	2,000
<b>Total brides . .</b>	<b>100,000</b>	<b>90,608</b>	<b>3,501</b>	<b>5,891</b>

(a) Includes Aborigines.

#### Countries of birth of persons marrying

The following table shows the relative countries of birth of bridegrooms and brides married in 1967.

**RELATIVE COUNTRIES OF BIRTH OF BRIDEGROOMS AND BRIDES**  
AUSTRALIA, 1967(a)

Country of birth of bridegroom	Country of birth of bride											Total bride- grooms
	Austra- lia	New Zea- land	United King- dom and Ireland	Ger- many	Greece	Italy	Malta	Nether- lands	Yugo- slavia	Other Euro- pean	Other and un- specified	
Australia . . .	66,457	302	4,319	915	54	193	155	637	50	436	669	74,187
New Zealand . .	675	60	56	8	2	1	2	5	..	6	17	832
United Kingdom and Ireland . .	5,642	71	1,848	146	4	25	20	127	8	92	176	8,159
Germany . . .	1,008	11	177	367	6	17	18	38	17	87	68	1,814
Greece . . .	197	1	18	10	3,162	5	6	3	8	13	77	3,500
Italy . . .	759	12	103	58	18	2,220	24	20	28	50	62	3,354
Malta . . .	268	1	38	11	2	5	483	6	..	12	12	838
Netherlands . .	902	7	146	36	..	4	7	275	5	26	35	1,443
Yugoslavia . .	312	4	44	79	52	42	6	19	564	67	15	1,204
Other European and un- specified . .	921	23	167	214	27	20	13	41	42	701	83	2,252
<b>Total brides</b>	<b>78,288</b>	<b>516</b>	<b>7,076</b>	<b>1,893</b>	<b>3,402</b>	<b>2,562</b>	<b>745</b>	<b>1,205</b>	<b>730</b>	<b>1,549</b>	<b>2,034</b>	<b>100,000</b>

(a) Includes Aborigines.

#### Occupation of bridegrooms

The distribution of the 100,000 bridegrooms for 1967 among classes of occupations was as follows: craftsmen, 32,313; administrative and clerical workers, 14,298; labourers, 10,822; rural and mining workers, 8,618; professional and technical workers, 10,869; workers in transport and communication, 6,749; service, sport, and other workers, 8,174; sales workers, 6,164; persons not in the work force, 1,993.

### Celebration of marriages

Under the provisions of the *Marriage Act* 1961–1966 marriages may be celebrated either by ministers of religion who are registered for that purpose with the Registrar of Ministers of Religion in each State or Territory, or by certain civil officers, in most cases district registrars. Most of the marriages are celebrated by ministers of religion. The registered ministers in 1967 belonged to more than fifty different denominations, some of which, however, have only very few adherents. The categories 'Ministers of Other recognised denominations' and 'Other ministers' combine ministers of some of these denominations. The figures for 1967 are shown in the following table.

MARRIAGES IN EACH DENOMINATION: STATES AND TERRITORIES, 1967(a)

Category of celebrant	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Australia	
									No.	Pro- portion of total
Ministers of religion—										
Recognised denominations—										
Church of England . . .	11,640	6,435	3,557	1,984	2,388	1,299	47	226	27,576	27.58
Roman Catholic . . .	10,254	7,995	3,644	1,992	1,928	690	77	276	26,856	26.86
Methodist . . .	3,723	3,018	1,972	2,357	806	434	26	40	12,376	12.38
Presbyterian . . .	3,370	4,230	2,107	370	405	147	24	70	10,723	10.72
Orthodox . . .	1,393	1,784	109	187	70	18	13	13	3,587	3.59
Baptist . . .	638	433	225	245	104	83	2	12	1,742	1.74
Lutheran . . .	178	261	314	512	26	9	13	13	1,326	1.33
Churches of Christ . . .	181	498	107	238	176	20		16	1,296	1.30
Congregational . . .	281	321	93	304	127	44	40	6	1,216	1.22
Salvation Army . . .	158	135	98	51	50	19	5	2	518	0.52
Jewry . . .	160	198	4	4	11	1	..		378	0.38
Seventh-day Adventist . . .	94	68	52	22	36	9	1	1	283	0.28
Jehovah's Witnesses . . .	50	38	40	19	16	3	1	1	168	0.17
Church of Jesus Christ of Latter Day Saints . . .	51	34	26	15	20	9	1	1	157	0.16
Christian Brethren . . .	45	31	29	14	9	25	..	..	153	0.15
Assemblies of God . . .	19	13	61	14	3	..	..	..	110	0.11
Other recognised de- nominations . . .	146	162	79	45	89	17	2	..	540	0.54
Other ministers . . .	102	147	26	13	25	1	..	1	315	0.32
Total ministers . . .	32,483	25,801	12,543	8,446	6,289	2,828	252	678	89,320	89.32
Civil officers . . .	4,594	2,203	1,091	988	1,141	385	73	205	10,680	10.68
Grand total . . .	37,077	28,004	13,634	9,434	7,430	3,213	325	883	100,000	100.00
Proportion of total (per cent)—										
Ministers of religion . . .	87.61	92.13	92.00	89.53	84.64	88.02	77.54	76.78	89.32	..
Civil officers . . .	12.39	7.87	8.00	10.47	15.36	11.98	22.46	23.22	10.68	..

(a) Includes Aborigines.

### Divorce

The number of dissolutions of marriage, nullities of marriage and judicial separations was 9,921 in 1966 and 9,746 in 1967. Further information may be found in the chapter Public Justice.

## Fertility and reproduction

Natural increase has been a significant element of increase in the population of Australia for many years. The level of natural increase depends on the excess of births over deaths, and the relation between fertility and mortality determines the rate of reproduction or replacement of the population.

### Number of live births and confinements

There are various methods of measuring the fertility of the population by relating the number of births to the numbers of the population. In each the basic data are, of course, the numbers of live births. The number of live births registered in Australia during 1966 is shown in the following table. The table shows also the number of confinements resulting in one or more live births. The figures exclude cases where the births were of still-born children only.



## LIVE BIRTHS AND CONFINEMENTS: STATES AND TERRITORIES, 1966(a)

	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
LIVE BIRTHS									
Single births .	76,164	62,566	32,198	19,969	16,668	7,274	955	2,220	218,014
Twins .	1,576	1,417	635	350	336	127	17	95	4,553
Triplets .	18	21	10	..	3	..	..	3	55
Quadruplets .	..	4	..	..	..	..	..	..	4
Males .	40,178	32,782	16,849	10,537	8,800	3,753	485	1,146	114,530
Females .	37,580	31,226	15,994	9,782	8,207	3,648	487	1,172	108,096
<b>Total</b> .	<b>77,758</b>	<b>64,008</b>	<b>32,843</b>	<b>20,319</b>	<b>17,007</b>	<b>7,401</b>	<b>972</b>	<b>2,318</b>	<b>222,626</b>
STILL-BIRTHS ASSOCIATED WITH MULTIPLE BIRTHS INCLUDED ABOVE									
Twins .	30	11	11	2	8	1	1	3	67
Triplets .	..	..	2	..	..	..	..	..	2
CONFINEMENTS RESULTING IN BIRTHS SHOWN ABOVE									
Nuptial .	71,005	59,749	29,332	18,784	15,247	6,818	830	2,196	203,961
Ex-nuptial .	5,968	3,539	3,193	1,361	1,594	520	134	74	16,383
<b>Total</b> .	<b>76,973</b>	<b>63,288</b>	<b>32,525</b>	<b>20,145</b>	<b>16,841</b>	<b>7,338</b>	<b>964</b>	<b>2,270</b>	<b>220,344</b>

(a) Excludes full-blood Aborigines.

NOTE. Owing to the registration procedure adopted in some States, it is possible that in some cases where one child only of a multiple pregnancy was live-born, the confinement has been treated as a single birth. However, the numbers of multiple births are not significantly affected. See also page 190.

The average annual number of live births in each State and Territory for each five-year period from 1941 to 1965 and the total number of live births for each year from 1963 to 1967 are given in the following table. Corresponding figures for each five-year period from 1861 to 1950 were published in Year Book No. 39, page 583.

From the beginning of 1967 births of Aborigines are included. Before 1967 births of full-blood Aborigines were excluded. The birth rates (number per 1,000 of mean population) for 1966 including Aborigines are shown in footnote (c) to the table of rates on page 184.

## LIVE BIRTHS: STATES AND TERRITORIES, 1941 TO 1967

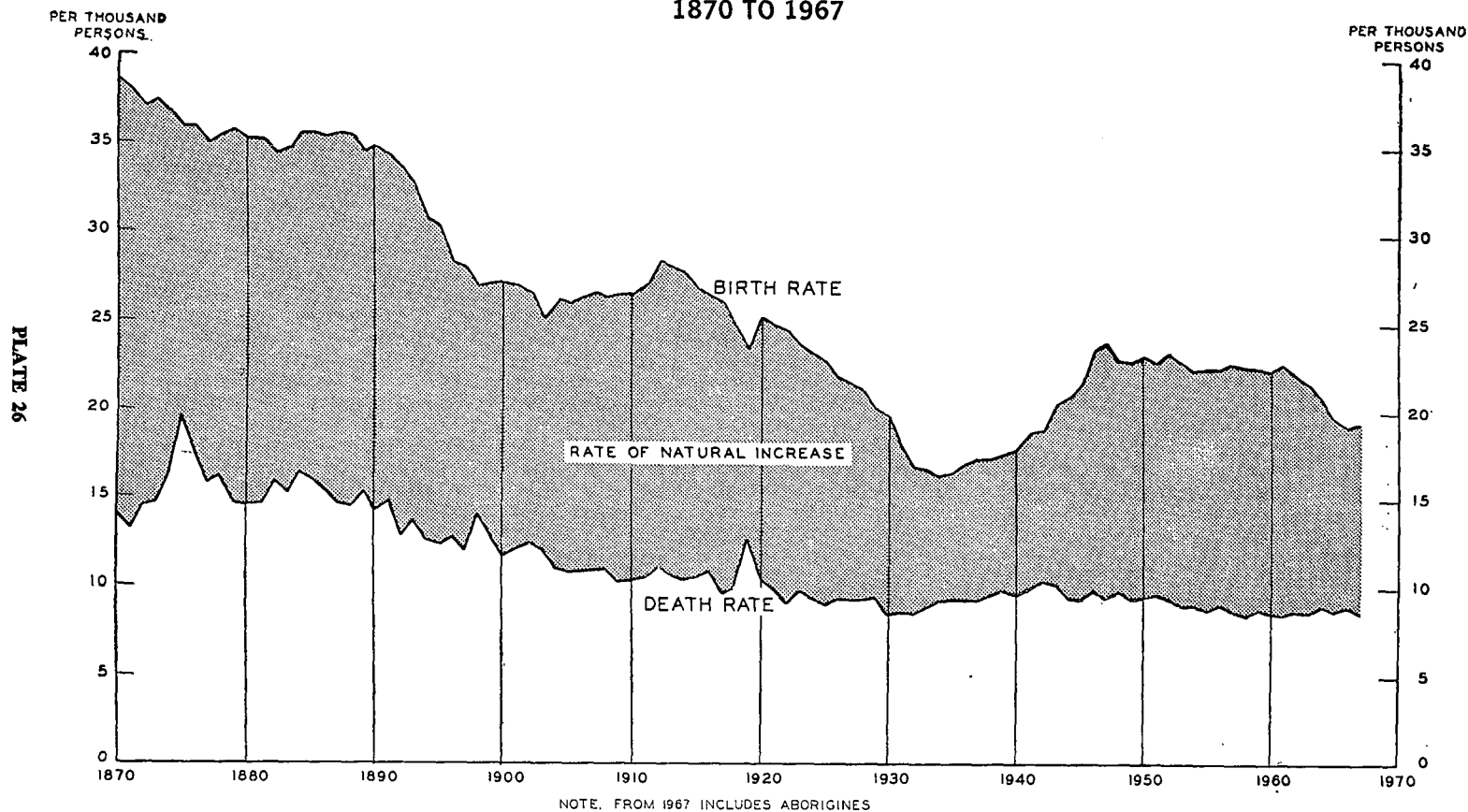
<i>Period</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
Annual average—									
1941–45 .	56,583	38,002	23,431	12,546	10,409	5,418	113	384	146,886
1946–50 .	68,856	47,372	28,003	16,270	13,130	7,064	289	734	181,718
1951–55 .	73,737	53,770	30,983	18,045	15,724	7,774	468	922	201,423
1956–60 .	79,613	61,279	34,171	19,977	16,922	8,517	694	1,286	222,459
1961–65 .	82,896	65,193	35,357	21,377	16,861	8,439	897	1,932	232,952
Annual total—									
1963 .	84,065	65,649	35,934	21,367	17,290	8,530	859	1,995	235,689
1964 .	80,518	64,990	34,972	20,866	16,685	8,252	911	1,955	229,149
1965 .	78,069	63,550	33,551	20,891	16,186	7,535	914	2,158	222,854
1966 .	77,758	64,008	32,843	20,319	17,007	7,401	972	2,318	222,626
1967(a) .	78,841	65,485	34,692	20,386	18,023	7,547	1,921	2,401	229,296

(a) Includes Aborigines. See text above.

A graph on page 177 shows the number of births in each year from 1870 to 1967.

# RATES OF BIRTHS, DEATHS AND NATURAL INCREASE: AUSTRALIA

1870 TO 1967



**Crude birth rates**

The oldest and most popular method of measuring fertility is to relate the number of births to the total population, thus obtaining the crude birth rate. The crude birth rate measures the rate per thousand persons (irrespective of age or sex) at which the population has added to its numbers by way of births during a given period. Other methods of measuring fertility are shown on pages 185, 187-8. Crude birth rates for each five-year period from 1941 to 1965 and for each year from 1963 to 1967 are set out below for each State and Territory.

**CRUDE BIRTH RATES(a): STATES AND TERRITORIES, 1941 TO 1967**

<i>Period</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
<b>Average annual rates—</b>									
1941-45 .	19.79	19.27	22.28	20.43	21.72	22.23	11.4	26.8	20.28
1946-50 .	22.60	22.51	24.69	24.41	25.24	26.71	23.8	37.9	23.39
1951-55 .	21.78	22.42	24.11	23.25	25.37	25.58	29.4	32.22	22.86
1956-60 .	21.55	22.52	23.80	22.27	24.20	25.45	31.49	30.10	22.59
1961-65(b)	20.49	21.42	22.49	21.11	21.71	23.41	29.30	26.31	21.34
<b>Annual rates—</b>									
1963(b) .	20.77	21.59	22.90	21.20	22.23	23.66	28.4	27.2	21.61
1964(b) .	19.61	20.93	21.84	20.16	20.93	22.64	27.6	24.3	20.60
1965(b) .	18.71	20.08	20.54	19.63	19.85	20.48	25.8	24.4	19.65
1966(b) .	18.35	19.87	19.74	18.62	20.31	19.92	25.9	24.0	19.27
1967(c) .	18.30	19.98	20.37	18.34	20.55	20.04	32.3	23.1	19.40

(a) Number of births per 1,000 of mean population. (b) Recalculated from population figures revised in accordance with results of the census of 30 June 1966. (c) Number of births (including births of Aborigines) per 1,000 of mean population (including Aborigines). For 1966 the corresponding birth rates (i.e., including births of Aborigines) are: New South Wales, 18.34; Victoria, 19.87; Queensland, 19.65; South Australia, 18.60; Western Australia, 20.26; Tasmania 19.91; Northern Territory, 31.2; Australian Capital Territory, 24.0; Australia, 19.28.

NOTE. In some instances rates are based on too few births to warrant calculation to the second decimal place.

The birth rates in the table above are based on *live births registered in the respective States and Territories*. Some confinements, however, take place in States other than the State in which the mother usually resides, particularly in areas near State borders. The variations thus caused in the birth rates for the States and Territories by referring the birth registrations to the mother's usual residence are shown by the following corrected rates for 1966—New South Wales, 18.38; Victoria, 19.86; Queensland, 19.69; South Australia, 18.57; Western Australia, 20.32; Tasmania, 19.93; Northern Territory, 27.1; and Australian Capital Territory, 24.2. See Year Book No. 47 (p. 339) for the effect of the variations in the availability of hospital facilities on the birth rate in the Australian Capital Territory and in the neighbouring town of Queanbeyan in New South Wales.

A graph showing the birth rate for each year from 1870 to 1967 will be found on page 183. The crude birth rates of Australia and the more populous countries of the world for the latest available year are shown in International Vital Statistics at the end of this chapter.

**Fertility rates**

The principal demographic factors affecting the level of crude birth rates are the proportion of women of child-bearing age in the population and the proportion of such women who are married. These factors may vary considerably at different periods and for different countries, and a population with a high proportion of married women of child-bearing age will have a higher crude birth rate than one with a low proportion, although the fertilities of the two populations may be identical. In order to compare fertilities births are sometimes related to the number of women of child-bearing age or, alternatively, nuptial births are related to the number of married women of child-bearing age. Thus births are related to potential mothers, giving the fertility rate.

The following table sets out for certain periods, commencing with 1880-82, the number of births per thousand of mean population, the number of births per thousand women of child-bearing age and the number of nuptial births per thousand married women of child-bearing age. For purposes of this table the child-bearing age has been taken to be fifteen to forty-four years inclusive, but births to mothers who were stated to be under fifteen or over forty-four years have been included in the compilations.

## CRUDE BIRTH RATES AND FERTILITY RATES: AUSTRALIA, 1880-82 TO 1960-62(a)

Period	Average annual rates			Index Nos (Base: 1880-82 = 100)		
	Fertility rates			Fertility rates		
	Crude birth rate(b)	Births per 1,000 women aged 15-44 years	Nuptial births per 1,000 married women aged 15-44 years	Crude birth rate(b)	Births per 1,000 women aged 15-44 years	Nuptial births per 1,000 married women aged 15-44 years
1880-82 . . .	35.3	170	321	100	100	100
1890-92 . . .	34.5	159	332	98	94	103
1900-02 . . .	27.2	117	235	77	69	73
1910-12 . . .	27.2	117	236	77	69	74
1920-22 . . .	25.0	107	197	71	63	61
1932-34 . . .	16.7	71	131	47	42	41
1946-48 . . .	23.6	104	160	67	61	50
1953-55 . . .	22.7	109	149	64	64	46
1960-62 . . .	22.5	112	154	64	66	48

(a) Excludes full-blood Aborigines. (b) Number of births per 1,000 of mean population.

The table above shows how increasing proportions both of women of child-bearing age and of married women of child-bearing age inflate the crude birth rate. Thus, while the nuptial birth rate for married women increased by only 22 per cent over the period 1932-34 to 1946-48, the crude birth rate rose by 41 per cent owing principally to the greatly increased number of marriages during that period.

## Age-specific birth rates

So long as customary ages at marriage do not change drastically the main demographic factor affecting the number of births is the age composition of the potential mothers in the population. Within the child-bearing group the fertility of women of different ages varies considerably, and a clearer view of the fertility of the population can be obtained from an examination of what are known as its age-specific birth rates, that is the number of births to women of specified ages per thousand women of those particular ages.

Age-specific birth rates are more commonly expressed in age groups than in single ages. In the following table such rates are shown in five-year age groups for Australia for the period 1941 to 1966. A graph on the following page shows the age-specific birth rates for each year during the period 1921 to 1966.

## AGE-SPECIFIC BIRTH RATES(a): AUSTRALIA, 1941 TO 1966(b)

Age group (years)	1941	1946	1951	1956	1961	1964	1965	1966
15-19 . . .	24.27	26.13	38.62	42.99	47.35	46.95	47.52	48.89
20-24 . . .	121.02	151.07	177.23	210.87	225.81	190.51	179.31	173.07
25-29 . . .	143.46	183.18	185.32	203.04	221.21	198.11	188.54	183.88
30-34 . . .	104.94	131.72	123.10	123.52	131.11	119.12	110.10	105.12
35-39 . . .	57.82	78.29	65.03	64.20	63.38	58.38	53.00	50.62
40-44 . . .	19.61	24.57	21.02	19.74	19.17	16.53	15.03	14.16
45-49 . . .	1.67	2.10	1.61	1.58	1.41	1.16	1.11	1.04

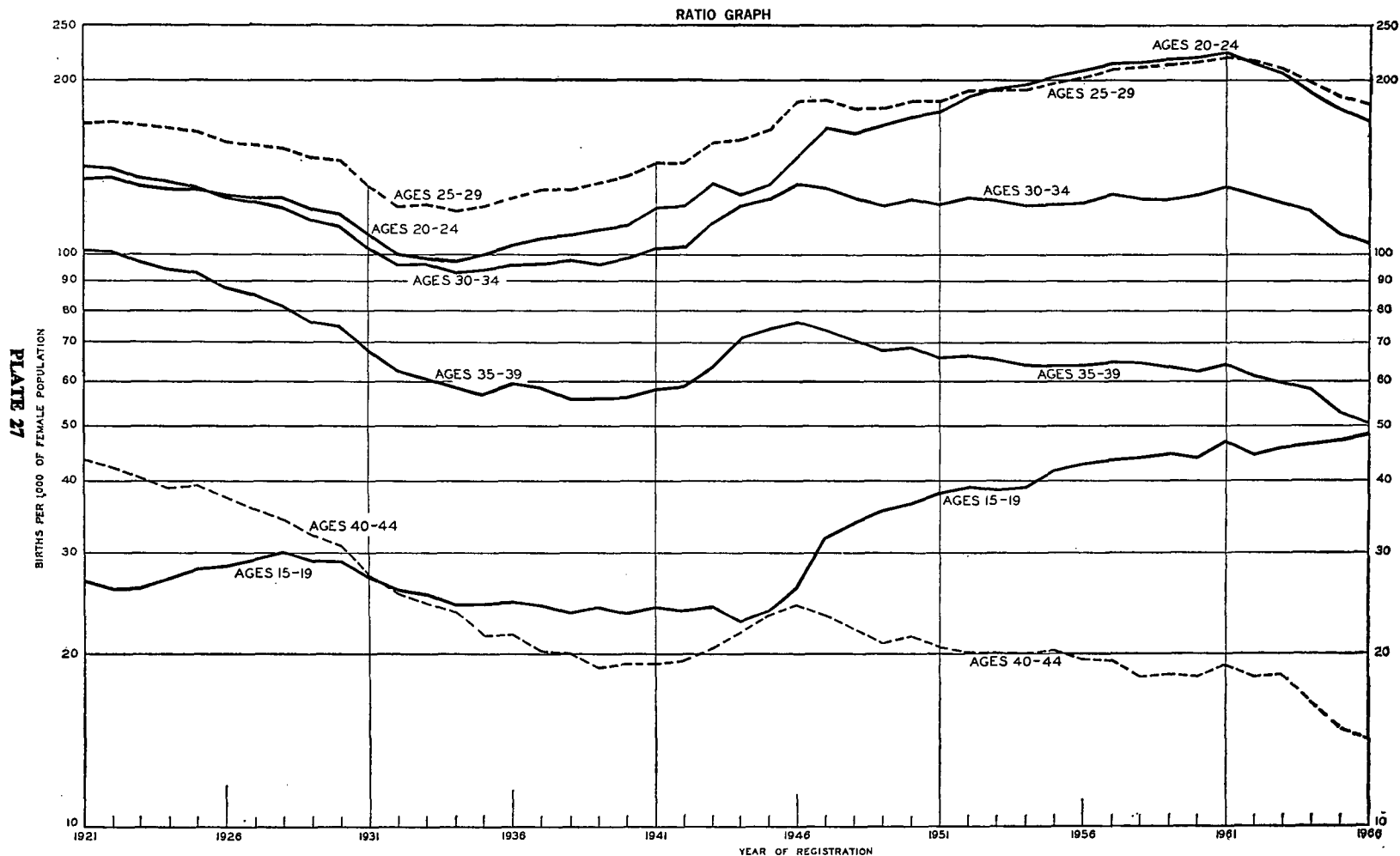
(a) Number of births per 1,000 women in each age group. (b) Excludes full-blood Aborigines.

## Gross and net reproduction rates for females

A single measure of reproduction, known as the gross reproduction rate, is obtained by adding together the specific fertility rates for each age in the child-bearing group. This measure indicates the number of female children who would be born on an average to women living right through the child-bearing period, if the conditions on which the rate is based continue. The rate is unaffected by the age composition of the potential mothers, and consequently it shows more clearly than the crude birth rate the reproductive propensity of the population. It is, however, an imperfect measure

# BIRTH RATES BY AGE OF MOTHER: AUSTRALIA, 1921 TO 1966

(NUMBER OF BIRTHS PER 1,000 OF FEMALE POPULATION IN EACH AGE GROUP)



NOTE. THE VERTICAL SCALE IS LOGARITHMIC, AND THE CURVES RISE AND FALL ACCORDING TO THE RATE OF INCREASE OR DECREASE; ACTUAL NUMBERS ARE INDICATED BY THE SCALE.

of reproduction because it does not take into account the females who fail to live from birth to the end of the reproductive period. A more accurate measure of this nature is obtained by multiplying the specific fertility rates by the number of females in the corresponding age group of the stationary or life table population and summing the products. Allowance is thus made for the effect of mortality and the result is known as the net reproduction rate. The net reproduction rate indicates the average number of female children who would be born to women during their lifetime if they were subject at each age to the fertility and mortality rates on which the calculation is based. A constant net reproduction rate of unity indicates that the population will ultimately become stationary. If it continues greater than unity, the population will ultimately increase; if less than unity, it will ultimately decrease. The following table should be read in the light of the comment which follows it and of the index of marriage fertility, page 188.

GROSS AND NET REPRODUCTION RATES(a): AUSTRALIA, 1881 TO 1966

Year	Gross reproduction rate	Net reproduction rate	Year	Gross reproduction rate	Net reproduction rate
1881(b)	2.65	(c) 1.88	1951	1.485	(h) 1.409
1891(b)	2.30	(c) 1.73	1954	1.558	(i) 1.497
1901(b)	1.74	(d) 1.39	1961	1.728	(j) 1.672
1911	1.705	(e) 1.421	1962	1.666	(j) 1.609
1921	1.511	(f) 1.313	1963	1.625	(j) 1.572
1931	1.141	(g) 1.039	1964	1.529	(j) 1.480
1941	1.154	(g) 1.053	1965	1.447	(j) 1.400
1947	1.493	(h) 1.416	1966	1.400	(j) 1.355

(a) Excludes full-blood Aborigines. (b) Approximate only. (c) 1881-1890 mortality experience used. (d) 1891-1900 mortality experience used. (e) 1901-1910 mortality experience used. (f) 1920-1922 mortality experience used. (g) 1932-1934 mortality experience used. (h) 1946-1948 mortality experience used. (i) 1953-1955 mortality experience used. (j) 1960-1962 mortality experience used.

It is not strictly correct to assume, as in the calculations of the rates above, that a particular age-specific fertility rate can be applied to a hypothetical group of women reaching that age, without taking into account previous fertility and marriage experience. Reproduction rates are therefore unreliable when birth and marriage rates have been changing. The indexes of marriage fertility shown on the next page are also of doubtful reliability in similar circumstances.

In the following table a comparison is given of the gross and net reproduction rates recorded for various countries in the period 1954 to 1966. These represent the latest available international comparisons. The registration of vital events has not been fully established in many countries and consequently details for the calculation of reproduction rates are not available. In order that the table should be as representative as possible some countries have been included even though the gross reproduction rate is the only figure available.

GROSS AND NET REPRODUCTION RATES: VARIOUS COUNTRIES

Country	Period	Reproduction rate		Country	Period	Reproduction rate	
		Gross	Net			Gross	Net
Venezuela	1963	3.04	..	Norway	1963	1.42	1.38
Mauritius	1964	2.94	2.54	France	1964	1.42	1.37
Malaya	1960	2.9	..	Australia(a)	1966	1.40	1.36
Ceylon	1961	2.5	..	England and Wales	1963	1.39	1.34
Thailand	1954	2.26	1.70	Belgium	1963	1.30	1.25
Chile	1964	2.16	1.83	Yugoslavia	1963	1.29	1.06
Ireland, Republic of	1963	1.90	1.74	Czechoslovakia	1963	1.22	1.18
New Zealand	1964	1.83	1.77	Germany—			
Canada	1964	1.72	1.66	Federal Rep.	1963	1.22	1.17
United States of America	1963	1.62	1.56	Democratic Rep.	1960	1.16	1.06
Netherlands	1964	1.55	1.50	Sweden	1964	1.21	1.18
Portugal	1960	1.52	1.33	Switzerland	1962	1.20	1.16
Scotland	1964	1.49	1.44	Japan	1963	0.96	0.92
				Hungary	1964	0.87	0.81

(a) Excludes full-blood Aborigines.

In comparing the reproduction rates of the countries shown allowance should be made for any differences in years, as the rates for any one country from year to year are affected by variations in the incidence of marriage, as well as the stationary or life table population used.

### Fertility of marriages

More satisfactory estimates of the fertility of marriages may be made by relating nuptial births in each year to the marriages from which they could have resulted. Births to women of a certain number of years duration of marriage are related to the number of marriages taking place that number of years previously. The table below sets out this index of current fertility per marriage in respect of births in the individual years shown.

**FERTILITY OF MARRIAGES: AUSTRALIA, 1955 TO 1966**

<i>Year</i>	<i>Nuptial births per marriage</i>	<i>Year</i>	<i>Nuptial births per marriage</i>	<i>Year</i>	<i>Nuptial births per marriage</i>
1955 . . .	2.54	1959 . . .	2.73	1963 . . .	2.72
1956 . . .	2.58	1960 . . .	2.76	1964 . . .	2.58
1957 . . .	2.69	1961 . . .	2.84	1965 . . .	2.42
1958 . . .	2.69	1962 . . .	2.78	1966 . . .	2.32

See text following first table on page 187.

The figure for a particular year gives the estimated number of children which a marriage would produce according to the fertility conditions of that year. The figures published in recent years present a somewhat inflated index, as many of the births used to calculate the index related to marriages of immigrants which took place overseas and consequently were not included in Australian marriage records. A revised series of indexes from which such births have been eliminated has been calculated from the year 1955 and is shown in the table above. The index has also now been expressed in terms of nuptial births and not nuptial confinements as formerly, while at the same time weights used for the calculation of fertility during the first two years of marriage have been revised. The net effect of these adjustments has been to reduce the index of current marriage fertility, as calculated on the original basis, by percentages varying from 6 in 1955 to 8 in 1966.

As formerly, some understatement is present in the index owing to the non-inclusion of births which occur overseas to Australian marriages. Furthermore the results do not take account of the previous reproductive history of a marriage or of age at marriage.

### Masculinity of live births

The masculinity of live births, i.e. the number of males born for every 100 female births, has remained fairly stable for Australia at about 105. But when the number of births for which masculinity is being calculated is small (for example, totals for smaller States) considerable variation is shown. The averages for the ten years 1951-60 were as follows: New South Wales, 105.38; Victoria, 105.50; Queensland, 105.80; South Australia, 104.89; Western Australia, 105.25; Tasmania, 104.96; Northern Territory, 107.16; Australian Capital Territory, 108.77; Australia, 105.43. The following table shows the figures for Australia for each ten-year period from 1901 to 1960 and for each of the years 1965 to 1967.

**MASCULINITY(a) OF LIVE BIRTHS REGISTERED: AUSTRALIA, 1901 TO 1967**

	1901-10	1911-20	1921-30	1931-40	1941-50	1951-60	1965	1966	1967(b)
Total births . . .	105.22	105.27	105.55	105.12	105.38	105.43	105.61	105.95	105.43
Ex-nuptial births . . .	104.08	105.25	105.16	105.36	105.34	103.99	107.47	103.91	106.16

(a) Number of males born for every 100 female births. (b) Includes Aborigines.

**Ex-nuptial live births**

The variations in the proportions of ex-nuptial live births as between the individual States and Territories for 1966 and for Australia at intervals from 1901 to 1966 are shown in the following table.

**EX-NUPTIAL LIVE BIRTHS  
NUMBER AND PROPORTION, STATES AND TERRITORIES, 1966(a)**

	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
Number	6,024	3,578	3,227	1,372	1,607	524	135	74	16,541
Proportion of total births %	7.75	5.59	9.83	6.75	9.45	7.08	13.89	3.19	7.43

(a) Excludes full-blood Aborigines.

**EX-NUPTIAL LIVE BIRTHS: NUMBER AND PROPORTION  
AUSTRALIA, 1901 TO 1966(a)**

	<i>Annual average</i>						1962	1963	1964	1965	1966
	1901-10	1911-20	1921-30	1931-40	1941-50	1951-60					
Number	6,498	6,836	6,238	5,133	6,780	9,013	12,813	13,454	14,925	15,531	16,541
Proportion of total births %	6.05	5.22	4.66	4.40	4.13	4.25	5.40	5.71	6.51	6.97	7.43

(a) Excludes full-blood Aborigines.

A further measure of ex-nuptiality is obtained by calculating the number of ex-nuptial births per thousand of the single, widowed and divorced female population aged from 15 to 44 years. On this basis, the number of ex-nuptial births per 1,000 unmarried women of ages 15 to 44 is as follows: 1880-82, 14.49; 1890-92, 15.93; 1900-02, 13.30; 1910-12, 12.53; 1920-22, 10.50; 1932-34, 6.91; 1946-48, 11.45; 1953-55, 14.45; and 1960-62, 18.49. Ex-nuptial births to married women, which are not recorded separately, are included in these figures and it is not possible to determine to what extent they influence the trend shown. The following table shows the relative ratios of ex-nuptial and nuptial births to the total population for periods from 1901.

**CRUDE EX-NUPTIAL, NUPTIAL, AND TOTAL BIRTH RATES(a)  
AUSTRALIA, 1901 TO 1966(b)**

<i>Birth rate</i>	<i>Annual average</i>						1964	1965	1966
	1901-10	1911-20	1921-30	1931-40	1941-50	1951-60			
Ex-nuptial	1.60	1.39	1.04	0.76	0.90	0.97	1.34	1.37	1.43
Nuptial	24.91	25.18	21.40	16.47	20.99	21.75	19.26	18.28	17.84
Total	26.51	26.57	22.44	17.23	21.89	22.72	20.60	19.65	19.27

(a) Number of births per 1,000 of mean population. (b) Excludes full-blood Aborigines.

**Legitimations**

Under the provisions of the Commonwealth *Marriage Act* 1961-1966, which came into operation on 1 September 1963, a child whose parents were not married to each other at the time of its birth becomes legitimised on the subsequent marriage of its parents. The legitimisation takes place whether or not there was a legal impediment to the marriage of the parents at the time of the child's birth and



whether or not the child was still living at the time of the marriage, or in the case of a child born before 1 September 1963, at that date. Prior to the introduction of this Act, legitimations took place under Acts passed in the several States to legitimise children born before the marriage of their parents, provided that no legal impediment to the marriage existed at the time of birth. On registration in accordance with the provisions of the Legitimation Acts, any child who came within the scope of their purposes, born before or after the passing, thereof, was deemed to be legitimate from birth by the post-natal union of its parents, and entitled to the status of offspring born in wedlock. The number of children legitimised in Australia during 1966 was 2,927.

### Multiple births

Because the current Australian birth statistics are based only on those confinements which resulted in a live-born child, the number of confinements for multiple births for Australia is understated—firstly, because in cases where all children of a multiple birth are still-born the confinement is excluded, and secondly, because some cases of multiple births in which only one child was live-born are registered as single births.

Multiple births recorded on this basis during 1966 comprised 2,310 cases of twins, 19 cases of triplets and one case of quadruplets, the resultant numbers of live-born and still-born children being respectively 4,553 and 67 for twins, 55 and 2 for triplets and 4 live-born children for quadruplets. This represents an average of 10.48 recorded cases of twins and 0.09 recorded cases of triplets per 1,000 confinements or, alternatively, mothers of twins represented 1 in every 95 mothers and mothers of triplets 1 in every 11,597. Total cases of multiple births represented 10.57 per 1,000 confinements or 1 in every 95 mothers. The proportion of mothers of multiple births to total mothers does not vary greatly from year to year.

### Confinements—ages of parents

The relative ages of the parents of children whose births were registered in 1966 have been tabulated separately for male and female births, multiple births being distinguished from single births. For confinements and for multiple births, the relative ages of parents are shown in *Demography*, Bulletin No. 84. In the following table the relative ages of parents are shown in five-year groups.

CONFINEMENTS, BY RELATIVE AGES OF PARENTS: AUSTRALIA, 1966(a)

Age of father (years) and type of birth	Total	Age of mother (years)								45 and over	Not stated
		Under 15	15-19	20-24	25-29	30-34	35-39	40-44			
Under 20 . . . . .	4,090	..	3,444	640	5	1	..	..	..	..	
20-24 . . . . .	39,346	4	11,773	25,162	2,280	110	16	1	..	..	
25-29 . . . . .	66,046	..	2,578	31,520	29,247	2,441	233	27	..	..	
30-34 . . . . .	47,070	..	472	7,397	23,220	14,117	1,733	130	1	..	
35-39 . . . . .	29,366	..	84	1,640	6,837	12,156	7,986	648	15	..	
40-44 . . . . .	12,525	..	16	280	1,313	3,271	5,300	2,275	70	..	
45-49 . . . . .	3,879	..	3	80	245	638	1,481	1,290	142	..	
50-54 . . . . .	1,182	..	1	32	71	212	400	402	64	..	
55-59 . . . . .	332	..	2	14	26	58	103	108	21	..	
60-64 . . . . .	80	..	2	3	7	15	23	21	9	..	
65 and over(b) . . . . .	45	..	..	2	7	10	10	13	1	2	
Mothers of nuptial children { Single . . . . .	201,793	4	18,269	66,199	62,529	32,600	17,007	4,861	322	2	
Twins . . . . .	2,148	..	106	570	722	424	271	54	1	..	
Triplets . . . . .	20	..	..	1	7	5	(c)7	..	..	..	
Total . . . . .	203,961	4	18,375	66,770	63,258	33,029	17,285	4,915	323	2	
Mothers of ex-nuptial children { Single . . . . .	16,221	107	6,375	4,728	2,297	1,379	932	364	23	16	
Twins . . . . .	162	..	46	39	24	24	21	8	..	..	
Total . . . . .	16,383	107	6,421	4,767	2,321	1,403	953	372	23	16	
Total mothers { Single . . . . .	218,014	111	24,644	70,927	64,826	33,979	17,939	5,225	345	18	
Twins . . . . .	2,310	..	152	609	746	448	292	62	1	..	
Triplets . . . . .	20	..	..	1	7	5	(c)7	..	..	..	
Total . . . . .	220,344	111	24,796	71,537	65,579	34,432	18,238	5,287	346	18	

(a) Excludes full-blood Aborigines.

(b) Includes six fathers, age 'Not stated'.

(c) Includes one case of quadruplets.

### Confinements—countries of birth of parents

The following table shows the countries of birth of parents of children whose births from nuptial confinements were registered during 1966.

**NUPTIAL CONFINEMENTS, BY RELATIVE COUNTRIES OF BIRTH OF PARENTS  
AUSTRALIA, 1966(a)**

Country of birth of father	Country of birth of mother											Total fathers
	Aus- tralia	New Zea- land	United King- dom and Ireland	Ger- many	Greece	Italy	Malta	Nether- lands	Yugo- slavia	Other Euro- pean	Other and un- spec- ified	
Australia . . . . .	137,847	542	5,506	748	131	289	246	884	62	602	983	147,840
New Zealand . . . . .	595	200	61	4	2	3	1	8	..	7	21	902
United Kingdom and Ireland . . . . .	7,036	85	7,504	136	9	32	37	107	12	135	264	15,357
Germany . . . . .	1,011	15	162	1,071	12	15	11	68	30	151	41	2,587
Greece . . . . .	366	4	24	20	7,015	18	5	8	7	33	102	7,602
Italy . . . . .	1,780	13	140	73	42	9,065	39	73	63	99	111	11,498
Malta . . . . .	474	..	70	14	1	12	1,764	19	4	12	30	2,400
Netherlands . . . . .	1,454	11	193	74	4	9	15	1,730	2	30	87	3,609
Yugoslavia . . . . .	519	4	83	131	74	137	17	37	1,701	119	29	2,851
Other European . . . . .	1,607	18	257	331	80	66	14	71	98	2,032	167	4,741
Other and unspecified . . . . .	1,597	25	290	57	185	45	22	97	10	79	2,167	4,574
Total mothers . . . . .	154,286	917	14,290	2,659	7,555	9,691	2,171	3,102	1,989	3,299	4,002	203,961

(a) Excludes full-blood Aborigines.

**Confinements—occupations of fathers**

In the 203,961 cases where nuptial confinements resulted in one or more live births, the classes of occupations of the fathers were distributed as follows: craftsmen, 66,938; rural and mining workers, 24,546; administrative and clerical workers, 27,039; labourers, 21,966; workers in transport and communication, 17,683; professional and technical workers, 20,197; sales workers, 12,613; service, sport and other workers, 12,308; persons not in the work force, 671.

**Confinements—age, duration of marriage and issue of mothers**

The total number of nuptial confinements resulting in live births in 1966 was 203,961, comprising 201,793 single births, 2,148 cases of twins, 19 cases of triplets and one case of quadruplets. The following tables relating to previous issue exclude the issue of former marriages and still-born children. On the other hand, they include in some States children by the same father who were born to the mother prior to the marriage. Children born at the present confinement are included in the total issue shown.

The following table shows that in 1966 the duration of marriage of mothers of nuptial children ranged from less than one year to over 25 years and that the average family increased fairly regularly with the duration of marriage. The average issue of married mothers who bore children in 1966 was 2.42, compared with 2.48 in 1965, 2.56 in 1964, 2.60 in 1963 and 2.61 in 1962.

**NUPTIAL CONFINEMENTS, BY DURATION OF MARRIAGE AND ISSUE OF MOTHERS  
AUSTRALIA, 1966(a)**

<i>Duration of marriage</i>	<i>Total married mothers</i>	<i>Total issue</i>	<i>Average issue</i>	<i>Duration of marriage</i>	<i>Total married mothers</i>	<i>Total issue</i>	<i>Average issue</i>
Under 1 year . . . . .	31,519	32,278	1.02	15 years . . . . .	2,427	12,084	4.98
1 year . . . . .	24,444	30,798	1.26	16 „ . . . . .	2,010	10,755	5.35
2 years . . . . .	24,587	40,547	1.65	17 „ . . . . .	1,455	8,028	5.52
3 „ . . . . .	22,234	43,697	1.97	18 „ . . . . .	1,206	6,778	5.62
4 „ . . . . .	17,922	40,750	2.27	19 „ . . . . .	962	5,685	5.91
5 „ . . . . .	14,928	39,335	2.63	20 „ . . . . .	669	4,184	6.25
6 „ . . . . .	12,499	36,379	2.91	21 „ . . . . .	402	2,580	6.42
7 „ . . . . .	10,181	32,441	3.19	22 „ . . . . .	268	1,672	6.24
8 „ . . . . .	8,211	28,047	3.42	23 „ . . . . .	197	1,364	6.92
9 „ . . . . .	7,058	25,781	3.65	24 „ . . . . .	127	929	7.31
10 „ . . . . .	5,857	22,870	3.90	25 years and over	144	1,159	8.05
11 „ . . . . .	4,781	19,711	4.12				
12 „ . . . . .	3,934	17,162	4.36				
13 „ . . . . .	3,200	14,924	4.66				
14 „ . . . . .	2,739	13,199	4.82				
				<b>Total . . . . .</b>	<b>203,961</b>	<b>493,137</b>	<b>2.42</b>

(a) Excludes full-blood Aborigines.

The following table shows the average number of children born to mothers of different ages.

**NUPTIAL CONFINEMENTS: AVERAGE ISSUE OF MOTHERS, BY AGE  
AUSTRALIA, 1911 TO 1966(a)**

<i>Period</i>	<i>Average issue of mothers aged—</i>							<i>All ages</i>
	<i>Under 20 years</i>	<i>20–24 years</i>	<i>25–29 years</i>	<i>30–34 years</i>	<i>35–39 years</i>	<i>40–44 years</i>	<i>45 years and over</i>	
1911–20.	1.21	1.75	2.61	3.74	5.11	6.69	8.16	3.25
1921–30.	1.20	1.71	2.46	3.48	4.80	6.27	7.74	3.04
1931–40.	1.20	1.68	2.30	3.19	4.41	5.89	7.40	2.71
1941–50.	1.17	1.56	2.15	2.85	3.67	4.79	6.19	2.37
1951–60.	1.23	1.71	2.42	3.12	3.84	4.63	5.57	2.51
1966 . .	1.21	1.67	2.42	3.31	4.10	4.84	5.62	2.42

(a) Excludes full-blood Aborigines.

A classification of mothers by age and previous issue is given for 1966 in the following table.

**NUPTIAL CONFINEMENTS, BY AGE OF MOTHER AND PREVIOUS ISSUE  
AUSTRALIA, 1966(a)**

<i>Previous issue</i>	<i>Age of mother (years)</i>							<i>Total married mothers</i>
	<i>Under 20</i>	<i>20–24</i>	<i>25–29</i>	<i>30–34</i>	<i>35–39</i>	<i>40–44</i>	<i>45 and over</i>	
0 . . . .	14,975	35,002	16,585	4,589	1,826	455	30	73,462
1 . . . .	3,078	22,090	20,689	7,126	2,520	535	19	56,057
2 . . . .	302	7,331	15,301	8,372	3,385	688 (b)	29	35,408
3 . . . .	20	1,839	6,790	6,165	3,276	821	45	18,956
4 . . . .	4	403	2,519	3,420	2,402	747 (b)	48	9,543
5 . . . .	..	88	906	1,685	1,571	517	46	4,813
6 . . . .	..	16	314	849	943	392	30	2,544
7 . . . .	..	1	121	451	602	275	26	1,476
8 . . . .	..	..	26	223	339	191	16	795
9 . . . .	..	..	3	96	193	113	11	416
10 and over . .	..	..	4	53	228	181	25	491
<b>Total married mothers</b>	<b>18,379</b>	<b>66,770</b>	<b>63,258</b>	<b>33,029</b>	<b>17,285</b>	<b>4,915 (c)</b>	<b>325</b>	<b>203,961</b>

(a) Excludes full-blood Aborigines. (b) Includes 1, age not stated. (c) Includes 2, age not stated.

**Multiple births—previous issue of mothers**

Of married mothers of twins in 1966, 624 had no previous issue either living or dead, 542 had one child previously, 432 had two previous issue, 257 three, 134 four, 67 five, 39 six, 22 seven, 11 eight, 7 nine, 9 ten, 2 eleven, 1 twelve, and 1 thirteen. Of the 20 cases of nuptial triplets and one case of quadruplets registered during 1966, 3 mothers had no previous issue, 4 had one, 5 had two, 3 had three, 2 had four, 2 had six, and 1 had eight previous issue.

**Nuptial first births**

The following table shows the interval between marriage and first birth for periods since 1911. In cases of multiple births, the first live-born child only is enumerated.

## NUPTIAL FIRST BIRTHS, BY DURATION OF MARRIAGE: AUSTRALIA, 1911 TO 1966(a)

	<i>Annual average</i>						
<i>Duration of marriage</i>	<i>1911-20</i>	<i>1921-30</i>	<i>1931-40</i>	<i>1941-50</i>	<i>1951-60</i>	<i>1965</i>	<i>1966</i>
<b>NUMBER OF NUPTIAL FIRST BIRTHS</b>							
Under 8 months . . .	9,312	10,351	10,677	8,822	11,796	19,358	20,038
8 months . . . . .	1,562	1,530	1,417	2,104	2,144	1,875	1,882
9 " . . . . .	3,517	3,253	2,668	4,298	4,673	3,856	3,546
10 " . . . . .	2,877	2,907	2,202	3,447	3,947	3,060	3,092
11 " . . . . .	2,018	2,152	1,836	2,896	3,287	2,634	2,518
<i>Total under 1 year . .</i>	<i>19,286</i>	<i>20,193</i>	<i>18,800</i>	<i>21,567</i>	<i>25,847</i>	<i>30,783</i>	<i>31,076</i>
1 year and under 2 years	8,563	10,133	10,595	17,762	18,463	17,567	18,574
2 years " " 3 "	2,626	3,369	4,319	8,028	7,937	9,161	10,077
3 " " " 4 "	1,230	1,743	2,214	4,361	4,373	4,809	5,619
4 " " " 5 "	700	941	1,205	2,569	2,632	2,739	2,988
5 " " " 10 "	980	1,446	1,766	3,936	4,262	4,177	4,237
10 " " " 15 "	168	240	289	501	721	766	710
15 years and over . . .	42	55	55	94	144	195	181
<b>Total . . . . .</b>	<b>33,595</b>	<b>38,120</b>	<b>39,243</b>	<b>58,818</b>	<b>64,379</b>	<b>70,197</b>	<b>73,462</b>

PROPORTION OF TOTAL NUPTIAL FIRST BIRTHS  
(Per cent)

Under 8 months . . .	27.72	27.15	27.21	15.00	18.32	27.58	27.28
8 months . . .	4.65	4.01	3.61	3.58	3.33	2.67	2.56
9 " . . .	10.47	8.53	6.80	7.31	7.26	5.49	4.82
10 " . . .	8.56	7.63	5.61	5.86	6.13	4.36	4.21
11 " . . .	6.01	5.65	4.68	4.92	5.11	3.75	3.43
Total under 1 year . .	57.41	52.97	47.91	36.67	40.15	43.85	42.30
1 year and under 2 years	25.49	26.58	27.00	30.20	28.68	25.03	25.28
2 years " " 3 "	7.82	8.84	11.01	13.65	12.33	13.05	13.72
3 " " " 4 "	3.66	4.57	5.64	7.41	6.79	6.85	7.65
4 " " " 5 "	2.08	2.47	3.07	4.37	4.09	3.90	4.07
5 " " " 10 "	2.92	3.79	4.50	6.69	6.62	5.95	5.77
10 " " " 15 "	0.50	0.63	0.73	0.85	1.12	1.09	0.97
15 years and over . .	0.12	0.15	0.14	0.16	0.22	0.28	0.24
Total . . .	100.00	100.00	100.00	100.00	100.00	100.00	100.00

(a) Excludes full-blood Aborigines.

In 1966 the masculinity of nuptial first births was 105.92 and of total births 105.95.

A summary showing grouped ages and grouped durations of marriage of mothers of nuptial first-born children is given in the following table.

**NUPTIAL FIRST BIRTHS, BY AGE OF MOTHER AND DURATION OF MARRIAGE  
AUSTRALIA, 1966(a)**

Age of mother (years)										Total
Duration of marriage	Under 20	20-24	25-29	30-34	35-39	40-44	45 and over	Not stated		
	NUMBER OF NUPTIAL FIRST BIRTHS									
Under 8 months . . . . .	10,890	7,538	1,103	312	148	43	4	..	20,038	
8 months . . . . .	412	1,024	315	92	36	3	..	..	1,882	
9 " . . . . .	591	2,000	666	194	78	17	..	..	3,546	
10 " . . . . .	491	1,746	589	191	68	7	..	..	3,092	
11 " . . . . .	433	1,415	456	144	60	10	..	..	2,518	
Total under 1 year . . . . .	12,817	13,723	3,129	933	390	80	4	..	31,076	
1 year and under 2 years . . . . .	1,834	11,397	3,869	978	390	101	5	..	18,574	
2 years " " 3 " . . . . .	262	5,944	3,028	578	205	57	3	..	10,077	
3 " " " 4 " . . . . .	45	2,676	2,326	389	144	38	1	..	5,619	
4 " " " 5 " . . . . .	13	904	1,647	305	89	28	2	..	2,988	
5 " " " 10 " . . . . .	4	358	2,514	1,006	284	62	9	..	4,237	
10 " " " 15 " . . . . .	..	..	72	388	216	32	2	..	710	
15 years and over . . . . .	..	..	..	12	108	57	4	..	181	
Total . . . . .	14,975	35,002	16,585	4,589	1,826	455	30	..	73,462	

(a) Excludes full-blood Aborigines.

The following table provides a comparison between the numbers of nuptial first births and subsequent births in periods since 1911 and shows also the proportion of first to total nuptial confinements.

**NUPTIAL FIRST BIRTHS AND SUBSEQUENT BIRTHS  
AUSTRALIA, 1911 TO 1966(a)**

<i>Period</i>	<i>Nuptial confinements</i>		<i>Total</i>	<i>Proportion of first to total nuptial confinements (per cent)</i>
	<i>First births</i>	<i>Other births</i>		
Annual average—				
1911-20 . . . . .	33,595	88,997	122,592	27.40
1921-30 . . . . .	38,120	88,086	126,206	30.20
1931-40 . . . . .	39,243	71,136	110,379	35.55
1941-50 . . . . .	58,818	96,994	155,812	37.75
1951-60 . . . . .	64,379	136,264	200,643	32.09
Annual total—				
1962 . . . . .	68,310	153,547	221,857	30.79
1963 . . . . .	69,130	150,713	219,843	31.45
1964 . . . . .	68,586	143,437	212,023	32.35
1965 . . . . .	70,197	134,941	205,138	34.22
1966 . . . . .	73,462	130,499	203,961	36.02

(a) Excludes full-blood Aborigines.

**Still-births**

Interstate comparisons of the figures and rates in the following tables are affected by the differences in the definitions of still-births adopted by the various States, and only the trends in the rates for the States should be compared. For various reasons, the registration of still-births is not as complete as for live births and deaths; particulars for the Territories and the smaller States are more affected by this than are those for the larger States. Still-birth registration was not compulsory in Tasmania until 1967. The figures shown in the tables represent those still-births voluntarily registered during the year.

## STILL-BIRTHS: STATES AND TERRITORIES, 1936 TO 1966(a)

Period	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Annual average—									
1936-40 . . . . .	1,409	854	n.a.	(b)274	234	144	n.a.	5	n.a.
1941-45 . . . . .	1,478	966	(c)657	324	248	143	n.a.	9	cd3,825
1946-50 . . . . .	1,405	949	626	368	274	161	n.a.	12	(d)3,795
1951-55 . . . . .	1,239	849	581	290	271	139	8	16	3,393
1956-60 . . . . .	1,253	839	558	274	235	109	6	19	3,293
1961-65 . . . . .	1,104	794	468	264	194	87	17	18	2,946
Annual total—									
1962 . . . . .	1,099	775	520	278	203	102	9	20	3,006
1963 . . . . .	1,163	792	476	262	178	63	30	14	2,978
1964 . . . . .	1,003	771	402	252	170	69	13	15	2,695
1965 . . . . .	947	747	391	256	181	89	15	23	2,649
1966 . . . . .	964	762	397	237	168	111	11	31	2,681

(a) Excludes full-blood Aborigines. (b) Three years 1938-40. (c) Figures for Queensland are not available for 1941. (d) Excludes Northern Territory.

The incidence of still-births in each State and Territory as measured by the rate per 1,000 of all births, both live and still, is as follows.

## PROPORTION OF STILL-BIRTHS(a): STATES AND TERRITORIES, 1936 TO 1966(b)

Period	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Average annual rate—									
1936-40 . . . . .	28.7	27.4	n.a.	(c)27.5	25.7	28.7	n.a.	22.2	n.a.
1941-45 . . . . .	25.5	24.8	(d)26.8	25.2	23.3	25.7	n.a.	22.9	de 25.25
1946-50 . . . . .	20.0	19.6	21.9	22.1	20.5	22.3	n.a.	16.3	e 20.46
1951-55 . . . . .	16.5	15.5	18.4	15.8	17.0	17.5	17.2	17.1	16.57
1956-60 . . . . .	15.5	13.5	16.1	13.5	13.7	12.6	8.6	14.3	14.59
1961-65 . . . . .	13.1	12.0	13.1	12.2	11.4	10.2	18.4	9.3	12.49
Annual rate—									
1962 . . . . .	12.7	11.6	14.4	12.8	11.8	11.3	(f)	10.9	12.52
1963 . . . . .	13.6	11.9	13.1	12.1	10.2	7.3	33.7	(f)	12.48
1964 . . . . .	12.3	11.7	11.4	11.9	10.1	8.3	(f)	(f)	11.62
1965 . . . . .	12.0	11.6	11.5	12.1	11.1	11.7	(f)	10.5	11.75
1966 . . . . .	12.25	11.76	11.94	11.53	9.78	14.78	(f)	13.2	11.90

(a) Numbers of still-births per 1,000 of all births (live and still). (b) Excludes full-blood Aborigines. (c) Three years 1938-40. (d) Figures for Queensland are not available for 1941. (e) Excludes Northern Territory. (f) Less than twenty events; rates not calculated.

NOTE. Because of the smallness of the numbers of still-births occurring in the Australian Capital Territory and the Northern Territory the rates for these Territories (i.e. the number per thousand live births and still-births) are subject to considerable fluctuation.

## Mortality

## Number of deaths

The following tables show the number of deaths, male and female, registered in each State and Territory during 1967. Still-births, although registered as both births and deaths in some States, are excluded from the death statistics published herein.

From the beginning of 1967 deaths of Aborigines are included. Prior to 1967 deaths of full-blood Aborigines were excluded. Death rates (number per 1,000 of mean population) for 1966 including deaths of Aborigines are shown in footnote (d) to the table of rates shown on the following page.

## DEATHS, SEXES: STATES AND TERRITORIES, 1967(a)

Sex	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Males . . . . .	21,947	15,659	8,580	5,031	3,956	1,789	312	234	57,508
Females . . . . .	17,666	12,714	6,156	4,040	2,823	1,439	215	142	45,195
Persons . . . . .	39,613	28,373	14,736	9,071	6,779	3,228	527	376	102,703

(a) Includes Aborigines. See text above.

A summary of the number of deaths in each State and Territory from 1941 to 1967 is given in the following table. Annual averages for each five-year period from 1861 to 1950 were published in Year Book No. 39, page 597.

#### DEATHS: STATES AND TERRITORIES, 1941 TO 1967

<i>Period</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
Annual average—									
1941-45(a) . . .	27,807	20,964	9,715	6,303	4,724	2,488	64	71	72,136
1946-50(a) . . .	29,552	21,827	10,357	6,507	4,802	2,459	76	103	75,683
1951-55 . . .	32,135	22,900	11,187	7,182	5,263	2,576	109	131	81,483
1956-60 . . .	34,002	24,254	12,008	7,732	5,523	2,668	117	184	86,488
1961-65 . . .	37,514	26,569	13,570	8,388	6,043	2,939	152	290	95,465
Annual total—									
1963 . . .	37,226	26,920	13,275	8,201	5,976	2,818	161	317	94,894
1964 . . .	39,487	27,548	14,523	8,906	6,429	3,174	164	363	100,594
1965 . . .	38,949	28,031	14,114	8,788	6,274	3,043	161	355	99,715
1966 . . .	40,546	28,673	14,861	9,323	6,772	3,159	154	441	103,929
1967(b) . . .	39,613	28,373	14,736	9,071	6,779	3,228	527	376	102,703

(a) Excludes deaths of defence personnel and of internees and prisoners of war from overseas for the period September 1939 to June 1947. (b) Includes Aborigines.

A graph on page 177 shows the number of deaths in each year from 1870 to 1967.

#### Crude death rates

The commonest method of measuring the mortality rate is to relate the number of deaths for a given period to the mean population for that period, thus obtaining the crude death rate. This rate for a given period measures the number per thousand of population by which the population is depleted through deaths during that period.

#### CRUDE DEATH RATES(a): STATES AND TERRITORIES, 1941 TO 1967

<i>Period</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
Average annual rate—									
1941-45(b) . . .	9.73	10.63	9.24	10.26	9.86	10.21	6.4	5.0	9.96
1946-50(b) . . .	9.70	10.37	9.13	9.76	9.23	9.30	6.3	5.3	9.74
1951-55 . . .	9.49	9.55	8.71	9.25	8.49	8.48	6.9	4.58	9.25
1956-60 . . .	9.20	8.91	8.36	8.62	7.90	7.97	5.32	4.31	8.78
1961-65(c) . . .	9.27	8.73	8.63	8.28	7.78	8.15	4.95	3.94	8.75
Annual rate—									
1963(c) . . .	9.20	8.85	8.46	8.14	7.68	7.82	5.3	4.3	8.70
1964(c) . . .	9.61	8.87	9.07	8.61	8.06	8.71	5.0	4.5	9.04
1965(c) . . .	9.33	8.86	8.64	8.26	7.70	8.27	4.6	4.0	8.79
1966(c) . . .	9.57	8.90	8.93	8.54	8.09	8.50	4.1	4.6	8.99
1967(d)—									
Males . . .	10.15	9.53	9.94	9.01	8.85	9.42	9.5	4.4	9.66
Females . . .	8.23	7.78	7.33	7.30	6.56	7.71	8.0	2.8	7.70
Persons . . .	9.19	8.66	8.65	8.16	7.73	8.57	8.9	3.6	8.69

(a) Number of deaths per 1,000 of mean population. (b) Excludes deaths of defence personnel, etc., from September 1939 to June 1947. (c) Recalculated from population figures revised in accordance with the results of the census of 30 June 1966. (d) Number of deaths (including deaths of Aborigines) per 1,000 of mean population (including Aborigines). For 1966 corresponding rates (i.e. including deaths of Aborigines) for persons are: New South Wales, 9.57; Victoria, 8.90; Queensland, 8.90; South Australia, 8.54; Western Australia, 8.13; Tasmania, 8.50; Northern Territory, 9.5; Australian Capital Territory, 4.6; Australia, 9.01.

NOTE: Crude death rates (i.e. the number of deaths per thousand of mean population) are affected by the particular age and sex composition of the population. In the Australian Capital Territory and the Northern Territory the population at risk in the higher ages is lower proportionately than in other States, largely as a result of the rapid increases of the population in the lower ages. In some instances rates are based on too few deaths to warrant calculation to the second decimal place.

A graph showing the crude death rate for each year from 1870 to 1967 will be found on page 183.

### Standardised death rates

The death rates quoted on page 196 are crude rates, i.e. they simply show the number of deaths per thousand of mean population without taking into consideration differences in the sex and age composition of the population. Other conditions being equal, however, the crude death rate of a community will be low if it contains a large proportion of young people (not infants), and conversely it will be relatively high if the population includes a large proportion of elderly people. The foregoing table of crude death rates, therefore, does not indicate comparative incidence of mortality either as between States in the same year or in any one State over a period of years. In order to obtain a comparison of mortality rates on a uniform basis as far as sex and age constitution are concerned, 'standardised' death rates may be computed. This is done by selecting a particular distribution of age and sex as a standard, and then calculating what would have been the general death rate if the death rates for each sex and in each age group had been as recorded, but the age and sex distribution had been the same as in the standard population. For the standardised rates which follow, the standard population compiled by the International Institute of Statistics has been used. This standard is based upon the age distribution according to sex of nineteen European countries at their censuses nearest to the year 1900. An examination of the age distribution of deaths and the resultant age-specific death rates is made on pages 201-2.

### Comparison of crude and standardised death rates

The relative incidence of mortality as between individual States and as between the years 1921, 1933, 1947, 1954, 1961, and 1966 is illustrated in the following statement of crude and 'standardised' death rates. These years have been chosen for comparison because the census data give essential information as to sexes and ages of the State populations. Crude death rates are shown to indicate the degree to which they disguise the true position.

#### CRUDE AND STANDARDISED DEATH RATES: STATES, 1921 TO 1966

	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>Aust.</i>
Crude death rate(a)—							
1921 . . .	9.50	10.52	9.37	10.02	10.42	10.30	9.91
1933 . . .	8.58	9.59	8.84	8.44	8.64	9.60	8.92
1947 . . .	9.53	10.44	9.15	9.61	9.39	9.17	9.69
1954 . . .	9.46	9.20	8.63	9.01	8.38	8.67	9.10
1961 . . .	8.95	8.37	8.41	8.06	7.77	7.89	8.47
1966 . . .	9.57	8.90	8.93	8.54	8.09	8.50	8.99
Standardised death rate(b)—							
1921 . . .	10.35	10.79	10.24	10.38	11.88	10.83	10.58
1933 . . .	8.52	8.74	9.10	7.66	8.74	8.86	8.62
1947 . . .	7.44	7.31	7.47	6.77	7.28	7.21	7.34
1954 . . .	7.24	6.63	6.80	6.52	6.71	7.02	6.90
1961 . . .	6.56	6.12	6.26	5.90	6.02	6.19	6.27
1966 . . .	6.84	6.42	6.34	6.18	6.25	6.47	6.53

(a) Total deaths per 1,000 of mean population. Excludes full-blood Aborigines.  
 (b) See explanation of standardised death rates above.

The comparisons above relate to individual years in which a census of population was taken and should not be used as the basis for general conclusions as to changes in incidence of mortality for other than those years.

### True death rates

The main objections to standardised death rates are that the choice of a standard population is arbitrary and that the standardised rates have little value except for comparative purposes, and even then variation of the standard population may make appreciable differences. However, a correct measurement of the mortality of the population can be obtained from life tables. A life table represents the number of survivors at each age from a group of newly-born children who are subject to



given mortality conditions, and from such a table the complete expectation of life at birth can be calculated. The reciprocal of this figure is known as the true death rate, since, if the complete expectation of life of a person at birth is fifty years, say, then each person will on the average die fifty years after birth, so that in a stationary population one person in fifty or twenty per thousand, will die each year. The true death rate for a given period is unaffected by the particular age distribution of that period and is determined solely by the mortality experience of the period as manifested in the rate of survival from each year of age to the next. The table below sets out complete expectation of life at birth and true death rates for the periods covered by Australian life tables.

COMPLETE EXPECTATION OF LIFE AT BIRTH, AND TRUE  
DEATH RATES: AUSTRALIA, 1881-90 TO 1966(a)

Period	Complete expectation of life at birth (years)		True death rate	
	Males	Females	Males(b)	Females(c)
1881-90 . . .	47.20	50.84	21.19	19.67
1891-1900 . . .	51.06	54.76	19.58	18.26
1901-10 . . .	55.20	58.84	18.12	17.00
1920-22 . . .	59.15	63.31	16.91	15.80
1932-34 . . .	63.48	67.14	15.75	14.89
1946-48 . . .	66.07	70.63	15.14	14.16
1953-55 . . .	67.14	72.75	14.89	13.75
1960-62 . . .	67.92	74.18	14.72	13.48
1964(d) . . .	67.40	73.81	14.84	13.55
1965(d) . . .	67.69	74.19	14.77	13.48
1966(d) . . .	67.58	74.01	14.80	13.51

(a) Excludes full-blood Aborigines. (b) Number of deaths per 1,000 males in stationary population. (c) Number of deaths per 1,000 females in stationary population. (d) Based on abridged life tables calculated by the Commonwealth Statistician. These tables are based on estimates of population by age, adjusted to take into account the 1966 census.

The crude death rates and the true death rates of Australia and the more populous countries of the world for the latest available year are shown in the table in International Vital Statistics at the end of this chapter.

#### Australian Life Tables

*Life Tables prior to 1961.* It has been the practice at each census from 1911 onwards to prepare Life Tables representative of the mortality experience of Australia. The mortality of the Australian population for the thirty years from 1881 to 1910 inclusive was investigated in 1911 by the Commonwealth Statistician. Tables were compiled for each State and for Australia as a whole in respect of each sex for each of the decennial periods 1881-90, 1891-1900 and 1901-10. These compilations furnished a comprehensive view of Australian mortality in respect of sex, time, and geographical distribution, and practically superseded all Life Tables prepared in Australia prior to 1911. In addition, mortality tables based on the experience for the whole of Australia for the ten years 1901-10 were prepared and published. At the census of 1921 Life Tables were prepared by the Commonwealth Statistician from the recorded census population and the deaths in the three years 1920 to 1922. In 1933, 1947 and 1954, Life Tables based on the census population and the deaths in the years 1932 to 1934, 1946 to 1948 and 1953 to 1955 respectively were compiled by the Commonwealth Actuary.

*Life Tables of census of 1961.* On the occasion of the 1961 Census the eighth Life Tables in the series were compiled by the Commonwealth Actuary. These were based on the population recorded at the census, adjusted to allow for variation in the net movement into Australia over the years 1960 to 1962, and deaths during these years. Full particulars of the data used, the method of construction and the tabulation of these Life Tables will be found in the report of the Commonwealth Actuary, which was published by the Commonwealth Statistician in 1966. This report will also appear in Volume VIII of the detailed tables of the 1961 census. The main features of the tables, including comparisons with earlier Australian tables, are set out in the following summary tables.

**AUSTRALIAN COMPARATIVE LIFE TABLES**  
**RATES OF MORTALITY ( $q_x$ ) AT REPRESENTATIVE AGES**

Age (x)	1901-10	1920-22	1932-34	1946-48	1953-55	1960-62
<b>MALES</b>						
0	.09510	.07132	.04543	.03199	.02521	.02239
10	.00179	.00156	.00119	.00072	.00056	.00041
20	.00370	.00284	.00219	.00169	.00186	.00173
30	.00519	.00390	.00271	.00186	.00170	.00157
40	.00816	.00617	.00460	.00337	.00297	.00300
50	.01395	.01158	.00966	.00919	.00819	.00804
60	.02584	.02407	.02216	.00278	.02221	.02176
70	.06162	.05290	.05082	.05256	.05315	.05177
80	.13795	.13340	.12659	.12011	.11958	.11617
<b>FEMALES</b>						
0	.07953	.05568	.03642	.02519	.01989	.01757
10	.00159	.00127	.00087	.00050	.00035	.00028
20	.00329	.00252	.00183	.00091	.00064	.00060
30	.00519	.00387	.00279	.00165	.00096	.00082
40	.00718	.00524	.00402	.00284	.00217	.00187
50	.00956	.00808	.00744	.00641	.00530	.00464
60	.01920	.01571	.01466	.01360	.01203	.01074
70	.04777	.04090	.03802	.03607	.03250	.02933
80	.11333	.11230	.10106	.10027	.09314	.08507

$q_x$  = probability of dying within one year at specified ages.

**RATES OF MORTALITY FOR ONE PERIOD AS A PROPORTION OF THE  
RATES FOR THE PRECEDING PERIOD**

Age	<i>Males</i>				<i>Females</i>			
	1932-34	1946-48	1953-55	1960-62	1932-34	1946-48	1953-55	1960-62
	1920-22	1932-34	1946-48	1953-55	1920-22	1932-34	1946-48	1953-55
0	.64	.70	.79	.89	.65	.69	.79	.88
10	.76	.61	.78	.73	.69	.57	.70	.80
20	.77	.77	1.10	.93	.73	.50	.70	.94
30	.69	.69	.91	.92	.72	.59	.58	.85
40	.75	.73	.88	1.01	.77	.71	.76	.86
50	.83	.95	.89	.98	.92	.86	.83	.88
60	.92	1.03	.97	.98	.93	.93	.88	.89
70	.96	1.03	1.01	.97	.93	.95	.90	.90
80	.95	.95	1.00	.97	.90	.99	.93	.91

## RATES OF MORTALITY AS A PROPORTION OF THE RATES FOR THE PERIOD 1901-1910

Age	Males				Females			
	1932-34	1946-48	1953-55	1960-62	1932-34	1946-48	1953-55	1960-62
	1901-10	1901-10	1901-10	1901-10	1901-10	1901-10	1901-10	1901-10
0	.48	.34	.27	.24	.46	.32	.25	.22
10	.66	.40	.31	.23	.55	.31	.22	.18
20	.59	.46	.50	.47	.56	.28	.19	.18
30	.52	.36	.33	.30	.54	.32	.18	.16
40	.56	.41	.36	.37	.56	.40	.30	.26
50	.69	.66	.59	.58	.78	.67	.55	.49
60	.86	.88	.86	.84	.76	.71	.63	.56
70	.82	.85	.86	.84	.80	.76	.68	.61
80	.92	.87	.87	.84	.89	.88	.82	.75

NUMBER OF SURVIVORS ( $l_x$ ) AT SELECTED AGES OUT OF 100,000 BIRTHS

Age (x)	Males				Females			
	1901-10	1946-48	1953-55	1960-62	1901-10	1946-48	1953-55	1960-62
0	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
10	86,622	95,619	96,488	97,062	88,395	96,549	97,228	97,664
20	84,493	94,562	95,460	96,215	86,459	95,953	96,774	97,278
30	80,844	92,967	93,801	94,726	82,909	94,740	96,055	96,649
40	75,887	90,823	90,861	92,859	78,001	92,758	94,715	95,481
50	68,221	85,946	87,553	88,473	71,945	89,011	91,573	92,713
60	56,782	74,251	76,256	77,456	63,247	81,257	84,665	86,537
70	38,275	52,230	54,054	54,944	46,793	65,398	69,613	72,505
80	14,330	22,785	23,658	24,669	21,356	35,401	39,633	43,453
90	1,652	3,144	3,507	3,800	3,566	6,556	8,087	10,005

COMPLETE EXPECTATION OF LIFE ( $^e e_x$ ) AT SELECTED AGES

Age (x)	Males				Females			
	1901-10	1946-48	1953-55	1960-62	1901-10	1946-48	1953-55	1960-62
0	55.20	66.07	67.14	67.92	58.84	70.63	72.75	74.18
10	53.53	59.04	59.53	59.93	56.38	63.11	64.78	65.92
20	44.74	49.64	50.10	50.40	47.52	53.47	55.06	56.16
30	36.52	40.40	40.90	41.12	39.33	44.08	45.43	46.49
40	28.56	31.23	31.65	31.84	31.47	34.91	35.99	36.99
50	21.16	22.67	22.92	23.13	23.69	26.14	27.03	27.92
60	14.35	15.36	15.47	15.60	16.20	18.11	18.78	19.51
70	8.67	9.55	9.59	9.77	9.96	11.14	11.62	12.19
80	4.96	5.36	5.47	5.57	5.73	6.02	6.30	6.68

$l_x$  = number surviving at specified ages out of 100,000 births.  $^e e_x$  = complete expectation of life at specified ages.

As indicated in the foregoing tables, the progress towards lower mortality rates for both males and females has continued over the past sixty years or more. For example, the probability of a child born in 1961 dying in one year is less than one-quarter of the probability of death in one year attached to the child who was born sixty years ago. Even at advanced ages, the reductions which have occurred in mortality rates as compared with sixty years ago are very substantial. With the exception of males of ages forty to forty-seven and ages sixty-two to sixty-six lower mortality rates were experienced by males and females during 1960 to 1962 than for the period 1953 to 1955.

There is evidence that female longevity continues to improve at a faster rate than male longevity. It would seem that the risks associated with child-bearing for females are far out-weighted by the greater accident propensity of younger males and the more rapid deterioration of health, presumably due to business and other pressures, of older males.

An improvement has occurred in male mortality from accidents of all types, although there is some indication that for females the accident rates have deteriorated slightly. The rates for females are, nevertheless, still substantially below the corresponding rates for males.

#### Age distribution at death

Age at death is recorded for statistical purposes in days for the first week of life, in weeks for the first four weeks, in months for the first year and in completed years of life thereafter. These ages are usually combined in groups for publication, the most common being weeks for the first four weeks, months or groups of months for the first year, single years of age for the first five years, and thereafter the five-year group 5-9 years, 10-14 years, etc. A summary in this form for the year 1966 is given for Australia in the following table.

DEATHS, BY AGE AT DEATH AND SEX: AUSTRALIA, 1966(a)

Age at death	Males	Fe- males	Per- sons	Age at death	Males	Fe- males	Per- sons
Under 1 week . . . . .	1,513	1,105	2,618	5-9 years . . . . .	277	204	481
1 week and under 2 weeks . . . . .	92	73	165	10-14 " . . . . .	256	137	393
2 weeks and under 3 weeks . . . . .	46	31	77	15-19 " . . . . .	733	286	1,019
3 weeks and under 4 weeks . . . . .	35	32	67	20-24 " . . . . .	731	268	999
<i>Total under 4 weeks . . . . .</i>	<i>1,686</i>	<i>1,241</i>	<i>2,927</i>	25-29 " . . . . .	544	250	794
4 weeks and under 3 months . . . . .	215	147	362	30-34 " . . . . .	572	341	913
3 months and under 6 months . . . . .	220	174	394	35-39 " . . . . .	991	599	1,590
6 months and under 12 months . . . . .	207	155	362	40-44 " . . . . .	1,497	831	2,328
<i>Total under 1 year . . . . .</i>	<i>2,328</i>	<i>1,717</i>	<i>4,045</i>	45-49 " . . . . .	2,040	1,257	3,297
1 year . . . . .	211	136	347	50-54 " . . . . .	3,362	1,906	5,268
2 years . . . . .	126	75	201	55-59 " . . . . .	4,652	2,356	7,008
3 " . . . . .	103	64	167	60-64 " . . . . .	5,990	2,964	8,954
4 " . . . . .	79	53	132	65-69 " . . . . .	7,115	4,397	11,512
<i>Total under 5 years . . . . .</i>	<i>2,847</i>	<i>2,045</i>	<i>4,892</i>	70-74 " . . . . .	7,775	6,198	13,973
				75-79 " . . . . .	8,100	7,510	15,610
				80-84 " . . . . .	5,829	7,046	12,875
				85 years and over . . . . .	4,469	7,536	12,005
				Age not stated . . . . .	15	3	18
				<i>Total all ages . . . . .</i>	<i>57,795</i>	<i>46,134</i>	<i>103,929</i>

(a) Excludes full-blood Aborigines.

There are different mortality rates at various stages of life, and the actual number of deaths in any period is related to the numbers living at the respective stages. Changes in the number of deaths from one period to another are associated with changes in the rate of mortality in the various age groups and by the changed proportions of persons living in the different groups. The combined effect of various influences, i.e. the steady decline in the rate of mortality, the long term decline in the birth-rate, and the effects of past and present migration on the age distribution of the population, is shown in the following table, which shows the proportion of deaths in various age groups in ten-year periods from 1901 to 1960 and for the year 1966.

PROPORTION OF DEATHS IN EACH AGE GROUP: AUSTRALIA, 1901 TO 1966(a)

(Per cent)

Age at death (years)							1966		
	1901-10	1911-20	1921-30	1931-40	1941-50	1951-60	Males	Females	Persons
Under 1 year	20.51	16.66	13.09	7.40	6.79	5.59	4.03	3.72	3.89
1-4 . . . . .	6.45	6.09	4.51	2.56	1.71	1.33	0.90	0.71	0.82
5-14 . . . . .	3.71	3.47	3.00	2.29	1.34	1.04	0.92	0.74	0.84
15-24 . . . . .	6.22	5.10	4.33	3.61	2.09	1.71	2.53	1.20	1.94
25-34 . . . . .	7.31	7.40	5.92	4.49	2.87	2.30	1.93	1.28	1.64
35-44 . . . . .	8.39	8.02	7.72	6.25	4.52	4.00	4.31	3.10	3.77
45-54 . . . . .	9.29	10.34	9.99	10.34	9.15	8.29	9.35	6.86	8.24
55-64 . . . . .	9.74	12.12	14.82	15.11	16.67	15.81	18.41	11.53	15.36
65-74 . . . . .	13.39	13.51	17.85	22.53	23.09	25.47	25.76	22.97	24.52
75 and over . . . . .	14.99	17.29	18.77	25.42	31.77	34.46	31.86	47.89	38.98
<i>Total . . . . .</i>	<i>100.00</i>	<i>100.00</i>	<i>100.00</i>	<i>100.00</i>	<i>100.00</i>	<i>100.00</i>	<i>100.00</i>	<i>100.00</i>	<i>100.00</i>

(a) Excludes full-blood Aborigines.

A table showing these proportions for males and females separately for the period 1901 to 1950 was published in Year Book No. 39, page 614.

#### Age-specific death rates

In previous issues of the Year Book, average annual age-specific death rates were given for each State and Australia for the periods 1932-1934, 1946-1948, 1953-1955, and 1960-1962 (*see* Year Books, No. 37, pp. 778-9, No. 39, pp. 615-6, No. 44, pp. 640-1, and No. 52, p. 253). These rates were based on the age distribution of the population at the relevant censuses.

Intercensal estimates of the age distribution of the population are available for Australia and for the larger States. The following table shows age-specific death rates, i.e. the average number of deaths per 1,000 of population in each age group, for Australia for the year 1966, for males and females.

AGE-SPECIFIC DEATH RATES(a): AUSTRALIA, 1966(b)

Age group (years)	Males	Females	Age group (years)	Males	Females
Under 1(c)	20.3	15.9	45-49	6.0	3.8
1-4	1.1	0.7	50-54	10.4	6.0
5-9	0.5	0.4	55-59	16.9	8.8
10-14	0.5	0.3	60-64	27.8	13.6
15-19	1.4	0.6	65-69	44.1	22.7
20-24	1.7	0.6	70-74	67.7	38.3
25-29	1.4	0.7	75-79	102.5	64.5
30-34	1.6	1.0	80-84	151.8	110.6
35-39	2.5	1.6	85 and over	250.5	204.3
40-44	3.8	2.2			

(a) Average number of deaths per 1,000 of mid-year population in each age group as recorded at the Census of 30 June 1966 and adjusted for mis-statement of age. (b) Excludes full-blood Aborigines. (c) Infant deaths per 1,000 live births registered.

#### Infant deaths and death rates—States and Territories

Compared with other countries, Australia occupies a favourable position in respect of infant mortality. In 1966 only a few countries recorded a lower rate than Australia. Rates for Australia and the more populous countries of the world for the latest available year are shown in the table International Vital Statistics, pages 217-18. The next table shows for each State and Territory for the period 1941 to 1967, the number of deaths under one year of age and the rates of infant mortality under one year.

INFANT MORTALITY UNDER ONE YEAR: STATES AND TERRITORIES, 1941 TO 1967

Period	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Annual average—									
1941-45	2,034	1,311	804	413	347	213	7	7	5,136
1946-50	1,990	1,129	770	431	370	187	11	14	4,902
1951-55	1,852	1,113	730	407	384	184	17	14	4,701
1956-60	1,770	1,205	717	410	362	176	25	18	4,683
1961-65	1,685	1,168	696	407	350	156	28	34	4,524
Annual total—									
1963	1,673	1,242	722	399	353	153	27	38	4,607
1964	1,634	1,098	673	397	328	166	30	41	4,367
1965	1,492	1,109	598	385	351	125	23	34	4,117
1966	1,490	1,116	581	356	329	108	19	46	4,045
1967(a)	1,452	1,101	678	346	313	130	122	44	4,186
Annual average rate(b)—									
1941-45	35.9	34.5	34.3	32.9	33.3	39.3	61.7	18.7	34.97
1946-50	28.9	23.8	27.5	26.5	28.1	26.5	37.4	19.9	26.98
1951-55	25.1	20.7	23.6	22.6	24.4	23.7	36.3	15.4	23.34
1956-60	22.2	19.7	21.0	20.5	21.4	20.6	36.0	13.7	21.05
1961-65	20.3	17.9	19.7	19.0	20.8	18.5	31.2	17.6	19.42
Annual rate(b)—									
1963	19.9	18.9	20.1	18.7	20.4	17.9	31.4	19.0	19.55
1964	20.3	16.9	19.2	19.0	19.7	20.1	32.9	21.0	19.06
1965	19.1	17.5	17.8	18.4	21.7	16.6	25.2	15.8	18.47
1966	19.2	17.4	17.7	17.5	19.3	14.6	(c)	19.8	18.17
1967(d)	18.4	16.8	19.5	17.0	17.4	17.2	63.5	18.3	18.26

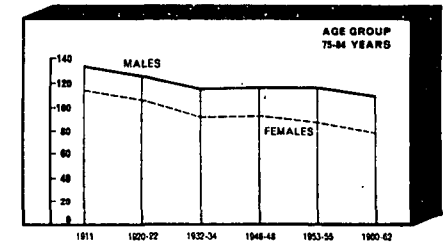
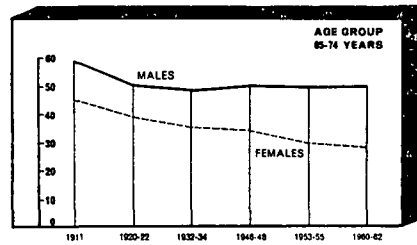
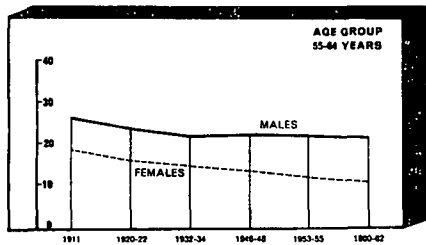
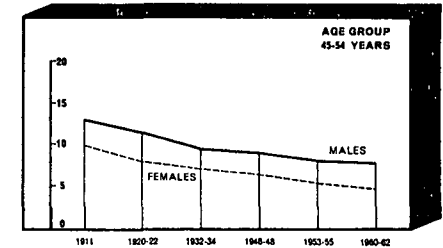
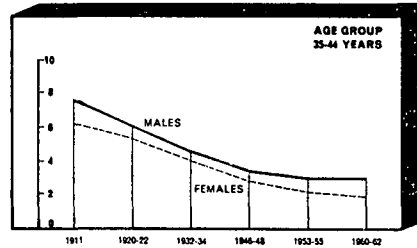
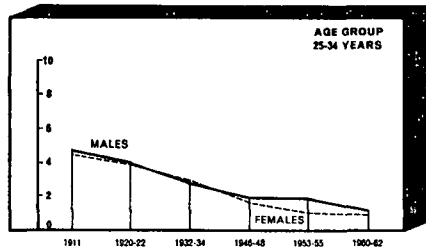
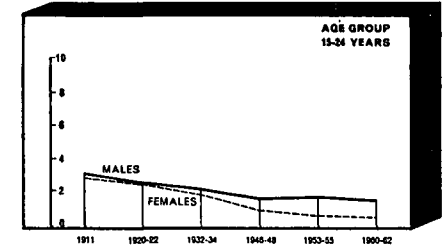
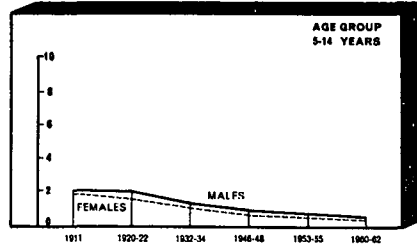
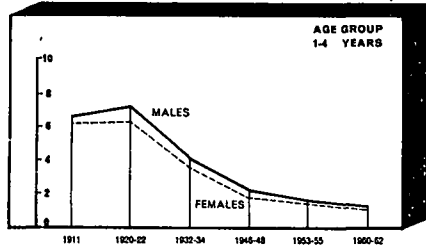
(a) Includes Aborigines. (b) Number of deaths of children aged under one year per 1,000 live births registered. (c) Less than twenty events; rates not calculated. (d) Number of deaths (including deaths of Aborigines) per 1,000 of mean population (including Aborigines). For 1966 the corresponding rates (i.e. including deaths of Aborigines) are: New South Wales, 19.2; Victoria, 17.4; Queensland, 17.8; South Australia, 17.9; Western Australia, 19.9; Tasmania, 14.6; Northern Territory, 75.7; Australian Capital Territory, 19.8; Australia, 18.7.

# AGE-SPECIFIC DEATH RATES

AUSTRALIA, 1911 TO 1960-62

NUMBER OF DEATHS PER 1,000 MALES OR FEMALES IN EACH AGE GROUP

PLATE 28



Because of the smallness of the numbers of these deaths occurring in the Australian Capital Territory and the Northern Territory, the rates for these Territories (i.e. number of such deaths per thousand live births) are subject to considerable fluctuation.

#### Infant deaths and death rates—Australia

The fact that out of 590,304 male infants born from 1962 to 1966, 12,619 (21.38 per 1,000) died during the first year of life, while of 557,095 female infants only 9,357 (16.80 per 1,000) died during the first year, accords with the universal experience that during the first few years of life the higher death rate of male infants tends to counteract the excess of male births. Still-births, for which masculinity is also higher, are not included in any of the tables relating to deaths.

As shown by the following table, the disparity is greater during the first four weeks of life, termed the neonatal period, than during the remainder of the first year of life, or the post-neonatal period.

INFANT DEATHS AND MORTALITY RATES, BY SEX: AUSTRALIA, 1936 TO 1966(a)

Period	Number of deaths						Rates(b)					
	Neonatal— under four weeks			Post- neonatal— four weeks and under one year			Neonatal— under four weeks			Post- neonatal— four weeks and under one year		
	Males		Fe- males	Males		Fe- males	Males		Fe- males	Males		Fe- males
	Males	Fe- males	Males	Fe- males	Males	Fe- males	Males	Fe- males	Males	Fe- males	Males	Fe- males
ANNUAL AVERAGES												
1936-40 . . . . .	1,816	1,353	863	663	2,679	2,016	29.30	22.93	13.93	11.23	43.23	34.16
1941-45 . . . . .	2,007	1,495	914	720	2,921	2,215	26.66	20.88	12.14	10.05	38.80	30.93
1946-50 . . . . .	2,024	1,490	784	604	2,808	2,094	21.68	16.86	8.40	6.84	30.08	23.70
1951-55 . . . . .	1,907	1,406	776	612	2,683	2,018	18.47	14.32	7.52	6.24	25.99	20.56
1956-60 . . . . .	1,921	1,432	741	589	2,662	2,021	16.81	13.24	6.48	5.45	23.29	18.69
1961-65 . . . . .	1,887	1,373	709	555	2,596	1,928	15.75	12.13	5.92	4.90	21.67	17.03
ANNUAL TOTALS												
1962 . . . . .	2,038	1,451	752	599	2,790	2,050	16.69	12.62	6.16	5.21	22.85	17.83
1963 . . . . .	1,946	1,429	690	542	2,636	1,971	16.06	12.48	5.70	4.73	21.76	17.21
1964 . . . . .	1,795	1,331	713	528	2,508	1,859	15.20	11.98	6.04	4.75	21.24	16.73
1965 . . . . .	1,704	1,243	653	517	2,357	1,760	14.89	11.47	5.70	4.77	20.59	16.24
1966 . . . . .	1,686	1,241	642	476	2,328	1,717	14.72	11.48	5.61	4.40	20.33	15.88

(a) Excludes full-blood Aborigines. (b) Number of deaths per 1,000 male or female live births registered.

From the following table, showing particulars of infant deaths in the first four weeks of life, or the neonatal period, it will be seen that for both males and females the risk of death is very much greater during the first day of life than subsequently.

INFANT DEATHS AND MORTALITY RATES—UNDER FOUR WEEKS, BY SEX  
AUSTRALIA, 1936 TO 1966(a)

Period	Number of deaths						Rates(b)					
	Early neonatal			Late neonatal— one week and under four weeks			Early neonatal			Late neonatal— one week and under four weeks		
	Under one day		One day and under one week	Under one day		One day and under one week	Under one day		One day and under one week	Under one day		One day and under one week
	Males	Fe- males	Males	Fe- males	Males	Fe- males	Males	Fe- males	Males	Fe- males	Males	Fe- males
ANNUAL AVERAGES												
1936-40 . . . . .	n.a.	n.a.	c1,496	c1,120	320	233	n.a.	n.a.	c24 13	c18.99	5.17	3.94
1941-45 . . . . .	906	674	728	541	373	280	12.03	9.42	9.67	7.55	4.96	3.91
1946-50 . . . . .	986	731	758	539	280	220	10.56	8.28	8.12	6.09	3.00	2.49
1951-55 . . . . .	918	713	742	508	247	185	8.88	7.26	7.19	5.17	2.40	1.89
1956-60 . . . . .	972	765	705	490	244	177	8.50	7.07	6.17	4.53	2.13	1.64
1961-65 . . . . .	986	723	691	496	210	154	8.23	6.39	5.77	4.38	1.75	1.36
ANNUAL TOTALS												
1962 . . . . .	1,080	733	719	548	239	170	8.84	6.38	5.89	4.76	1.96	1.48
1963 . . . . .	1,043	765	691	509	212	155	8.61	6.68	5.70	4.44	1.75	1.36
1964 . . . . .	940	719	691	479	164	133	7.96	6.47	5.85	4.31	1.39	1.20
1965 . . . . .	889	655	615	452	200	136	7.77	6.04	5.37	4.17	1.75	1.25
1966 . . . . .	853	658	660	447	173	136	7.45	6.09	5.76	4.14	1.51	1.26

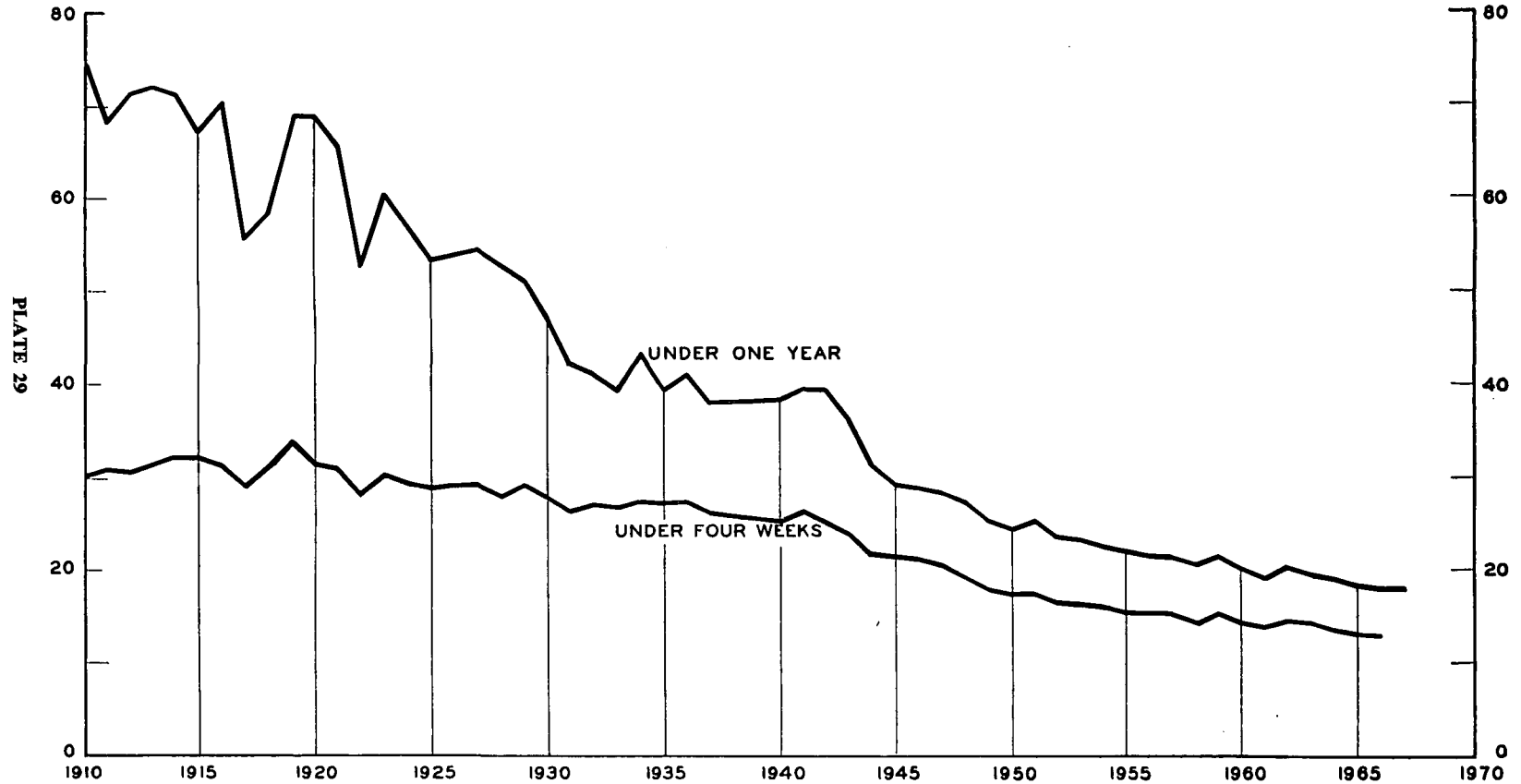
(a) Excludes full-blood Aborigines. (b) Number of deaths per 1,000 male or female live births registered. (c) Includes under one day.

The graph opposite shows infant mortality rates for each year from 1910 to 1967.

# INFANT MORTALITY RATES: AUSTRALIA

1910 TO 1967

(INFANT DEATHS PER 1,000 LIVE BIRTHS)





## Causes of death—children under one year

Causes of death of children under one year of age should be considered in relation to age at death, because the emphasis on various causes changes rapidly as age at death varies. A summary for 1966 of deaths of children under one year of age, classified according to principal causes of death and age at death, is given in the following table.

DEATHS OF CHILDREN UNDER ONE YEAR OF AGE, BY CAUSE OF DEATH  
AUSTRALIA, 1966(a)

Inter- national Classi- fication of Diseases number	Cause of death	Age at death										Total under one year
		Days		Total under one week	Weeks			Months				
		Under 1	1-6		1	2	3	1-2 (b)	3-5	6-8	9-11	
	Causes mainly of prenatal and natal origin—											
750-759	Congenital malformations . . . . .	151	178	329	58	35	27	109	69	43	28	698
760, 761	Birth injury . . . . .	298	192	490	13	2	1	1	..	..	..	507
762	Postnatal asphyxia and atelec- tasis . . . . .	267	204	471	9	2	1	2	3	4	3	495
769	Attributed to certain diseases of the mother . . . . .	49	25	74	2	..	1	..	2	..	..	79
770	Erythroblastosis . . . . .	62	33	95	1	2	..	..	..	..	..	98
771	Haemorrhagic disease of new- born . . . . .	10	41	51	2	..	1	..	..	..	..	54
773	Ill-defined diseases peculiar to early infancy . . . . .	125	122	247	10	1	3	12	10	1	1	285
774, 776	Immaturity alone, or with men- tion of any other subsidiary condition . . . . .	501	209	710	19	5	3	5	..	..	..	742
	<i>Total</i> . . . . .	1,463	1,004	2,467	114	47	37	129	84	48	32	2,958
	Causes mainly of postnatal origin—											
571, 764	Gastro-enteritis (including diar- rhoea of newborn) . . . . .	..	4	4	..	..	4	18	20	26	20	92
(c)	Pneumonia and bronchitis . . . . .	13	43	56	21	10	6	98	128	50	35	404
(d)	Septicaemia, skin and sub- cutaneous tissue infections, sepsis of newborn . . . . .	1	9	10	13	10	4	7	7	5	..	56
057, 340	Meningococcal infections and non-meningococcal meningitis . . . . .	..	4	4	7	..	3	3	12	13	4	46
(e)	Causes classified as infective or mainly infective in origin not specified above . . . . .	1	6	7	1	2	1	17	33	21	9	91
E921-E925	Accidental mechanical suffoca- tion from vomit, food, foreign body or in bed and cradle . . . . .	..	..	..	2	1	3	32	33	12	5	88
E926, E980-E985	Lack of care, neglect, infant- icide . . . . .	6	1	7	..	..	..	..	3	..	..	10
(f)	Other accidents, poisonings and violence . . . . .	1	1	2	1	..	..	10	10	9	17	49
	<i>Total</i> . . . . .	22	68	90	45	23	21	185	246	136	90	836
140-239	Neoplasms . . . . .	..	7	7	..	..	1	3	4	2	5	22
Residual	Other causes remaining . . . . .	26	28	54	6	7	8	45	60	27	22	229
	<i>All causes</i> . . . . .	1,511	1,107	2,618	165	77	67	362	394	213	149	4,045

(a) Excludes full-blood Aborigines. (b) Age four weeks and under three months. (c) 490-493, 500-502, 763.  
(d) 053, 690-698, 765-768. (e) 001-052, 054-056, 058-138, 391-393, 470-483, 518, 519. (f) E800-E920, E927-E979,  
E990-E999.

The following table summarises the detail contained in the previous table, and, in addition, shows the proportions of deaths from the various causes in each of the periods—under one week, one week and under one month, one month and under one year, and total under one year.

**DEATHS OF CHILDREN UNDER ONE YEAR OF AGE, BY CAUSE OF DEATH  
NUMBERS AND PROPORTIONS, AUSTRALIA, 1966(a)**

Inter- national Classi- fication of Diseases number	Cause of death	Age at death							
		Under one week		One week and under one month		One month and under one year		Total under one year	
		Num- ber	Per cent	Num- ber	Per cent	Num- ber	Per cent	Num- ber	Per cent
Causes mainly of prenatal and natal origin—									
750-759	Congenital malformations . . . . .	329	12.6	120	38.8	249	22.3	698	17.3
760, 761	Birth injury . . . . .	490	18.7	16	5.2	1	0.1	507	12.5
762	Postnatal asphyxia and atelec- tasis . . . . .	471	18.0	12	3.9	12	1.1	495	12.2
769	Attributed to certain diseases of the mother . . . . .	74	2.8	3	1.0	2	0.2	79	2.0
770	Erythroblastosis . . . . .	95	3.6	3	1.0	..	..	98	2.4
771	Haemorrhagic disease of new- born . . . . .	51	1.9	3	1.0	..	..	54	1.3
773	Ill-defined diseases peculiar to early infancy . . . . .	247	9.4	14	4.5	24	2.1	285	7.0
774, 776	Immaturity alone, or with men- tion of any subsidiary condi- tion . . . . .	710	27.1	27	8.7	5	0.4	742	18.3
	Total . . . . .	2,467	94.2	198	64.1	293	26.2	2,958	73.1
Causes mainly of postnatal origin—									
571, 764	Gastro-enteritis (including diarrhoea of newborn) . . . . .	4	0.2	4	1.3	84	7.5	92	2.3
(b)	Pneumonia and bronchitis . . . . .	56	2.1	37	12.0	311	27.8	404	10.0
	Other . . . . .	30	1.1	48	15.5	262	23.4	340	8.4
	Total . . . . .	90	3.4	89	28.8	657	58.8	836	20.7
140-239, residual	Neoplasms and other causes remaining . . . . .	61	2.3	22	7.1	168	15.0	251	6.2
	All causes . . . . .	2,618	100.0	309	100.0	1,118	100.0	4,045	100.0

(a) Excludes full-blood Aborigines. (b) 490-493, 500-502, 763.

### Causes of death

The classification of causes of death adopted for Australia by the Commonwealth Bureau of Census and Statistics at the inception of its mortality statistics in 1907 was that introduced by the International Institute of Statistics in 1893, reviewed by that Institute in 1899, and revised by an International Commission in 1900. This classification became known as the International List of Causes of Death, and further international revisions in 1909 (Second), 1920 (Third), 1929 (Fourth), 1938 (Fifth), 1948 (Sixth), and 1955 (Seventh), were successively adopted for use in Australian statistics.

The Sixth Revision of the International Statistical Classification of Diseases, Injuries and Causes of Death was used in Australia for deaths registered in 1950 to 1957. The Seventh Revision has been used for deaths registered in 1958 and subsequent years. The Sixth Revision, for the first time in connection with the International Classification, laid down rules for a uniform method of selecting the main cause to be tabulated if more than one cause is stated on the death certificate. These rules were maintained in the Seventh Revision, which was concerned mainly with certain essential changes and amendment of errors and inconsistencies in the previous classification. Prior to 1950 the rules adopted in Australia for the selection of the cause of death to be tabulated were those laid down in the United States Manual of Joint Causes of Death, first published in 1914 and revised to conform to successive revisions of the International Classification.

The adoption of the new method introduced with the Sixth Revision and maintained in the Seventh marked a fundamental change in Australian cause of death statistics, emphasis now being placed on the underlying cause of death as indicated by the certifying practitioner. This change in principle affects the comparability of the statistics for 1950 and subsequent years with those for earlier years. A complete detailed classification of causes of death for Australia for 1950 according to both the Fifth and Sixth Revisions was shown in *Demography*, Bulletin No. 68, 1950.

In order to facilitate the concise presentation of cause of death statistics, the present International Classification provides two special lists of causes for tabulation—the Intermediate List of 150 causes and the Abbreviated List of 50 causes. The latter has been used as the base of the cause of death tabulations for 1966 which follow. Some categories have been sub-divided to show additional particulars of interest in Australian statistics. Tables A and B show deaths of males and females, respectively, in age groups, and Table C shows the total numbers of males and females who died, the death rates per million of mean population, and the percentage of total deaths.

### A. DEATHS OF MALES, BY CAUSE OF DEATH AND AGE GROUP: AUSTRALIA, 1966

#### ABBREVIATED LIST OF 50 CAUSES (BASED ON THE SEVENTH REVISION OF THE INTERNATIONAL LIST)

		Age group (years)										
Cause of death(a)		Detailed list numbers	0	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65 and over	Total
B 1	Tuberculosis of respiratory system	001-008	..	..	..	..	..	13	27	77	137	254
B 2	Tuberculosis, other forms	010-019	..	..	..	1	..	1	1	1	6	10
B 3	Syphilis and its sequelae	020-029	3	..	..	..	..	3	3	19	23	51
B 4	Typhoid fever	040	1	..	..	..	..	..	..	..	..	1
B 6	Dysentery, all forms	045-048	1	1	1	..	1	..	..	..	1	5
B 7	Scarlet fever and streptococcal sore throat	050, 051	..	..	..	..	1	1	..	..	..	2
B 9	Whooping cough	056	2	..	..	..	..	..	..	..	..	2
B10	Meningococcal infections	057	7	4	3	1	1	..	1	..	4	21
B14	Measles	085	1	2	1	..	..	..	..	..	..	4
B15	Typhus and other rickettsial diseases	100-108	..	..	..	..	1	..	..	..	..	1
R17	All other diseases classified as infective and parasitic	(b)	27	12	11	5	7	4	11	13	31	121
B18	Malignant neoplasms of—											
	Digestive organs and peritoneum	150-159	..	2	1	4	24	112	287	675	1,818	2,923
	Lung	162, 163	..	..	..	1	7	63	265	756	1,167	2,259
	Breast	170	..	..	..	..	1	1	2	3	8	15
	Genital organs	171-179	..	..	..	11	11	12	19	94	759	906
	Urinary organs	180, 181	2	2	5	..	4	16	49	102	305	485
	Leukaemia and aleukemia	204	4	18	48	32	16	26	36	72	134	386
	Other malignant and lymphatic neoplasms	(c)	2	24	38	55	62	148	292	400	694	1,715
B19	Benign neoplasms and neoplasms of unspecified nature	210-239	2	1	2	5	1	7	10	23	26	77
B20	Diabetes mellitus	260	..	..	..	4	9	18	45	120	475	671
B21	Anaemias	290-293	1	4	2	..	2	2	9	14	81	115
B22	Vascular lesions affecting central nervous system	330-334	5	..	2	15	28	145	345	870	4,434	5,844
B23	Non-meningococcal meningitis	340	19	19	3	..	..	1	4	5	4	55
B24	Rheumatic fever	400-402	..	..	2	2	..	1	3	..	..	8
B25	Chronic rheumatic heart disease	410-416	..	..	..	4	12	32	62	86	124	320
B26	Arteriosclerotic heart disease	420	..	..	..	4	43	549	2,083	4,390(d)	11,166	18,235
	Degenerative heart disease	421, 422	3	1	2	5	7	36	75	207	1,524	1,860
B27	Other diseases of heart	430-434	4	1	6	7	12	40	52	194	1,361	1,677
B28	Hypertension with heart disease	440-443	..	..	..	..	..	10	41	96	399	546
B29	Hypertension without mention of heart	444-447	..	..	1	1	5	19	60	70	229	385
B30	Influenza	480-483	8	5	2	3	2	3	6	15	85	129
B31	Pneumonia	490-493	158	48	21	16	17	46	113	237 (e)	1,492	2,148
B32	Bronchitis	500-502	15	12	2	4	4	17	78	400 (e)	1,664	2,196
B33	Ulcer of stomach and duodenum	540, 541	2	..	..	1	5	14	45	99	249	415
B34	Appendicitis	550-553	1	1	4	3	4	4	6	5	10	38
B35	Intestinal obstruction and hernia	560, 561, 570	34	1	2	..	3	5	14	32	152	243
B36	Gastritis, duodenitis, enteritis, and colitis except diarrhoea of the newborn	543, 571, 572	48	43	1	7	3	6	12	22	71	213
B37	Cirrhosis of liver	581	1	1	2	4	6	41	103	122	117	397
B38	Nephritis and nephrosis	590-594	1	2	7	21	24	30	72	90	243	490
B39	Hyperplasia of prostate	610	..	..	..	..	..	..	1	11	291	303
B41	Congenital malformations	750-759	395	49	32	23	16	12	11	14	18	570
B42	Birth injuries, postnatal asphyxia and atelectasis	760-762	589	..	..	..	..	..	..	..	..	589
B43	Infections of the newborn	763-768	81	..	..	..	..	..	..	..	..	81

For footnotes see next page.

**A. DEATHS OF MALES, BY CAUSE OF DEATH AND AGE GROUP**  
**AUSTRALIA, 1966—continued**

ABBREVIATED LIST OF 50 CAUSES (BASED ON THE SEVENTH REVISION OF THE  
 INTERNATIONAL LIST)—continued

Cause of death(a)	Detailed list numbers	Age group (years)									Total
		0	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65 and over	
B44 Other diseases peculiar to early infancy, and immaturity unqualified	769-776	718	..	..	..	..	..	..	..	..	718
B45 Senility without mention of psychosis, ill-defined and unknown causes	780-795	6	2	2	8	2	18	16	12	184	250
General arteriosclerosis	450	..	..	..	..	..	..	6	39	982	1,027
Other diseases of circulatory system	451-468	1	1	3	6	9	15	69	146	508	758
B46 Other diseases of respiratory system	470-475	37	19	4	3	5	11	43	113	395	630
All other diseases	510-527	63	53	63	66	79	180	273	391 (f)	1,086	2,254
BE47 Motor vehicle accidents	Residual	13	67	134	777	347	309	250	224	273	2,394
BE48 All other accidents	E810-E835	72	123	120	260	174	275	261	208	(d)383	1,876
BE49 Suicide and self-inflicted injury	E800-E802	..	..	2	89	142	218	222	168	(g)176	1,017
BE50 Homicide and operations of war	E840-E962	1	1	4	16	19	24	19	7	14	105
E963, E970-E979	..	..	..	..	..	..	..	..	..	..	..
E964, E965, E980-E999	..	..	..	..	..	..	..	..	..	..	..
<b>All causes</b>	<b>..</b>	<b>2,328</b>	<b>519</b>	<b>533</b>	<b>1,464</b>	<b>1,116</b>	<b>2,488</b>	<b>5,402</b>	<b>10,642(h)</b>	<b>33,303</b>	<b>57,795</b>

(a) No male deaths were recorded in the following categories in 1966: B5, Cholera (043); B8, Diphtheria (055); B11, Plague (058); B12, Acute poliomyelitis (080); B13, Smallpox (084); B16, Malaria (110-117). (b) 030-039, 041, 042, 044, 049, 052-054, 059-074, 081-083, 086-096, 120-138. (c) All causes, 140-205 not shown above. (d) Includes 3, age 'not stated'. (e) Includes 1, age 'not stated'. (f) Includes 2, age 'not stated'. (g) Includes 5, age 'not stated'. (h) Includes 15, age 'not stated'.

NOTE. Table excludes deaths of full-blood Aborigines.

**B. DEATHS OF FEMALES, BY CAUSE OF DEATH AND AGE GROUP: AUSTRALIA, 1966**

ABBREVIATED LIST OF 50 CAUSES (BASED ON THE SEVENTH REVISION OF THE  
 INTERNATIONAL LIST)

Cause of death(a)	Detailed list numbers	Age group (years)									Total
		0	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65 and over	
B 1 Tuberculosis of respiratory system	001-008	..	..	..	1	..	6	12	9	21	49
B 2 Tuberculosis, other forms	010-019	..	1	1	..	1	1	2	..	2	8
B 3 Syphilis and its sequelae	020-029	..	..	..	..	..	2	1	2	15	20
B 6 Dysentery, all forms	045-048	..	..	..	..	..	..	..	..	1	1
B 7 Scarlet fever and streptococcal sore throat	050, 051	..	..	1	..	..	..	..	..	2	3
B 9 Whooping cough	056	2	..	..	..	..	..	..	..	..	2
B10 Meningococcal infections	057	2	1	3	1	..	..	..	3	3	13
B14 Measles	085	2	8	2	1	..	..	..	..	..	13
B17 All other diseases classified as infective and parasitic	(b)	12	10	9	3	10	7	11	13	48	123
Malignant neoplasms of—											
Digestive organs and peritoneum	150-159	..	2	..	5	11	85	227	466	1,887	2,683
Lung	162, 163	..	..	..	2	1	22	61	78	153	317
Breast	170	..	..	..	..	18	109	283	310	622	1,342
Genital organs	171-179	..	..	1	6	18	84	226	255	458	1,048
Urinary organs	180, 181	..	9	3	1	1	6	16	46	164	246
Leukaemia and aleukemia	204	1	16	37	12	16	27	37	31	122	299
Other malignant and lymphatic neoplasms	(c)	3	11	25	43	39	83	182	237	540	1,163
B19 Benign neoplasms and neoplasms of unspecified nature	210-239	8	1	4	3	5	11	22	21	46	121
B20 Diabetes mellitus	260	..	1	..	2	6	10	26	137	785	967
B21 Anaemias	290-293	..	4	4	4	2	5	6	12	143	180

For footnotes see next page.

**B. DEATHS OF FEMALES, BY CAUSE OF DEATH AND AGE GROUP**  
**AUSTRALIA, 1966—continued**

ABBREVIATED LIST OF 50 CAUSES (BASED ON THE SEVENTH REVISION OF THE  
 INTERNATIONAL LIST)—continued

Cause of death(a)	Detailed list numbers	Age group (years)									Total
		0	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65 and over	
B22 Vascular lesions affecting central nervous system	330-334	1	2	4	11	34	146	390	735	6,753	8,076
B23 Non-meningococcal meningitis	340	18	4	6	1	1	1	2	1	6	40
B24 Rheumatic fever	400-402	..	..	..	..	1	..	3	..	1	5
B25 Chronic rheumatic heart disease	410-416	..	..	1	6	14	36	77	104	240	478
B26 { Arteriosclerotic heart disease	420	..	..	..	1	6	104	488	1,458	9,029	11,086
Degenerative heart disease	421, 422	2	..	..	2	7	19	43	101	2,145	2,319
B27 Other diseases of heart	430-434	3	4	2	2	7	18	38	107	1,586	1,767
B28 Hypertension with heart disease	440-443	..	..	..	..	2	8	20	82	702	814
B29 Hypertension without mention of heart	444-447	..	..	..	1	9	12	43	55	276	396
B30 Influenza	480-483	5	1	..	1	..	1	4	12	96	120
B31 Pneumonia	490-493	132	30	18	11	19	21	72	84	(d)1,415	1,802
B32 Bronchitis	500-502	7	9	2	..	2	14	20	44	292	(d)390
B33 Ulcer of stomach and duodenum	540, 541	..	..	..	1	2	10	19	28	107	167
B34 Appendicitis	550-553	1	..	3	2	2	3	4	1	15	31
B35 Intestinal obstruction and hernia	560, 561, 570	24	..	..	3	2	4	15	28	190	266
B36 Gastritis, duodenitis, enteritis and colitis, except diarrhoea of the newborn	543, 571, 572	36	24	..	1	4	5	8	15	129	222
B37 Cirrhosis of liver	581	..	2	1	2	4	16	51	54	71	201
B38 Nephritis and nephrosis	590-594	2	2	4	11	9	35	62	62	226	413
B40 Complications of pregnancy, childbirth and the puerperium	{ 640-652, 670-689 }	..	..	1	15	30	18	2	..	..	66
B41 Congenital malformations	750-759	303	34	38	19	9	10	20	15	17	465
B42 Birth injuries, post-natal asphyxia and atelectasis	760-762	413	..	..	..	..	..	..	..	..	413
B43 Infections of the newborn	763-768	57	..	..	..	..	..	..	..	..	57
B44 Other diseases peculiar to early infancy, and immaturity unqualified	769-776	544	..	..	..	..	..	..	..	..	544
B45 Senility without mention of psychosis, ill-defined and unknown causes	780-795	2	2	..	4	9	6	9	6	263	301
General arteriosclerosis	450	..	..	..	..	..	..	4	16	1,286	1,306
Other diseases of circulatory system	451-468	..	1	1	8	14	24	47	68	352	515
B46 { Other diseases of respiratory system	{ 470-475, 510-527 }	32	11	4	3	2	14	19	25	170	280
All other diseases	Residual	44	33	39	62	76	176	258	314	1,356	2,358
BE47 Motor vehicle accidents	E810-E835	9	37	74	197	60	75	101	108	211	872
BE48 All other accidents	{ E800-E802, E840-E962 }	49	67	45	39	36	55	74	78	(d)652	1,095
BE49 Suicide and self-inflicted injury	{ E963, E970-E979 }	..	..	..	58	92	130	146	93	88	607
BE50 Homicide and operations of war	{ E964, E965, E980-E999 }	3	1	8	9	10	11	12	6	4	64
<b>All causes</b>	..	<b>1,717</b>	<b>328</b>	<b>341</b>	<b>554</b>	<b>591</b>	<b>1,430</b>	<b>3,163</b>	<b>5,320</b>	<b>(e)32,690</b>	<b>46,134</b>

(a) No female deaths were recorded in the following categories in 1966: B4, Typhoid fever (040); B5, Cholera (043); B8, Diphtheria (055); B11, Plague (058); B12, Acute poliomyelitis (080); B13, Smallpox (084); B15, Typhus and other rickettsial diseases (100-108); B16, Malaria (110-117). (b) 030-039, 041, 042, 044, 049, 052-054, 059-074, 081-083, 086-096, 120-138. (c) All causes, 140-205 not shown above. (d) Includes 1, age 'not stated'. (e) Includes 3, age 'not stated'.

NOTE. Table excludes deaths of full-blood Aborigines

**C. DEATHS, BY CAUSE OF DEATH AND SEX: NUMBERS AND RATES  
AUSTRALIA, 1966**

ABBREVIATED LIST OF 50 CAUSES (BASED ON THE SEVENTH REVISION OF THE  
INTERNATIONAL LIST)

Cause of death	Detailed list numbers	Number of deaths			Rate per 1,000,000 of mean population	Percentage of total deaths
		Males	Females	Persons		
B 1 Tuberculosis of respiratory system	001-008	254	49	303	26	0.29
B 2 Tuberculosis, other forms	010-019	10	8	18	2	0.02
B 3 Syphilis and its sequelae	020-029	51	20	71	6	0.07
B 4 Typhoid fever	040	1	..	1	(a)	0.00
B 5 Cholera	043	..	..	..	..	..
B 6 Dysentery, all forms	045-048	5	1	6	1	0.01
B 7 Scarlet fever and streptococcal sore throat	050, 051	2	3	5	(a)	0.00
B 8 Diphtheria	055	..	..	..	..	..
B 9 Whooping cough	056	2	2	4	(a)	0.00
B10 Meningococcal infections	057	21	13	34	3	0.03
B11 Plague	058	..	..	..	..	..
B12 Acute poliomyelitis	080	..	..	..	..	..
B13 Smallpox	084	..	..	..	..	..
B14 Measles	085	4	13	17	1	0.02
B15 Typhus and other rickettsial diseases	100-108	1	..	1	(a)	0.00
B16 Malaria	110-117	..	..	..	..	..
B17 All other diseases classified as infective and parasitic	(b)	121	123	244	21	0.23
Malignant neoplasms of—						
Digestive organs and peritoneum	150-159	2,923	2,683	5,606	485	5.39
Lung	162, 163	2,259	317	2,576	223	2.48
Breast	170	15	1,342	1,357	117	1.31
Genital organs	171-179	906	1,048	1,954	169	1.88
Urinary organs	180, 181	485	246	731	63	0.70
Leukaemia and aleukaemia	204	386	299	685	59	0.66
Other malignant and lymphatic neoplasms	(c)	1,715	1,163	2,878	249	2.77
B19 Benign and unspecified neoplasms	210-239	77	121	198	17	0.19
B20 Diabetes mellitus	260	671	967	1,638	142	1.58
B21 Anaemias	290-293	115	180	295	26	0.28
B22 Vascular lesions affecting central nervous system	330-334	5,844	8,076	13,920	1,205	13.39
B23 Non-meningococcal meningitis	340	55	40	95	8	0.09
B24 Rheumatic fever	400-402	8	5	13	1	0.01
B25 Chronic rheumatic heart disease	410-416	320	478	798	69	0.77
B26 Arteriosclerotic heart disease	420	18,235	11,086	29,321	2,537	28.21
B27 Degenerative heart disease	421, 422	1,860	2,319	4,179	362	4.02
B28 Other diseases of heart	430-434	1,677	1,767	3,444	298	3.31
B29 Hypertension with heart disease	440-443	546	814	1,360	118	1.31
B30 Hypertension without mention of heart	444-447	385	396	781	68	0.75
B31 Influenza	480-483	129	120	249	22	0.24
B32 Pneumonia	490-493	2,148	1,802	3,950	342	3.80
B33 Bronchitis	500-502	2,196	390	2,586	224	2.49
B34 Ulcer of stomach and duodenum	540, 541	415	167	582	50	0.56
B35 Appendicitis	550-553	38	31	69	6	0.07
B36 Intestinal obstruction and hernia	560, 561, 570	243	266	509	44	0.49
B37 Gastritis, duodenitis, enteritis and colitis, except diarrhoea of the newborn	543, 571, 572	213	222	435	38	0.42
B38 Cirrhosis of liver	581	397	201	598	52	0.58
B39 Nephritis and nephrosis	590-594	490	413	903	78	0.87
B40 Hyperplasia of prostate	610	303	..	303	26	0.29
B41 Complications of pregnancy, childbirth and the puerperium	{ 640-652 } 670-689	..	66	66	6	0.06
B42 Congenital malformations	750-759	570	465	1,035	90	1.00
B43 Birth injuries, post-natal asphyxia and atelectasis	760-762	589	413	1,002	87	0.96
B44 Infections of the newborn	763-768	81	57	138	12	0.13
B45 Other diseases peculiar to early infancy, and immaturity unqualified	769-776	718	544	1,262	109	1.21
B46 Senility without mention of psychosis, ill-defined and unknown causes	780-795	250	301	551	48	0.53
General arteriosclerosis	451-458	1,027	1,306	2,333	202	2.24
Other diseases of circulatory system	470-475	758	515	1,273	110	1.22
Other diseases of respiratory system	{ 510-527 }	630	280	910	79	0.88
All other diseases	Residual	2,254	2,358	4,612	399	4.44
BE47 Motor vehicle accidents	E810-E835	2,394	872	3,266	283	3.14
BE48 All other accidents	{ E800-E802 } E840-E962	1,876	1,095	2,971	257	2.86
BE49 Suicide and self-inflicted injury	{ E963, } E970-E979	1,017	607	1,624	141	1.56
BE50 Homicide and operations of war	{ E964, E965 } E980-E999	105	64	169	15	0.16
All causes	..	57,795	46,134	103,929	8,994	100.00

(a) Less than 0.5. (b) 030-039, 041, 042, 044, 049, 052-054, 059-074, 081-083, 086-096, 120-138. (c) 140-148, 160, 161, 164, 165, 190-203, 205.

NOTE. Table excludes deaths of full-blood Aborigines.

**Deaths from certain important causes**

In the preceding tables, particulars have been given for each of the causes of death comprising the Abbreviated Classification according to the Seventh Revision of the International List. Certain important causes are treated in detail hereunder. The Abbreviated Classification numbers used in tables A to C (pages 208-11) are indicated in parentheses for each cause or group of causes.

*All forms of tuberculosis (B1, B2).* In comparing any of the figures for 1950 and subsequent years with those for 1949 and earlier years, consideration should be given to the effect of the change in basis from the Fifth to the Sixth Revision of the International List. This was discussed in Year Book No. 39, page 626. The following table shows the age groups of males and females who were classified as dying from tuberculosis in 1966, together with figures for 1931, 1941, 1951 and 1961.

**DEATHS FROM TUBERCULOSIS (ALL FORMS), BY AGE GROUP AND SEX  
AUSTRALIA, 1931 TO 1966(a)**

Age group (years)	Males					Females				
	1931	1941	1951	1961	1966	1931	1941	1951	1961	1966
0-14 . . . . .	90	63	23	5	..	81	54	35	1	2
15-29 . . . . .	294	162	46	2	1	487	275	68	..	2
30-44 . . . . .	585	428	135	25	14	422	319	142	20	7
45-64 . . . . .	674	793	570	128	106	252	251	126	41	23
65 and over . . . . .	193	279	306	175	143	89	110	86	50	23
Not stated . . . . .	..	..	..	..	..	..	..	1	..	..
Total . . . . .	1,836	1,725	1,080	335	264	1,331	1,009	458	112	57

(a) Excludes full-blood Aborigines.

The reduction in mortality from tuberculosis is shown by the decline in the crude death rate from tubercular diseases, which fell from 49 per 100,000 of mean population in 1931 to 18 in 1951, and to 3 in 1966. The reductions in the younger age groups are much greater, as can be seen from the table above. In making these comparisons, consideration of the effect of the change in basis from the Fifth to the Sixth Revision of the International List (*see above*) is particularly important.

Of the more developed countries, those with the lowest death rates from tuberculosis per 100,000 of population are: Netherlands, 1.9; Denmark, 2.4; Australia, 2.8; Canada, 3.5; Israel, 3.6; New Zealand, 3.7; and United States of America, 4.3. Rates for selected countries in each continent are:

Africa—South Africa (white population), 6.0; United Arab Republic, 14.7.

North America—Dominican Republic, 7.7; Mexico, 24.0; Guatemala, 29.1.

South America—Argentina, 19.9; Peru, 54.1; Brazil, 82.3.

Asia—Japan, 23.6; India, 82.7; Philippines, 81.7.

Europe—England and Wales, 5.3; Scotland, 7.2; Italy, 13.3; France, 15.6; Poland, 40.1.

*Malignant neoplasms, including neoplasms of lymphatic and haematopoietic tissues (B18).* Deaths classified under this heading according to the Sixth and Seventh Revisions of the International List (used in Australia for deaths registered since 1950) are not directly comparable in total with those on the Fifth Revision basis (*see Year Book No. 39, p. 628*).

A summary regarding seat of disease for 1966 is given on the next page.

**DEATHS FROM MALIGNANT NEOPLASMS AND NEOPLASMS OF LYMPHATIC AND HAEMATOPOIETIC TISSUES, BY SEAT OF DISEASE AND SEX: AUSTRALIA, 1966(a)**

<i>Seat of disease</i>	<i>Males</i>	<i>Females</i>	<i>Persons</i>
<b>Malignant neoplasms—</b>			
Buccal cavity and pharynx . . . . .	218	74	292
Digestive organs and peritoneum—			
Oesophagus . . . . .	200	127	327
Stomach . . . . .	956	645	1,601
Small intestine . . . . .	23	17	40
Large intestine . . . . .	756	1,012	1,768
Other . . . . .	988	882	1,870
Respiratory system . . . . .	2,418	350	2,768
Breast . . . . .	15	1,342	1,357
Uterus . . . . .	..	571	571
Other female genital organs . . . . .	..	477	477
Male genital organs . . . . .	906	..	906
Urinary organs . . . . .	485	246	731
Skin . . . . .	286	192	478
Other and unspecified organs . . . . .	640	550	1,190
<i>Total, malignant neoplasms . . . . .</i>	<i>7,891</i>	<i>6,485</i>	<i>14,376</i>
<b>Neoplasms of lymphatic and haematopoietic tissues—</b>			
Lymphosarcoma and reticulosarcoma . . . . .	213	143	356
Hodgkin's disease . . . . .	85	60	145
Other forms of lymphoma (reticulosis) . . . . .	31	32	63
Multiple myeloma (plasmacytoma) . . . . .	81	77	158
Leukaemia and aleukaemia . . . . .	386	299	685
Mycosis fungoides . . . . .	2	2	4
<i>Total, neoplasms of lymphatic and haematopoietic tissues . . . . .</i>	<i>798</i>	<i>613</i>	<i>1,411</i>
<b>Grand total . . . . .</b>	<b>8,689</b>	<b>7,098</b>	<b>15,787</b>

(a) Excludes full-blood Aborigines.

The ages of males and females who died from malignant neoplasms in 1966 are given below, together with figures for 1931, 1941, 1951, and 1961. The increase in the number of deaths from malignant neoplasms in the years since 1931 is due principally to the increase in the number of people in the higher age groups, at which ages the risks of cancer are much greater. While the total population increased by about 77 per cent between 1931 and 1966, the number of people aged 55 years and over increased by about 124 per cent. The increase in the number of deaths in the lower age groups from 1951 is due partly to the inclusion of neoplasms of lymphatic and haematopoietic tissues, and it is probable also that part of the increased number of deaths from cancer recorded in recent years has been due to improved diagnosis and certification on the part of the medical profession.

**DEATHS FROM MALIGNANT NEOPLASMS(a), BY AGE GROUP AND SEX  
AUSTRALIA, 1931 TO 1966(b)**

<i>Age group (years)</i>	<i>Males</i>					<i>Females</i>				
	<i>1931</i>	<i>1941</i>	<i>1951(a)</i>	<i>1961(a)</i>	<i>1966(a)</i>	<i>1931</i>	<i>1941</i>	<i>1951(a)</i>	<i>1961(a)</i>	<i>1966(a)</i>
Under 15 . . . . .	25	21	91	130	146	23	25	71	114	108
15-29 . . . . .	43	49	103	109	149	38	45	76	84	113
30-44 . . . . .	196	176	275	380	457	326	344	387	481	476
45-54 . . . . .	410	465	584	823	950	548	685	692	847	1,032
55-64 . . . . .	868	983	1,334	1,699	2,102	744	926	1,180	1,207	1,423
65 and over . . . . .	1,942	2,561	3,128	4,239	4,885	1,426	2,198	2,698	3,575	3,946
Not stated . . . . .	..	..	..	..	..	..	..	..	1	..
<b>Total . . . . .</b>	<b>3,484</b>	<b>4,255</b>	<b>5,515</b>	<b>7,380</b>	<b>8,689</b>	<b>3,105</b>	<b>4,223</b>	<b>5,104</b>	<b>6,309</b>	<b>7,098</b>

(a) Includes neoplasms of lymphatic and haematopoietic tissues.      (b) Excludes full-blood Aborigines.

The death rates from malignant neoplasms have continued to rise over recent years. The rates are crude death rates representing the number of deaths from malignant neoplasms per 100,000 of mean population and do not take account of changes in the age constitution of the population, and to a substantial extent they reflect the increasing age of the population rather than the true change in mortality from malignant neoplasms (*see* previous paragraph). In 1931 the rate for Australia



was 101 (males, 105; females, 97); in 1941 it was 119 (males, 119; females, 120); and in 1951 it had risen to 126 (males, 130; females, 122). Figures for 1961 gave a rate of 130 (males, 139; females, 121), and for 1966 a rate of 136 (males, 149; females, 124).

Death rates from malignant neoplasms per 100,000 of mean population for Australia and for various other countries are as follows: Brazil, 94; Japan, 108; Israel, 112; Poland, 119; Canada, 133; South Africa (white population), 134; Australia, 136; United States of America, 151; Italy, 159; Netherlands, 183; France, 204; England and Wales, 223; Scotland, 229. The rates are for the latest available year in each case.

*Diseases of the heart (B25 to B28).* The number of deaths classified to diseases of the heart in 1966 was 39,102 (22,638 males and 16,464 females). This class is the largest among causes of death, the rate having increased from 112 per 100,000 of mean population in 1911-15 to 338 in 1966. The increase in the number of deaths recorded from heart diseases has been particularly pronounced during the past twenty years. The rapid increase in mortality is partly a reflection of the ageing of the population, but the figures have been influenced mainly by improved diagnosis and certification by medical practitioners.

The death rates from heart diseases per 100,000 of mean population for various years from 1931 were as follows: 1931, 159 (males, 178; females, 142); 1941, 269 (males, 306; females, 231); 1951, 314 (males, 367; females, 259); 1961, 304 (males, 356; females, 250); and 1966, 338 (males, 389; females, 287). Deaths from heart diseases in 1966 represented 38 per cent of the total deaths.

*Puerperal causes (B40).* It was shown in Year Book No. 39, page 634, that the changes introduced with the Sixth Revision of the International List did not significantly affect the comparability of the total number of deaths from puerperal causes. The Seventh Revision, introduced in 1958, did not affect comparability. The death rate from these causes has fallen rapidly during recent years and in 1966 the rate was 0.3 per 1,000 live births, compared with a rate of 6 per 1,000 in 1936. The 66 deaths in 1966 are equivalent to a death rate of 1.15 per 100,000 females. The death rate may be expressed in other terms by stating that for every 3,373 babies born alive in 1966 one woman died from puerperal causes. The death rate per 1,000 live births from puerperal causes in various countries for the latest available year is as follows: Denmark, Norway and Sweden, 0.2; Australia, Canada, France, Netherlands, New Zealand, United Kingdom and United States, 0.3; Finland, 0.4; Switzerland, 0.5; Italy, 0.8; Japan, 0.9.

*Causes of infant mortality.* See paragraphs devoted to causes of infant deaths on pages 206-7.

*Accidents, poisonings and violence (BE47 to BE50).* Deaths in this class are classified according to external cause and not according to nature of injury. The classification provides sub-groups for accidents, including adverse reactions to prophylactic inoculations, therapeutic misadventures and late effects of accidental injury; suicide; homicide and injuries purposely inflicted by other persons; and injury resulting from operations of war, including delayed effects.

The following table, showing the death rates in the main sub-groups per 100,000 of mean population, indicates that the death rate from violence is between two and three times as great for males as for females. The low level of the rates and proportions for the years 1941-45 is due largely to the exclusion of deaths of defence personnel from accidents, suicide and homicide, though the rates have been based on total mean population (including defence personnel). A further contributing factor is the decrease during this period in the number of automobile accidents. From July 1947 deaths of defence personnel from accidents, etc. have again been included.

ACCIDENTS, POISONINGS, AND VIOLENCE: DEATH RATES(a), BY SEX  
AUSTRALIA, 1936 TO 1966(b)

Period	Death rate from—									All violence, proportion per 10,000 deaths					
	Accidents(c)			Suicide			Homicide(d)			Total violence					
	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.
1936-40	86	28	58	17	5	11	2	1	1	105	34	70	979	399	724
1941-45	67	26	46	11	4	8	1	1	1	79	31	55	730	348	558
1946-50	76	27	51	14	5	10	1	1	1	91	33	62	844	383	640
1951-55	82	31	57	15	5	10	2	1	1	99	37	68	964	453	740
1956-60	75	32	53	16	6	11	2	1	2	93	39	66	957	495	754
1961-65	72	32	52	19	9	14	2	1	1	93	43	68	954	550	777
1962	71	33	52	19	9	14	2	1	2	92	43	68	952	559	780
1963	69	29	49	21	11	16	2	1	1	92	41	66	944	529	762
1964	73	34	53	19	10	15	2	1	2	94	45	70	939	561	772
1965	74	33	54	19	11	15	1	1	1	95	46	70	970	584	800
1966	73	34	54	17	11	14	2	1	1	93	46	69	933	572	773

(a) Number of deaths per 100,000 of mean population. (b) Excludes full-blood Aborigines. (c) Includes 'open verdict'. (d) Includes late effects of injuries due to operations of war.

In 1966 the total number of deaths from *accidental causes* (BE47, BE48) was 6,237 (4,270 males and 1,967 females). Over half of the accidental deaths were the result of transport accidents. Of these, the numbers attributable to the major causes, and the percentages of the total accidental deaths in each case, were as follows: Motor vehicle traffic accidents, 3,203 (51.35 per cent); motor vehicle non-traffic accidents, 63 (1.01 per cent); other road vehicle accidents, 38 (0.61 per cent); railway accidents, 92 (1.48 per cent); water transport accidents, 83 (1.33 per cent); aircraft accidents, 61 (0.98 per cent); a total of 3,540 (56.76 per cent). Other important causes were accidental falls, 1,011 (16.21 per cent); accidental drowning, 370 (5.93 per cent); and accidents caused by fire and explosion of combustible material, 210 (3.37 per cent).

Deaths from *suicide* (BE49) in 1966 numbered 1,624 (males, 1,017; females, 607). Poisoning, other than by gases, was used in 735 cases (45.26 per cent of total deaths by suicide). Other important modes adopted, together with the numbers and relevant percentages, were as follows: firearms and explosives, 340 (20.94 per cent); poisoning by gases, 230 (14.16 per cent); hanging or strangulation, 167 (10.28 per cent); submersion (drowning), 58 (3.57 per cent); other and unspecified modes, 94 (5.79 per cent). Of the 1,017 males who committed suicide, 311 (30.58 per cent) used firearms or explosives. For females the most common mode was poisoning (other than by gases). This was used in 407 cases (67.05 per cent). The following table shows the age of persons who committed suicide in 1966.

PERSONS WHO COMMITTED SUICIDE, BY AGE GROUP AND SEX  
AUSTRALIA, 1966(a)

Age group (years)	Males	Females	Persons	Age group (years)	Males	Females	Persons
10-14	2	..	2	60-64	66	39	105
15-19	32	19	51	65-69	71	31	102
20-24	57	39	96	70-74	42	32	74
25-29	70	44	114	75-79	34	13	47
30-34	72	48	120	80-84	18	8	26
35-39	99	66	165	85 and over	6	4	10
40-44	119	64	183	Not stated	5	..	5
45-49	101	85	186				
50-54	121	61	182				
55-59	102	54	156				
				Total deaths	1,017	607	1,624

(a) Excludes full-blood Aborigines.

Of the 169 deaths recorded in 1966 from *homicide and operations of war* (BE50) there were 154 deaths from homicide and injury purposely inflicted by other persons (not in war), of which assault by firearms and explosives caused 63, assault by cutting and piercing instruments 19, and assault by other means 72. Deaths from injury resulting from the operations of war numbered 15, 14 of which were deaths from late effects of such injuries.

#### Age at death and average issue of deceased married males and females

*Demography*, Bulletin No. 84, contains a number of tables showing, in combination with the issue, the age at marriage, age at death and occupation of married (including widowed or divorced) persons who died in Australia in 1966. Deaths of married males in 1966 numbered 45,446, and those of married females, 37,836. The tables which follow deal, however, with only 44,781 males and 37,531 females, the information regarding issue in the remaining 970 cases being incomplete. The total number of children in the families of the 44,781 males was 127,752 and of the 37,531 females, 113,688. The average number of children is shown for various age groups in the following table.

**AVERAGE ISSUE: DECEASED MARRIED(a) MALES AND FEMALES, BY AGE  
AT DEATH, AUSTRALIA, 1931 TO 1966(b)**

Age at death (years)	Average issue									
	Males					Females				
	1931	1941	1951	1961	1966	1931	1941	1951	1961	1966
Under 20 . . . . .	0.75	..	0.43	0.33	0.67	0.66	0.79	0.83	0.75	0.43
20-24 . . . . .	0.81	0.73	0.96	0.93	0.91	1.13	0.95	0.86	1.12	0.98
25-29 . . . . .	1.33	1.12	1.29	1.56	1.75	1.81	1.45	1.61	2.00	1.96
30-34 . . . . .	1.79	1.76	1.79	2.23	2.36	2.34	1.91	1.98	2.37	2.61
35-39 . . . . .	2.13	2.11	2.12	2.37	2.67	2.89	2.30	2.49	2.47	2.67
40-44 . . . . .	2.77	2.49	2.30	2.44	2.79	3.29	2.77	2.39	2.44	2.60
45-49 . . . . .	3.10	2.68	2.51	2.49	2.59	3.55	2.93	2.59	2.38	2.43
50-54 . . . . .	3.46	2.96	2.56	2.46	2.55	3.60	3.29	2.76	2.43	2.44
55-59 . . . . .	3.69	3.28	2.71	2.45	2.56	4.01	3.55	3.03	2.50	2.44
60-64 . . . . .	4.02	3.55	3.07	2.58	2.53	4.21	3.79	3.29	2.69	2.53
65-69 . . . . .	4.41	3.73	3.25	2.77	2.59	4.82	4.01	3.63	3.04	2.76
70-74 . . . . .	5.06	4.17	3.58	3.00	2.77	5.41	4.29	3.64	3.30	2.93
75-79 . . . . .	5.65	4.56	3.83	3.31	3.11	6.02	4.85	3.96	3.44	3.14
80-84 . . . . .	6.17	4.93	4.30	3.62	3.28	6.26	5.39	4.19	3.58	3.41
85-89 . . . . .	6.59	5.70	4.63	3.94	3.55	6.57	5.85	4.68	3.78	3.61
90-94 . . . . .	6.94	6.57	5.06	4.39	3.94	6.73	6.11	5.08	3.99	3.63
95-99 . . . . .	6.69	7.04	5.78	4.76	4.07	7.10	6.34	5.76	4.51	3.90
100 and over . . . .	7.00	8.69	5.71	5.38	4.56	8.20	6.73	7.72	4.63	5.02
Age not stated . . .	5.00	..	8.00	..	..	5.00	..	5.50	5.00	..
<b>All ages . . . . .</b>	<b>4.44</b>	<b>3.91</b>	<b>3.39</b>	<b>2.98</b>	<b>2.85</b>	<b>4.72</b>	<b>4.22</b>	<b>3.68</b>	<b>3.22</b>	<b>3.03</b>

(a) Includes widowed or divorced.

(b) Excludes full-blood Aborigines.

**Age at marriage of deceased males and females, and issue**

The following table shows the average issue of males and females according to the age at marriage of the deceased parent.

**AVERAGE ISSUE: DECEASED MALES AND FEMALES, BY AGE AT MARRIAGE  
AUSTRALIA, 1931 TO 1966(a)**

Age at marriage (years)(b)	Average issue									
	Males					Females				
	1931	1941	1951	1961	1966	1931	1941	1951	1961	1966
Under 15 . . . . .	..	..	..	..	..	6.36	7.80	4.88	4.45	8.11
15-19 . . . . .	6.15	5.40	4.63	4.11	4.20	6.79	6.10	5.41	4.74	4.38
20-24 . . . . .	5.56	4.89	4.23	3.65	3.47	5.23	4.80	4.28	3.77	3.50
25-29 . . . . .	4.70	4.21	3.65	3.16	3.03	3.79	3.51	3.14	2.85	2.70
30-34 . . . . .	3.96	3.41	3.00	2.64	2.46	2.42	2.35	2.23	1.98	1.88
35-39 . . . . .	3.14	2.80	2.45	2.11	1.97	1.40	1.26	1.16	1.14	1.11
40-44 . . . . .	2.36	2.01	1.69	1.49	1.40	0.39	0.35	0.36	0.31	0.25
45-49 . . . . .	1.96	1.52	1.33	1.11	0.97	0.12	0.01	0.07	0.06	0.12
50-54 . . . . .	1.60	1.05	0.80	0.71	0.57	..	..	..	..	..
55-59 . . . . .	0.95	0.79	0.49	0.25	0.33	..	..	..	..	..
60-64 . . . . .	0.63	0.29	0.24	0.25	0.16	..	..	..	..	..
65 and over . . . . .	0.18	0.01	0.29	0.24	0.11	..	..	..	..	..
Age not stated . . .	3.64	2.95	2.81	2.40	2.28	3.96	2.45	3.17	2.44	2.40
<b>All ages . . . . .</b>	<b>4.44</b>	<b>3.91</b>	<b>3.39</b>	<b>2.98</b>	<b>2.85</b>	<b>4.72</b>	<b>4.22</b>	<b>3.68</b>	<b>3.22</b>	<b>3.03</b>

(a) Excludes full-blood Aborigines.

(b) In cases where the deceased was married more than once this represents age at first marriage.

### Vital statistics of External Territories

The following table shows, for the year 1966, the number of marriages, births and deaths registered in the External Territories under the control of Australia. More detailed information will be found in a series of tables in *Demography*, Bulletin No. 84.

#### EXTERNAL TERRITORIES: VITAL STATISTICS, 1966

<i>Territory</i>	<i>Marriages</i>	<i>Births</i>	<i>Deaths</i>
Christmas Island(a)	1	59	5
Cocos (Keeling) Islands(a)	6	12	3
Norfolk Island(a)	4	17	17
Territory of Papua and New Guinea(b)	278	970	109
Trust Territory of Nauru(a)(c)	27	236	48

(a) Total population. (b) Non-indigenous population only. (c) Independent State from 31 January 1968.

### International vital statistics

In the following table vital statistics rates for selected countries are shown. Crude marriage, birth, and death rates represent the number of 'events' reported for the year stated per 1,000 of the population. Infant mortality rates are the number of deaths which occurred under one year of age per 1,000 live births. The true death rates (reciprocals of the expectation of life at birth) have been computed from the life tables for the respective countries as published in the United Nations *Demographic Yearbook*, 1966 (see explanation of true death rates, pages 197-8).

In many instances the rates shown in the following table are estimates and the results of sample surveys only. Reference should be made to the detailed comments contained in the United Nations *Demographic Yearbook*, 1966 (see particularly Technical Notes on Statistical Tables and footnotes to the tables). The countries are arranged in the same order as in the table on pages 173-4 of the Population chapter.

#### VITAL STATISTICS RATES: SELECTED COUNTRIES—LATEST AVAILABLE YEAR

(Source: United Nations *Demographic Yearbook*, 1966)

Country	Year	Rates(a)				Year	True death rates(b)	
		Marriage	Birth	Death	Infant mortality		Male	Female
Africa—								
South Africa—								
Asian population . . . . .	1966	(c)7.5	33.9	7.4	(c)56.1	1950-52	17.9	18.3
Coloured population . . . . .	1966	(c)6.1	45.6	14.9	(c)136.1	1950-52	22.3	20.9
White population . . . . .	1966	(c)9.7	22.8	8.7	(c)29.2	1950-52	15.5	14.3
Congo, Democratic Republic of(d)(e) . . . . .	1955-58	n.a.	43	20	104	1950-52	26.6	25.0
Morocco(e) . . . . .	1962	n.a.	46.1	18.7	149	1960	20.2	
Upper Volta(e) . . . . .	1960-61	n.a.	53	35	182	1960-61	31.2	32.2
Southern Rhodesia(d)(e) . . . . .	1962	n.a.	48.1	14.0	(f)122	1962	20.0	
Ivory Coast(e) . . . . .	1961	n.a.	56.1	33.3	n.a.	n.a.	n.a.	n.a.
Zambia(d)(e) . . . . .	1963	n.a.	51.4	19.6	(g)259	1963	25.0	
Guinea(d)(e) . . . . .	1955	n.a.	62	40	216	1955	38.5	35.7
Senegal(e) . . . . .	1960-61	n.a.	43.3	16.7	92.9	1957	27.0	
Dahomey(d)(e) . . . . .	1961	n.a.	54.0	26.0	110.5	1961	26.8	
Central African Republic(d)(e) . . . . .	1959-60	n.a.	48	30	190	1959-60	30.3	27.8
North America—								
United States of America . . . . .	1966	9.4	18.5	9.5	23.4	1965	15.0	13.6
Mexico . . . . .	1960-65	6.8	(e)44-45	(e)10-11	60.7	1956	18.1	17.3
Canada . . . . .	1966	7.8	19.6	7.5	(c)23.6	1960-62	14.6	13.5
Haiti(e) . . . . .	1960-65	n.a.	45-50	20-24	n.a.	1950	30.7	
Guatemala . . . . .	1960-65	(h)3.5	(e)46-48	(e)18-20	(h)91.5	1949-51	22.8	23.0
El Salvador . . . . .	1960-65	(h)3.2	(e)47-49	(e)14-16	(h)61.7	1960-61	17.7	16.6
Puerto Rico . . . . .	1965	10.2	30.2	6.7	42.8	1959-61	14.9	13.9
Jamaica . . . . .	1960-65	(h)4.1	(e)39-40	(e)8-9	(h)35.4	1959-61	16.0	15.0
Costa Rica . . . . .	1960-65	(c)6.0	(e)44-46	(e)8-9	(c)75.1	1962-64	16.2	15.4

For footnotes see next page.

**VITAL STATISTICS RATES: SELECTED COUNTRIES—LATEST AVAILABLE**  
**YEAR—continued**

Country	Year	Rates(a)				Year	True death rates(b)	
		Marriage	Birth	Death	Infant mortality		Male	Female
South America—								
Brazil(e)	1960-65	n.a.	41-43	10-12	n.a.	1940-50	25.4	22.0
Argentina	1960-65	(i)6.6	(e)22-23	(e)8-9	(e)(c)60.7	1960-65	15.7	14.4
Colombia(e)	1960-65	(i)4.8	41-44	12-14	(c)82.4	1950-52	22.6	21.8
Peru(e)	1960-65	(h)4.1	44-45	12-14	(c)90.7	1961	19.3	18.6
Venezuela(e)	1960-65	(c)5.7	46-48	9-10	(c)47.7	n.a.	n.a.	n.a.
Chile	1960-65	(c)7.6	(e)34-36	(e)11-12	(c)107.1	1952	20.1	18.6
Bolivia(e)	1960-65	(c)5.5	43-45	20-22	(j)86.0	1949-51	20.1	20.1
Asia—								
China (mainland)(e)	1957	n.a.	34	11	n.a.	n.a.	n.a.	n.a.
India(e)	1963-64	n.a.	38.4	12.9	(k)139	1951-60	23.9	24.7
Indonesia	1962	10.6	(e)43.0	(e)21.4	(e)125	n.a.	n.a.	n.a.
Pakistan(e)	1963	n.a.	43.4	15.4	145.6	1962	18.6	20.5
Japan	1966	9.5	13.7	6.8	(c)18.5	1965	14.8	13.7
Thailand	1964	(c)3.7	(e)46.0	(e)12.9	37.8	1960	18.7	17.0
Korea, Republic of(e)	1955-60	n.a.	44.7	16.0	n.a.	1955-60	19.6	18.6
Burma(e)	1955	n.a.	50	35	(f)195-300	n.a.	n.a.	n.a.
China, Republic of (Formosa)	1966	7.5	32.5	5.5	(c)(m)22.2	1959-60	16.3	15.2
West Malaysia (Malaya)	1965	(i)1.1	36.7	7.9	50.0	1956-58	17.9	17.2
Cambodia(e)	1959	n.a.	41.4	19.7	127.0	1958-59	22.6	23.1
Hong Kong	1966	n.a.	24.9	5.0	24.9	1961	15.7	14.2
Israel(n)	1965	8.0	22.6	6.4	22.7	1965	14.2	13.7
Europe—								
Germany, Federal Republic of	1966	8.0	17.8	11.3	(c)23.8	1964-65	14.8	13.6
United Kingdom of Great Britain and Northern Ireland	1966	8.0	17.9	11.8	19.6	1963-65	14.7	13.5
England and Wales	1966	8.0	17.7	11.7	19.0	1963-65	14.6	13.4
Northern Ireland	1966	7.2	22.5	11.1	25.6	1963-65	14.7	13.7
Scotland	1966	8.1	18.6	12.3	23.1	1963-65	15.1	13.8
Italy	1966	7.4	18.9	9.5	(c)35.6	1960-62	14.9	13.8
France	1966	6.9	17.5	10.7	21.7	1964	14.7	13.3
Spain	1966	7.2	20.9	8.6	34.6	1960	14.9	13.9
Poland	1966	7.2	16.7	7.3	38.8	1960-61	15.4	14.2
Yugoslavia	1966	8.5	20.2	8.0	(c)71.5	1961-62	16.0	15.2
Romania	1966	8.9	14.3	8.2	46.5	1963	15.3	14.2
Czechoslovakia	1966	8.1	15.6	10.0	23.7	1964	14.8	13.6
Netherlands	1966	9.0	19.2	8.1	(c)14.4	1961-65	14.1	13.2
Hungary	1966	9.1	13.6	10.0	(c)38.8	1964	14.9	13.9
Belgium	1966	7.2	15.8	12.0	(c)24.1	1959-63	14.8	13.6
Portugal	1966	8.4	22.3	10.9	65.0	1959-62	16.5	15.1
Bulgaria	1966	8.2	14.9	8.3	32.2	1960-62	14.7	14.0
Sweden	1966	7.8	15.8	10.0	(c)13.3	1961-65	14.0	13.2
Austria	1966	7.6	17.6	12.5	28.1	1959-61	15.2	13.9
Switzerland	1966	7.3	18.1	9.3	(c)17.8	1959-61	14.4	13.4
Denmark	1966	(c)8.8	18.4	10.3	(c)18.7	1963-64	14.2	13.4
Finland	1966	8.2	16.7	9.4	17.6	1956-60	15.4	14.0
Norway	1965	6.8	17.5	9.1	(i)16.4	1956-60	14.0	13.2
Ireland	1966	5.8	21.6	12.1	24.9	1960-62	14.7	13.9
Oceania—								
Australia	1967	8.5	19.4	8.7	18.3	1960-62	14.7	13.5
New Zealand	1966	8.6	22.5	8.9	17.7	1960-62	14.6	13.6
U.S.S.R.—								
Union of Soviet Socialist Republics	1966	8.9	18.2	7.3	26.5	1964-65	15.2	13.5

(a) Crude marriage, birth and death rates, i.e. number of marriages, births and deaths per 1,000 of population. Infant mortality—number of deaths of children under one year of age per 1,000 live births. (b) Number of deaths per 1,000 males and 1,000 females respectively in stationary population (see explanation on pp. 197-8). (c) 1965. (d) African population only. (e) Estimated. (f) 1954. (g) 1950. (h) 1966. (i) 1964. (j) 1958. (k) 1951-61. (l) 1952. (m) Excludes live born infants dying before registration of birth. (n) Jewish population.

## CHAPTER 9

### HOUSING AND BUILDING

Pages 219–30 of this chapter give details of the *characteristics of dwellings as obtained from censuses*, pages 230–42 contain a *summary of building activities*, pages 242–52 outline *government activities in the field of housing*, and pages 252 on relate to *financial arrangements associated with the erection or purchase of homes*.

Further information on dwellings obtained from censuses is available in the detailed tables of the 1961 census and earlier censuses and in the mimeographed statements of the 1966 census (*see the chapter Miscellaneous of this Year Book*).

More detailed information on building activity is contained in the annual bulletin *Building and Construction* and the *Quarterly Bulletin of Building Statistics*, and current information is obtainable also in the *Quarterly Summary of Australian Statistics*, the *Monthly Review of Business Statistics*, the *Digest of Current Economic Statistics*, and the mimeographed statements *Building Statistics: Number of New Houses and Flats* (quarterly), and *Building Approvals* (monthly). Details for particular States are available from publications issued regularly by the Deputy Commonwealth Statisticians.

Commonwealth Government activities relate in the main to the provision of moneys to State Governments under Commonwealth-State Housing Agreements, to the assistance of ex-service personnel in the erection and purchase of homes, to assistance to young married couples under the Home Savings Grant Act, to the operation of the Housing Loans Insurance Corporation, and to the provision of homes in the Territories. Further details of activities of the Commonwealth and State Housing Authorities are shown in the reports issued by these authorities.

#### Census dwellings

At each census of the population, in addition to the questions relating to personal particulars, there have been a number of questions relating to dwellings. A 'dwelling' is defined as any habitation occupied by a household group living together as a domestic unit, whether comprising the whole or only part of a building, and includes, *in addition to houses and flats*, a great variety of dwellings ranging from a single-roomed shack to a multi-roomed hotel or institution. This section contains particulars of such information on dwellings as is yet available from the 1966 census, together with information from earlier censuses. All statistics in this section are exclusive of particulars of dwellings occupied solely by full-blood Aborigines.\*

#### Number of dwellings

The following table shows the number of occupied and unoccupied dwellings in Australia at each census from 1911 to 1966. Occupied dwellings are classified into 'private' and 'other than private' dwellings (*see page 221*) for definitions of 'private' and 'other than private' dwellings). Unoccupied dwellings include dwellings whose occupants are temporarily absent, holiday homes, and other temporarily vacant dwellings (*see page 230* for full explanation of the term 'unoccupied').

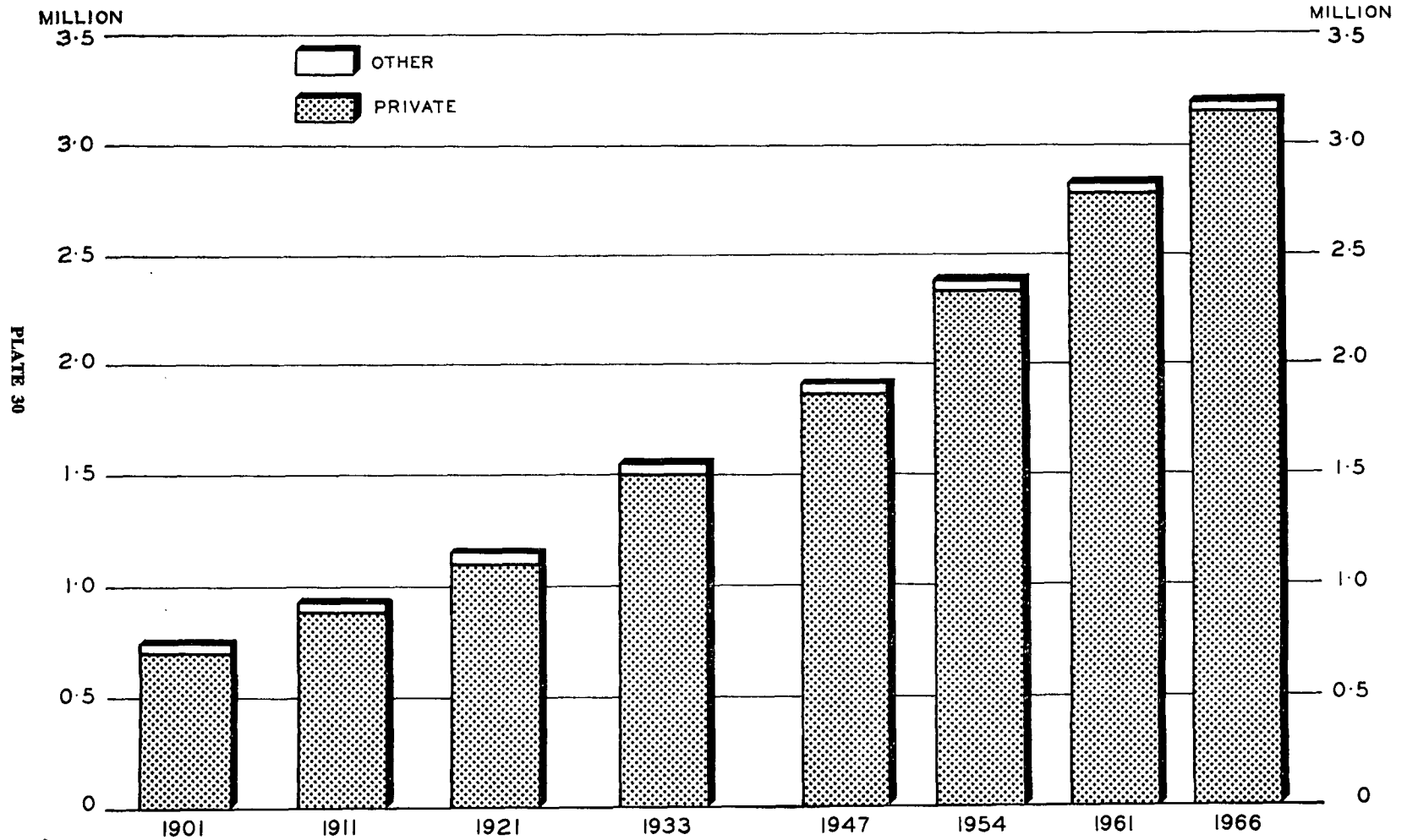
**DWELLINGS: AUSTRALIA, CENSUSES, 1911 TO 1966**

Census	Occupied			Un-occupied
	Private	Other than private	Total	
1911 . . .	894,389	29,070	923,459	33,473
1921 . . .	1,107,010	46,275	1,153,285	51,163
1933 . . .	1,509,671	37,705	1,547,376	68,772
1947 . . .	1,873,623	34,272	1,907,895	47,041
1954 . . .	2,343,421	36,932	2,380,353	112,594
1961 . . .	2,781,945	35,325	2,817,270	194,114
1966p . . .	3,151,852	33,728	3,185,580	263,869

\*See page 66 for results of *Constitution Alteration (Aborigines) 1967 Referendum*.

# OCCUPIED DWELLINGS: AUSTRALIA

CENSUSES 1901 TO 1966



The following table shows the number of occupied and unoccupied dwellings in the urban and rural areas of Australia at the census of 30 June 1966. For definitions of 'urban' and 'rural' see this Year Book, page 123.

**DWELLINGS: URBAN AND RURAL, AUSTRALIA, CENSUS  
30 JUNE 1966 p**

Division	Occupied				Unoccupied	
	Private	Other than private	Total		Number	Percentage of total
			Number	Percentage of total		
Urban—						
Metropolitan . . . . .	1,885,998	14,285	1,900,283	59.65	86,828	32.91
Other . . . . .	778,410	9,492	787,902	24.73	81,659	30.95
Rural . . . . .	487,444	9,951	497,395	15.61	95,382	36.15
<b>Total . . . . .</b>	<b>3,151,852</b>	<b>33,728</b>	<b>3,185,580</b>	<b>100.00</b>	<b>263,869</b>	<b>100.00</b>

The total numbers of occupied and unoccupied dwellings in each State and Territory at the censuses of 1961 and 1966 were as follows.

**DWELLINGS: STATES AND TERRITORIES, CENSUSES  
1961 AND 1966 p**

State or Territory	Census 30 June 1961		Census 30 June 1966	
	Occupied	Un- occupied	Occupied	Un- occupied
New South Wales . . . . .	1,061,609	72,432	1,189,471	101,545
Victoria . . . . .	790,529	47,389	888,983	64,757
Queensland . . . . .	398,233	33,969	449,168	41,818
South Australia . . . . .	261,908	17,061	302,313	25,110
Western Australia . . . . .	194,317	13,705	224,659	17,962
Tasmania . . . . .	91,258	8,582	99,365	10,800
Northern Territory . . . . .	5,479	179	8,067	380
Australian Capital Territory . . . . .	13,937	797	23,554	1,497
<b>Australia . . . . .</b>	<b>2,817,270</b>	<b>194,114</b>	<b>3,185,580</b>	<b>263,869</b>

**Class of dwelling (1961 and 1966)**

The following table shows the numbers of the various classes of occupied dwellings in the metropolitan urban, other urban, and rural areas of Australia at the censuses of 1961 and 1966. The 1961 dwellings data in the following table have not been compiled for the separate divisions of State according to criteria adopted at the 1966 census (see page 123), and consequently accurate comparison between 1961 and 1966 figures for divisions of State cannot be made. The numbers of the various classes of dwelling for each State and Territory at the 1966 census are given in the table on page 222.

**Private dwellings** are classified into the following categories:

*private house*—includes houses, sheds, huts, garages, etc., used for dwelling purposes;

*share of private house*—portion of a shared private house which is occupied separately and for which portion a separate householder's schedule was received;

*flat*—part of a house or other building which can be completely closed off and which has its own cooking and bathing facilities;

*other private dwelling*—includes private dwellings such as rooms, apartments, etc., which are parts of buildings but are not self-contained units.

**Other than private dwellings** include hotels; motels; boarding houses, lodging houses and hostels; educational, religious and charitable institutions; hospitals; defence and penal establishments; police and fire stations; clubs; staff barracks and quarters, etc.



**OCCUPIED DWELLINGS, BY CLASS: URBAN AND RURAL(a), AUSTRALIA  
CENSUSES, 1961 AND 1966 p**

Class of dwelling	Census, 30 June 1961				Census, 30 June 1966				Inter-censal increase or decrease (-)
	Urban		Rural	Total	Urban		Rural	Total	
	Metro-politan	Other			Metro-politan	Other			
Private dwellings—									
Private house . . . . .	1,324,627	630,072	438,470	2,393,169	1,529,039	692,504	460,147	2,681,690	288,521
Share of private house . . . . .	59,727	15,248	4,575	79,550	(b)20,940	(b)3,678	(b)1,296	25,914	-53,636
Self-contained flat . . . . .	169,934	43,134	4,518	217,586	274,328	63,325	7,893	345,546	129,128
Share of self-contained flat . . . . .	(c)	(c)	(c)	(c)	(d)956	(d)193	(d)19	1,168	(c)
Shed, hut, tent, etc. . . . .	10,740	11,338	19,919	41,997	5,085	9,526	16,445	31,056	-10,941
Other private dwellings . . . . .	42,364	6,743	536	49,643	55,650	9,184	1,644	66,478	16,835
Total occupied private dwellings . . . . .	1,607,392	706,535	468,018	2,781,945	1,885,998	778,410	487,444	3,151,852	369,907
Non-private dwellings—									
Licensed hotel . . . . .	1,759	2,447	1,877	6,083	1,760	2,390	1,788	5,938	-145
Motel . . . . .	61	301	137	499	188	717	219	1,124	625
Boarding house . . . . .	13,572	4,094	826	18,492	9,070	3,347	696	13,113	-5,379
Educational institution . . . . .	308	275	102	685	224	221	80	525	-160
Religious institution . . . . .	559	422	201	1,182	620	450	204	1,274	92
Charitable institution . . . . .	317	117	78	512	350	120	92	562	50
Hospital(e) . . . . .	638	488	318	1,444	687	526	287	1,500	56
Staff barracks . . . . .	310	697	4,016	5,023	463	1,290	6,321	8,074	3,051
Other non-private dwellings . . . . .	780	367	258	1,405	923	431	264	1,618	213
Total occupied non-private dwellings . . . . .	18,304	9,208	7,813	35,325	14,285	9,492	9,951	33,728	-1,597
Total occupied dwellings . . . . .	1,625,696	715,743	475,831	2,817,270	1,900,283	787,902	497,395	3,185,580	368,310

(a) See text on page 221 regarding comparability between censuses. (b) Represents 10,077 private houses in metropolitan areas, 1,803 in other urban areas, and 638 in rural areas. (c) At the 1961 Census, share of self-contained flat was not separately identified, and cases of more than one household group occupying a self-contained flat were treated as one household group occupying a self-contained flat. (d) Represents 464 self-contained flats in metropolitan areas, 95 in other urban areas, and 9 in rural areas. (e) Includes mental hospital.

The percentages of the various classes of occupied dwellings to the total for Australia at the 1966 census (1961 census in parentheses) are: private house, 84.18 (84.95); share of private house, 0.81 (2.82); self-contained flat, 10.89 (7.72); shed, hut, etc., 0.97 (1.49); other private dwellings, 2.09 (1.76); non-private dwellings, 1.06 (1.25).

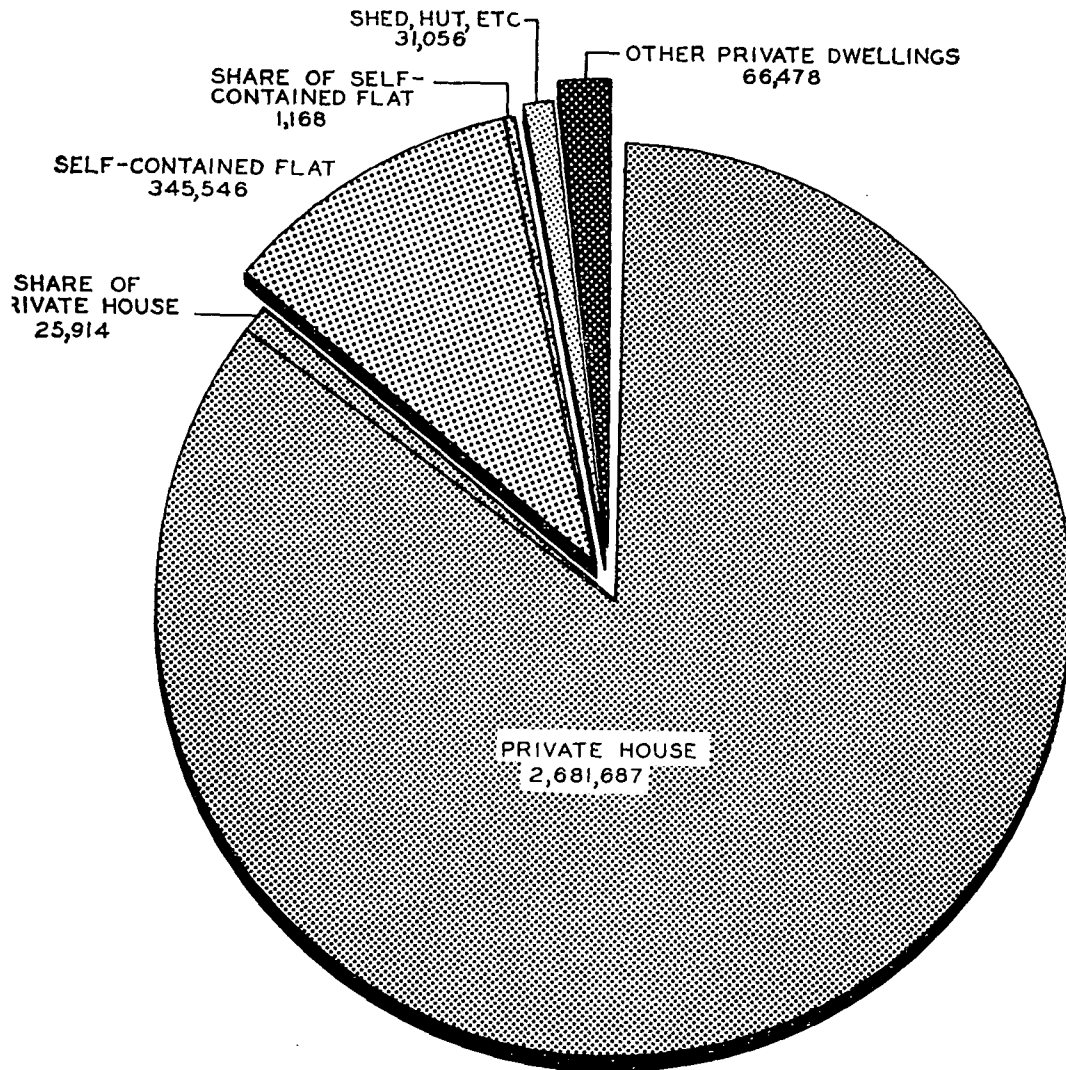
**OCCUPIED DWELLINGS, BY CLASS: STATES AND TERRITORIES  
CENSUS, 30 JUNE 1966 p**

Class of dwelling	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Australia
<b>Private dwellings—</b>									
Private house . . . . .	961,049	752,775	381,680	271,044	200,897	88,779	5,817	19,649	(b)2,681,690
Share of private house . . . . .	11,496	9,166	1,586	2,140	844	469	43	170	25,914
Self-contained flat . . . . .	164,341	92,166	43,069	20,802	14,074	7,036	838	3,220	345,546
Share of self-contained flat . . . . .	666	277	104	61	18	22	5	15	1,168
Shed, hut, tent, etc. . . . .	12,309	3,725	7,952	1,938	3,439	882	616	195	31,056
Other private dwellings . . . . .	28,194	23,338	7,759	3,644	2,169	1,093	180	101	66,478
<b>Total occupied private dwellings . . . . .</b>	<b>1,178,055</b>	<b>881,447</b>	<b>442,150</b>	<b>299,629</b>	<b>221,441</b>	<b>98,281</b>	<b>7,499</b>	<b>23,350</b>	<b>(b)3,151,852</b>
<b>Non-private dwellings—</b>									
Licensed hotel . . . . .	1,939	1,532	1,101	593	456	267	41	9	5,938
Motel . . . . .	444	205	298	74	43	29	19	12	1,124
Boarding house . . . . .	5,417	3,786	1,535	892	904	346	109	124	13,113
Educational institution . . . . .	186	114	104	36	55	19	4	7	525
Religious institution . . . . .	500	280	218	80	125	43	10	18	1,274
Charitable institution . . . . .	188	161	62	52	55	26	17	1	562
Hospital(a) . . . . .	458	416	190	191	188	48	8	1	1,500
Staff barracks . . . . .	1,629	744	3,238	605	1,266	240	338	14	8,074
Other non-private dwellings . . . . .	655	298	272	161	126	66	22	18	1,618
<b>Total occupied non-private dwellings . . . . .</b>	<b>11,416</b>	<b>7,536</b>	<b>7,018</b>	<b>2,684</b>	<b>3,218</b>	<b>1,084</b>	<b>568</b>	<b>204</b>	<b>33,728</b>
<b>Total occupied dwellings . . . . .</b>	<b>1,189,471</b>	<b>888,983</b>	<b>449,168</b>	<b>302,313</b>	<b>224,659</b>	<b>99,365</b>	<b>8,067</b>	<b>23,554</b>	<b>3,185,580</b>

(a) Includes mental hospital. (b) Figures differ slightly from those on the graph opposite because of revisions.

# OCCUPIED PRIVATE DWELLINGS, BY CLASS: AUSTRALIA

CENSUS 1966



TOTAL PRIVATE DWELLINGS - 3,151,849

PLATE 31

## Population according to class of dwelling, etc. (1954 and 1961)

The following table shows the number of the various classes of occupied dwellings at the censuses of 1954 and 1961, together with the number of inmates therein. Corresponding data for 1966 are not yet available.

OCCUPIED DWELLINGS AND INMATES, BY CLASS OF DWELLING: AUSTRALIA  
CENSUSES, 1954 AND 1961

	Census, 30 June 1954			Census, 30 June 1961		
	Number of dwellings	Inmates		Number of dwellings	Inmates	
		Number	Percentage of total		Number	Percentage of total
Private house(a)—						
House . . . . .	2,006,871	7,448,978	82.89	2,393,169	8,881,128	84.51
Shed, hut, etc. . . . .	49,148	134,187	1.49	41,997	116,458	1.11
Total, private house . . . . .	2,056,019	7,583,165	84.38	2,435,166	8,997,586	85.62
Share of private house(b) . . . . .	107,216	290,579	3.23	79,550	224,066	2.13
Flat(c) . . . . .	127,420	329,265	3.67	217,586	552,596	5.26
Other . . . . .	52,766	111,353	1.24	49,643	96,246	0.92
Total, private dwellings(d) . . . . .	2,343,421	8,314,362	92.52	2,781,945	9,870,494	93.93
Dwellings other than private(d) . . . . .	36,932	618,743	6.89	35,325	596,412	5.68
Total occupied dwellings . . . . .	2,380,353	8,933,105	99.41	2,817,270	10,466,906	99.61
Campers out . . . . .	..	30,056	0.33	..	15,994	0.15
Migratory(e) . . . . .	..	23,369	0.26	..	25,286	0.24
Total population . . . . .	..	8,986,530	100.00	..	10,508,186	100.00

(a) Includes shared private houses for which only one householder's schedule was received. (b) Portion of a shared private house which is occupied separately and for which portion a separate householder's schedule was received. (c) Before 1961 single self-contained dwellings attached to, or situated above, offices, shops, etc., were classified as private houses irrespective of the description stated in the householder's schedule. In 1961 such dwellings, if described as self-contained flats, were classified as flats. (d) Caretaker's quarters were included with private dwellings in 1961 and with other than private dwellings in 1954. (e) Shipping, railway, and air travellers.

## Occupied private dwellings

The tables on pages 224-9 shows occupied private dwellings classified according to material of outer walls; number of rooms; number of inmates; nature of occupancy; date of building; facilities; and number of motor vehicles.

## Material of outer walls (1961 and 1966)

OCCUPIED PRIVATE DWELLINGS, BY MATERIAL OF OUTER WALLS: URBAN AND  
RURAL(a), AUSTRALIA, CENSUSES, 1961 AND 1966 p

Material of outer walls	Census, 30 June 1961				Census, 30 June 1966				Inter- censal increase or decrease) (—)
	Urban				Urban				
	Metro- politan	Other	Rural	Total	Metro- politan	Other	Rural	Total	
Brick . . . . .	807,311	113,392	32,291	952,994	819,398	95,774	32,892	948,064	(b)
Brick veneer(c) . . . . .	(b)	(b)	(b)	(b)	213,852	49,428	17,635	280,915	(b)
Total brick and brick veneer . . . . .	807,311	113,392	32,291	952,994	1,033,250	145,202	50,527	1,228,979	275,985
Stone . . . . .	32,828	19,919	30,325	83,072	31,512	20,173	27,385	79,070	—4,002
Concrete . . . . .	40,779	19,111	15,455	75,345	52,282	20,164	15,943	88,389	13,044
Wood . . . . .	507,775	386,555	258,257	1,152,587	519,637	393,249	252,387	1,165,273	12,686
Iron, tin . . . . .	4,556	17,235	24,870	46,661	2,855	13,266	19,520	35,641	—11,020
Fibro-cement . . . . .	208,271	146,003	97,996	452,270	242,992	181,429	113,915	538,336	86,066
Other . . . . .	4,433	3,543	7,759	15,735	3,470	4,927	7,767	16,164	429
Not stated . . . . .	1,439	777	1,065	3,281	(d)	(d)	(d)	(d)	(d)
Total . . . . .	1,607,392	706,535	468,018	2,781,945	1,885,998	778,410	487,444	3,151,852	369,907

(a) See text on page 221 for comparability between censuses. (b) At the 1961 census, dwellings with walls of brick veneer were not separately identified and for tabulation purposes were included with brick walled dwellings. (c) So described in individual census schedules. (d) In the small number of cases where material of outer walls was not stated a material was selected during processing of the 1966 census schedules. Selection was based upon the answer given for the geographically nearest dwelling of the same class as the dwelling for which material of outer walls was not stated.

Minus sign (—) denotes decrease.

The percentages of occupied private dwellings of the various materials to the total for Australia at the 1966 census (1961 census in parentheses) are: brick and brick veneer, 38.99 (34.26); wood, 36.97 (41.43); fibro-cement, 17.08 (16.26); concrete, 2.80 (2.71); other and not stated, 4.15 (5.36).

**OCCUPIED PRIVATE DWELLINGS, BY MATERIAL OF OUTER WALLS  
STATES AND TERRITORIES, CENSUS, 30 JUNE 1966 p**

<i>Material of outer walls</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
Brick . . . . .	442,232	193,921	21,673	161,911	102,276	14,655	1,368	10,028	948,064
Brick veneer(a) . . . . .	66,166	161,620	10,262	14,409	11,204	9,491	88	7,675	280,915
Stone . . . . .	8,906	5,132	341	59,836	3,469	1,294	37	55	79,070
Concrete . . . . .	17,047	31,054	10,357	18,520	5,141	3,586	772	1,912	88,389
Wood . . . . .	316,233	426,728	312,475	13,770	28,227	64,912	449	2,479	1,165,273
Iron, tin . . . . .	11,090	2,317	8,793	6,638	5,438	713	631	21	35,641
Fibro-cement . . . . .	310,655	57,648	74,803	23,498	63,527	3,444	3,685	1,076	538,336
Other . . . . .	5,726	3,027	3,446	1,047	2,159	186	469	104	16,164
<b>Total</b> . . . . .	<b>1,178,055</b>	<b>881,447</b>	<b>442,150</b>	<b>299,629</b>	<b>221,441</b>	<b>98,281</b>	<b>7,499</b>	<b>23,350</b>	<b>3,151,852</b>

(a) So described in individual census schedules.

**Number of rooms (1954 and 1961)**

**OCCUPIED PRIVATE DWELLINGS, BY NUMBER OF ROOMS AND CLASS OF DWELLING  
AUSTRALIA, CENSUSES, 1954 AND 1961**

<i>Number of rooms(a) per dwelling</i>	<i>Census, 30 June 1954</i>					<i>Census, 30 June 1961</i>				
	<i>Private house(b)</i>	<i>Share of private house(c)</i>	<i>Flat(d)</i>	<i>Other</i>	<i>Total private dwellings</i>	<i>Private house(b)</i>	<i>Share of private house(c)</i>	<i>Flat(d)</i>	<i>Other</i>	<i>Total private dwellings</i>
1 . . . . .	24,052	12,129	769	16,336	53,286	17,303	6,941	2,282	13,306	39,832
2 . . . . .	45,117	23,761	7,333	18,675	94,886	28,607	17,606	20,635	19,644	86,492
3 . . . . .	87,137	25,716	27,270	9,955	150,078	70,945	21,280	53,585	9,732	155,542
4 . . . . .	380,138	19,284	49,548	4,250	453,220	387,737	16,524	77,531	3,536	485,328
5 . . . . .	692,044	12,728	27,701	1,520	733,993	903,227	11,906	39,914	1,224	956,271
6 . . . . .	534,420	7,663	10,752	687	553,522	656,348	2,168	15,723	245	674,484
7 . . . . .	181,312	2,788	2,525	218	186,843	231,841	609	4,471	97	237,018
8 . . . . .	64,092	1,130	806	100	66,128	80,911	230	1,674	45	82,860
9 . . . . .	22,430	341	244	47	23,062	28,070	70	572	28	28,740
10 and over . . . . .	20,808	163	98	18	21,087	24,196	97	160	38	24,491
Not stated . . . . .	4,469	1,513	374	960	7,316	5,981	2,119	1,039	1,748	10,887
<b>Total private dwellings</b> . . . . .	<b>2,056,019</b>	<b>107,216</b>	<b>127,420</b>	<b>52,766</b>	<b>2,343,421</b>	<b>2,435,166</b>	<b>79,550</b>	<b>217,586</b>	<b>49,643</b>	<b>2,781,945</b>
Average number of rooms(a) per private dwelling . . . . .	5.26	3.38	4.14	2.22	5.04	5.39	3.26	3.97	2.20	5.16

(a) Includes kitchen and permanently enclosed sleep-out but does not include bathroom, pantry, laundry or storehouse.

(b) Includes houses, sheds, huts, etc., and shared private houses for which only one householder's schedule was received.

(c) Portion of a shared private house which is occupied separately and for which portion a separate householder's schedule was received.

(d) See footnote (c) to first table on page 224.

**Number of inmates (1954 and 1961)**

**OCCUPIED PRIVATE DWELLINGS, BY NUMBER OF INMATES AND CLASS OF DWELLING  
AUSTRALIA, CENSUSES, 1954 AND 1961**

<i>Number of inmates per dwelling</i>	<i>Census, 30 June 1954</i>					<i>Census, 30 June 1961</i>				
	<i>Private house(a)</i>	<i>Share of private house(b)</i>	<i>Flat(c)</i>	<i>Other</i>	<i>Total private dwellings</i>	<i>Private house(a)</i>	<i>Share of private house(b)</i>	<i>Flat(c)</i>	<i>Other</i>	<i>Total private dwellings</i>
1 . . . . .	147,308	22,082	22,507	21,191	213,088	198,150	17,215	46,890	23,105	285,360
2 . . . . .	444,179	35,626	49,303	16,678	545,786	537,599	23,572	82,194	15,128	658,493
3 . . . . .	435,679	22,920	29,351	7,904	495,854	465,895	16,176	43,051	6,267	531,389
4 . . . . .	446,687	14,258	16,468	4,185	481,598	512,229	11,371	26,638	3,053	553,291
5 . . . . .	291,706	6,673	6,335	1,578	306,292	356,874	5,801	11,571	1,264	375,510
6 . . . . .	154,691	3,171	2,263	654	160,779	196,328	2,940	4,476	499	204,243
7 . . . . .	72,955	1,429	796	294	75,474	91,405	1,367	1,779	180	94,731
8 . . . . .	35,243	704	256	160	36,363	44,096	765	683	91	45,635
9 . . . . .	14,268	207	92	67	14,634	17,279	204	173	30	17,686
10 and over . . . . .	13,303	146	49	55	13,553	15,311	139	131	26	15,607
<b>Total private dwellings</b> . . . . .	<b>2,056,019</b>	<b>107,216</b>	<b>127,420</b>	<b>52,766</b>	<b>2,343,421</b>	<b>2,435,166</b>	<b>79,550</b>	<b>217,586</b>	<b>49,643</b>	<b>2,781,945</b>
<b>Total inmates</b> . . . . .	<b>7,583,165</b>	<b>290,579</b>	<b>329,265</b>	<b>111,353</b>	<b>8,314,362</b>	<b>8,997,586</b>	<b>224,066</b>	<b>552,596</b>	<b>96,246</b>	<b>9,870,494</b>
Average number of inmates per private dwelling . . . . .	3.69	2.71	2.58	2.11	3.55	3.69	2.82	2.54	1.94	3.55

(a) Includes houses, sheds, huts, etc., and shared private houses for which only one householder's schedule was received.

(b) Portion of a shared private house which is occupied separately and for which portion a separate householder's schedule was received.

(c) See footnote (c) to first table on page 224.

## Nature of occupancy (1961 and 1966)

OCCUPIED PRIVATE DWELLINGS, BY NATURE OF OCCUPANCY: URBAN AND RURAL(a)  
AUSTRALIA, CENSUSES, 1961 AND 1966 p

Nature of occupancy	Census, 30 June 1961				Census, 30 June 1966				Inter-censal increase or decrease (—)
	Urban		Rural	Total	Urban		Rural	Total	
	Metro-politan	Other			Metro-politan	Other			
Owner . . . . .	682,684	346,333	292,591	1,321,608	1,342,675	542,956	346,250	2,231,881	286,259
Purchaser by instalments	451,419	144,209	28,386	624,014					
Tenant of government authority . . . . .	75,586	38,914	2,579	117,079	107,527	49,691	4,502	161,720	44,641
Other tenant . . . . .	377,790	162,123	105,824	645,737	406,814	167,546	98,959	673,319	27,582
Other methods of occupancy . . . . .	15,057	11,862	32,772	59,691	16,543	12,968	30,040	59,551	— 140
Not stated . . . . .	4,856	3,094	5,866	13,816	12,439	5,249	7,693	25,381	11,565
Total . . . . .	1,607,392	706,535	468,018	2,781,945	1,885,998	778,410	487,444	3,151,852	369,907

(a) See text on page 221 regarding comparability between censuses.

At the 1961 census persons paying interest only on a mortgage on the dwelling were instructed to enter 'owner', but a person buying a house by regular payments including interest and principal was instructed to enter 'purchaser by instalment'. It is probable however, that some 'purchasers by instalment' described themselves on 1961 census schedules as 'owners' especially where they possessed the title to the property. However, the extent of such mis-statements has not been measured. At the 1966 census, as the two categories can be logically grouped, separate details for 'owners' and 'purchasers by instalment' were not collected.

The percentages of occupied private dwellings of the various types of occupancy to the total for Australia for the 1966 census (1961 census in parentheses) are: owner or purchaser by instalments, 70.81 (69.94); tenant of government authority, 5.13 (4.21); other tenant, 21.36 (23.21); other and not stated, 2.70 (2.65).

OCCUPIED PRIVATE DWELLINGS, BY NATURE OF OCCUPANCY  
STATES AND TERRITORIES, CENSUS, 30 JUNE 1966 p

Nature of occupancy	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Owner, purchaser by instalments . . . . .	822,219	644,012	314,138	215,531	154,753	68,363	2,264	10,601	2,231,881
Tenant of government authority . . . . .	52,077	34,311	13,755	27,620	17,461	5,176	2,420	8,900	161,720
Other tenant . . . . .	272,390	183,192	95,945	50,609	43,359	21,915	2,278	3,631	673,319
Other methods of occupancy . . . . .	21,748	12,770	13,582	4,146	4,625	2,061	439	180	59,551
Not stated . . . . .	9,621	7,162	4,730	1,723	1,243	766	98	38	25,381
Total . . . . .	1,178,055	881,447	442,150	299,629	221,441	98,281	7,499	23,350	3,151,852

## Date of building (1961)

The numbers of occupied private dwellings in Australia at the census of 30 June 1961, classified according to date of building, are shown next. This information was derived from replies of occupants of dwellings at 30 June 1961. For a number of reasons, the figures shown on the first line of the table do not agree with the number of dwellings by class recorded at the census of 30 June 1954, e.g. demolitions, conversion from one class of dwelling to another and errors of memory regarding date of building. Also, the figures are not precisely comparable with 1954 data because of changes in classification of dwellings adopted at the 1961 census.

# OCCUPIED PRIVATE DWELLINGS, BY NATURE OF OCCUPANCY: AUSTRALIA

CENSUSES 1933 TO 1966

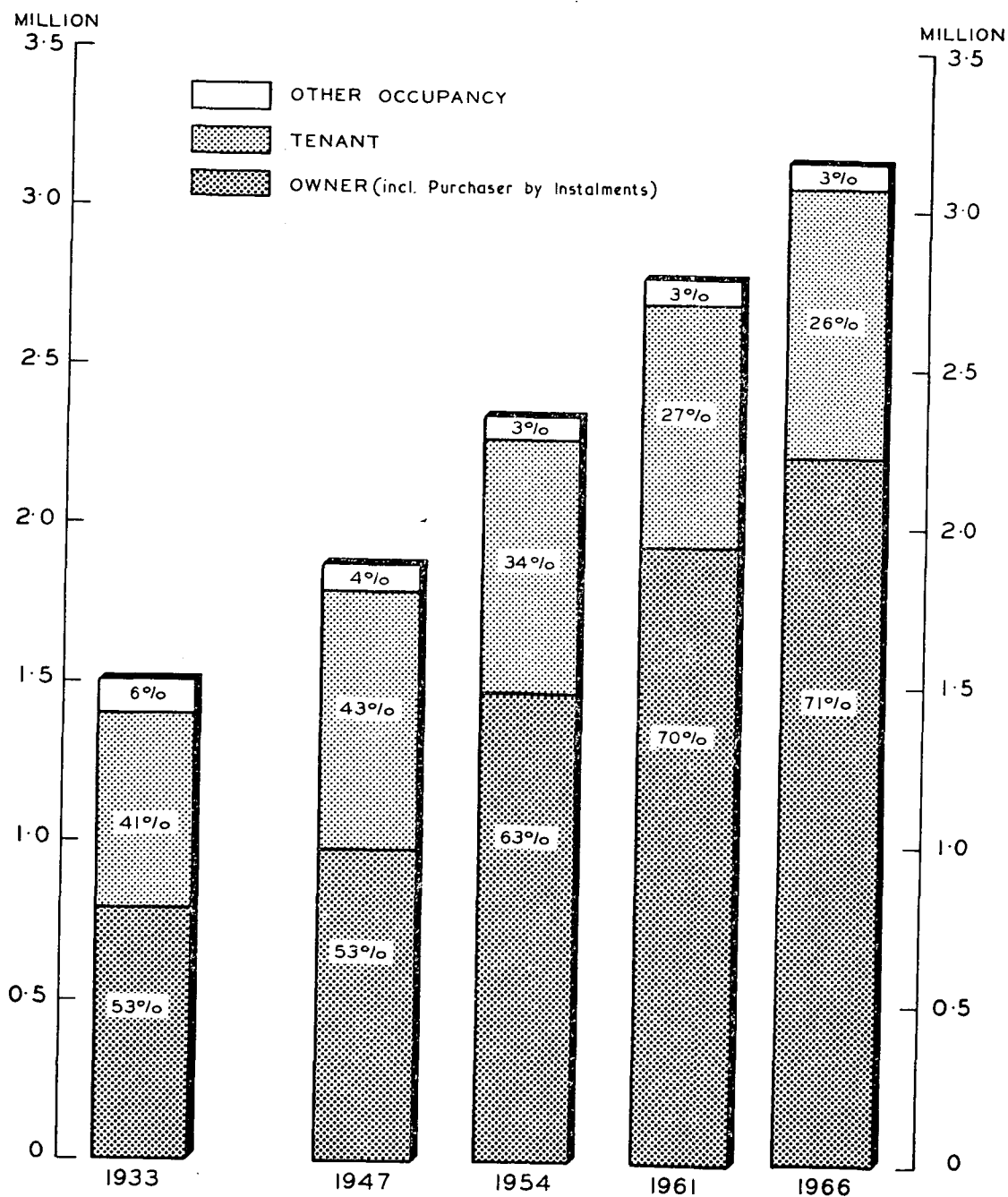


PLATE 32

**OCCUPIED PRIVATE DWELLINGS, BY DATE OF BUILDING AND CLASS OF DWELLING AND DIVISION OF STATE: AUSTRALIA, CENSUS, 30 JUNE 1961**

Date of building	Class of dwelling				Division			Total
	Private house (a)	Share of private house	Flat	Other	Urban		Rural	
					Metro- politan	Other		
Before 1 July 1954	1,861,262	68,823	168,615	44,358	1,231,462	537,953	373,643	2,143,058
After 30 June 1954—								
1954 (July–Dec.)	30,398	397	1,121	94	19,116	8,375	4,519	32,010
1955	80,293	975	3,375	194	49,571	22,374	12,892	84,837
1956	73,095	999	3,937	213	46,215	20,398	11,631	78,244
1957	68,340	939	3,596	351	43,353	18,953	10,920	73,226
1958	78,573	1,143	5,603	381	51,970	22,203	11,527	85,700
1959	81,110	1,220	7,657	366	54,747	24,002	11,604	90,353
1960	82,968	1,231	11,117	234	57,188	25,705	12,657	95,550
1961 (Jan.–June)	30,618	367	4,124	130	19,943	9,466	5,830	35,239
Not stated(b)	18,131	730	2,841	491	12,484	6,085	3,624	22,193
Total, after 30 June 1954	543,526	8,001	43,371	2,454	354,587	157,561	85,204	597,352
Other not stated	30,378	2,726	5,600	2,831	21,343	11,021	9,171	41,535
Grand total	2,435,166	79,550	217,586	49,643	1,607,392	706,535	468,018	2,781,945

(a) Includes houses, sheds, huts, etc., and shared private houses for which only one householder's schedule was received.

(b) After 30 June 1954 but year not stated.

**Facilities (1961 and 1966)**

**OCCUPIED PRIVATE DWELLINGS, BY FACILITY  
URBAN AND RURAL(a), AUSTRALIA, CENSUSES 1961 AND 1966 p**

Facility	Census, 30 June 1961				Census, 30 June 1966			
	Urban		Rural	Total	Urban		Rural	Total
	Metro-politan	Other			Metro-politan	Other		
Gas or electricity—								
With gas only	1,578	614	3,573	5,765	1,993	1,142	4,965	8,100
With electricity only	546,588	517,038	360,197	1,423,823	728,932	556,453	386,297	1,671,682
With gas and electricity	1,052,980	177,974	20,237	1,251,191	1,145,801	213,580	65,738	1,425,119
Without gas or electricity	3,239	8,665	77,148	89,052	1,405	4,291	25,355	31,051
Not stated	3,007	2,244	6,863	12,114	7,867	2,944	5,089	15,900
Total	1,607,392	706,535	468,018	2,781,945	1,885,998	778,410	487,444	3,151,852
With television set	1,038,837	168,875	70,950	1,278,662	1,584,951	558,754	294,346	2,438,051

(a) See text on page 221 regarding comparability between censuses.

NOTE. For the 1966 Census, dwellings for which electricity was not stated but which had television have been classified as having electricity and therefore so included in this table.

The percentages of occupied private dwellings with the various facilities to the total for Australia at the 1966 census (1961 census in parentheses) are: gas only, 0.26 (0.21); electricity only, 53.04 (51.18); gas and electricity, 45.22 (44.98); neither gas nor electricity, 0.99 (3.20); not stated, 0.50 (0.44); television set 77.30 (45.96).

**OCCUPIED PRIVATE DWELLINGS, BY FACILITY  
STATES AND TERRITORIES, CENSUS, 30 JUNE 1966 p**

Facility	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Gas only	2,239	2,184	1,499	770	1,143	125	128	12	8,100
Electricity only	646,782	341,143	286,855	146,862	134,062	87,633	6,022	22,323	1,671,682
Gas and electricity	512,595	528,939	141,237	149,336	81,787	9,325	942	958	1,425,119
Neither gas nor electricity	10,330	5,026	9,280	1,745	3,628	775	262	5	31,051
Not stated	6,109	4,155	3,279	916	821	423	145	52	15,900
Total	1,178,055	881,447	442,150	299,629	221,441	98,281	7,499	23,350	3,151,852
Television set	938,271	724,633	290,833	237,564	152,013	75,519	50	19,168	2,438,051

NOTE. Dwellings for which electricity was not stated but which had television have been classified as having electricity and therefore included as such in this table.

## Number of motor vehicles (1966)

At the 1966 census a question was asked regarding the number of motor vehicles parked or garaged at occupied private dwellings on census night. No information was collected on this topic at previous censuses.

**OCCUPIED PRIVATE DWELLINGS, BY NUMBER OF MOTOR VEHICLES**  
**URBAN AND RURAL, AUSTRALIA, CENSUS, 30 JUNE 1966 p**

Number of vehicles per occupied private dwelling	Urban		Rural	Total
	Metropolitan	Other		
No vehicles . . . . .	513,229	173,688	55,651	742,568
1 vehicle . . . . .	947,699	429,216	231,408	1,608,323
2 vehicles . . . . .	305,064	127,684	120,182	552,930
3 vehicles . . . . .	51,161	22,807	46,532	120,500
4 or more vehicles . . . . .	10,701	6,446	23,511	40,658
Not stated . . . . .	58,144	18,569	10,160	86,873
<b>Total occupied private dwellings . . . . .</b>	<b>1,885,998</b>	<b>778,410</b>	<b>487,444</b>	<b>3,151,852</b>
<b>Total vehicles . . . . .</b>	<b>1,757,434</b>	<b>781,910</b>	<b>717,838</b>	<b>3,257,182</b>

## Tenanted private dwellings—weekly rent (1954 and 1961)

Information tabulated from census results concerning rents has been restricted to the actual rent paid per week by tenants for unfurnished private dwellings. Particulars of rents shown in the following table are therefore on an *unfurnished* basis. Dwelling shown as rent 'Not stated' include those whose rents were shown on householders' schedules on a *furnished* basis, and those whose rents were not applicable (e.g. for shop and dwelling combined). In this section information on 'tenanted private dwellings' *excludes particulars of dwellings occupied by 'Tenants (Governmental Housing)' in each State*, i.e. those householders who at the 1954 Census furnished answers in response to the instruction on the census householder's schedule 'Tenant paying rent to a Government Authority to write "Tenant (G)"' and those householders who at the 1961 Census furnished answers in response to the instruction on the census householder's schedule 'Tenant paying rent to the Governmental Housing Authority in their State to write "Tenant (G)"'. *For the Australian Capital Territory and the Northern Territory particulars of all tenanted private dwellings are included.*

**TENANTED PRIVATE DWELLINGS, BY WEEKLY RENT (UNFURNISHED)**  
**AND CLASS OF DWELLING: AUSTRALIA, CENSUSES, 1954 AND 1961(a)**

Weekly rent (unfurnished)	Census, 30 June 1954					Census, 30 June 1961				
	Private house (b)	Share of private house (c)	Flat (d)	Other	Total tenanted private dwell- ings	Private house (b)	Share of private house (c)	Flat (d)	Other	Total tenanted private dwell- ings
Under \$2 . . . . .	71,092	4,960	1,191	1,573	78,816	24,925	665	1,043	426	27,059
\$2 and under \$3 . . . . .	116,836	9,155	6,559	3,019	135,569	41,731	1,649	2,798	860	47,038
\$3 " " \$4 . . . . .	94,619	8,971	17,187	2,955	123,732	41,920	1,942	5,424	1,268	50,554
\$4 " " \$5 . . . . .	50,869	5,827	18,180	1,815	76,691	44,659	2,662	9,482	1,431	58,234
\$5 " " \$6 . . . . .	22,487	2,963	11,874	1,061	38,385	32,137	2,011	10,598	1,068	45,814
\$6 " " \$7 . . . . .	14,770	1,830	6,980	686	24,266	31,174	2,776	10,239	1,158	45,347
\$7 " " \$8 . . . . .	6,584	685	3,561	324	11,154	18,189	1,787	7,147	810	27,933
\$8 " " \$9 . . . . .	3,751	481	2,370	182	6,784	15,590	1,824	6,669	718	24,801
\$9 " " \$10 . . . . .	3,279	137	1,352	70	2,838	7,469	915	4,205	433	13,022
\$10 and over . . . . .	3,636	316	3,523	177	7,652	43,482	4,050	38,306	1,596	87,434
Not stated(e) . . . . .	100,253	32,756	30,607	35,087	198,703	106,808	25,791	60,608	34,439	227,646
<b>Total tenanted private dwellings . . . . .</b>	<b>486,176</b>	<b>68,081</b>	<b>103,384</b>	<b>46,949</b>	<b>704,590</b>	<b>408,084</b>	<b>46,072</b>	<b>156,519</b>	<b>44,207</b>	<b>654,882</b>
<b>Average weekly rent (unfurnished) per private dwelling . . . . .</b>	<b>\$ 3.22</b>	<b>\$ 3.42</b>	<b>\$ 5.05</b>	<b>\$ 3.62</b>	<b>\$ 3.50</b>	<b>\$ 5.77</b>	<b>\$ 6.62</b>	<b>\$ 9.47</b>	<b>\$ 6.25</b>	<b>\$ 6.65</b>

(a) These figures exclude dwellings occupied by 'Tenants (Governmental housing)' except those in the Northern Territory and the Australian Capital Territory. (b) Includes houses, sheds, huts, etc., and shared private houses for which only one householder's schedule was received. (c) Portion of a shared private house which is occupied separately and for which portion a separate householder's schedule was received. (d) See footnote (c) to first table on page 224. (e) Includes tenanted dwellings which were rent-free, those rented on a furnished basis, and those for which the rents were not applicable (e.g. for shop and dwelling combined).



**Unoccupied dwellings (1966)**

The following tables classify unoccupied dwellings according to the reasons given by census collectors for the dwellings being unoccupied at the census date. Unoccupied dwellings include vacant dwellings available for sale or renting; dwellings such as 'week-end', 'holiday home', 'second home', 'seasonal workers' quarters', which were not occupied on the night of the census; dwellings normally occupied, but whose usual occupants were temporarily absent on the night of the census; newly completed dwellings whose owners or tenants had not entered into occupation on the night of the census; dwellings described as 'to be demolished', 'condemned', 'deceased estate', 'exhibition home', etc. The total number of unoccupied dwellings shown for any area must not, therefore, be read as representing the number of vacant houses and flats available for sale or renting.

**UNOCCUPIED DWELLINGS, BY REASON FOR BEING UNOCCUPIED: URBAN AND RURAL,  
AUSTRALIA, CENSUS, 30 JUNE 1966**

<i>Reason for being unoccupied</i>	<i>Urban</i>		<i>Rural p</i>	<i>Total</i>
	<i>Metropolitan</i>	<i>Other</i>		
For sale or for renting . . . . .	28,329	14,318	7,807	50,454
Holiday home, week-end, seasonal workers' quarters . . . . .	4,065	29,907	40,355	74,327
Temporarily unoccupied . . . . .	28,464	17,964	13,995	60,423
To be demolished, or condemned . . . . .	1,671	1,192	1,939	4,802
Other and not stated . . . . .	24,299	18,278	31,286	73,863
<b>Total . . . . .</b>	<b>86,828</b>	<b>81,659</b>	<b>95,382</b>	<b>263,869</b>

The percentages of the various groups of unoccupied dwellings at the 1966 census are: for sale or renting, 19.12; holiday home, etc., 28.17; temporarily unoccupied, 22.90; to be demolished, etc., 1.82; other, etc., 27.99.

**UNOCCUPIED DWELLINGS, BY REASON FOR BEING UNOCCUPIED  
STATES AND TERRITORIES, CENSUS, 30 JUNE 1966**

<i>Reason for being unoccupied</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
For sale or for renting	21,587	10,824	7,862	5,549	2,503	1,453	90	586	50,454
Holiday home, week- ender, seasonal workers' quarters . . . . .	27,505	20,207	10,399	6,704	5,367	4,050	3	92	74,327
Temporarily unoccupied	24,013	15,632	9,499	5,297	3,573	1,739	89	581	60,423
To be demolished, or condemned . . . . .	1,853	1,193	535	624	392	196	3	6	4,802
Other and not stated . . . . .	26,587	16,901	13,523	6,936	6,127	3,362	195	232	73,863
<b>Total . . . . .</b>	<b>101,545</b>	<b>64,757</b>	<b>41,818</b>	<b>25,110</b>	<b>17,962</b>	<b>10,800</b>	<b>380</b>	<b>1,497</b>	<b>263,869</b>

**Building****Statistics of building approved**

Statistics of building approvals have been compiled since the year 1953-54 from (a) permits issued by local government authorities in the areas subject to building control by these authorities, and (b) contracts let or work commenced and day labour projects authorised by governmental authorities. They relate only to approvals for buildings as distinct from the construction of roads, railways, bridges, earthworks, water storage, etc. Values shown represent the estimated cost when completed (excluding cost of land) of new buildings and alterations and additions to existing buildings. Before 1 July 1966 additions of \$10,000 and over were included with new buildings in all States except New South Wales, where they were included in 'alterations and additions'. From 1 July 1966 alterations and or additions of \$10,000 and over are included with new buildings in all States.

### Statistics of building commenced, completed and under construction

These relate to building by private contractors, government authorities and owner-builders. The following outlines the scope of the statistics: (a) *only the erection of new buildings as distinct from the construction of roads, railways, bridges, earthworks, water storages, etc., is covered*; (b) before 1 July 1966 major new additions to existing buildings in all States and major alterations in New South Wales were included with new buildings, while from 1 July 1966 alterations and or additions of \$10,000 and over are included with new buildings in all States; (c) minor additions, alterations, renovations and repairs are excluded because of the difficulty of obtaining details of this work; (d) temporary dwellings, sheds, huts, etc., are excluded; (e) figures for houses exclude flats and dwellings attached to other new buildings (the value of dwellings attached to other new buildings is included with the value of buildings to which they are attached); figures for flats include 'home units'; (f) imported prefabricated houses are included; (g) details obtained from government authorities and building contractors refer to all areas, whereas details for owner-builders cover only areas subject to building control by local government authorities.

The following definitions of terms used in this section are necessary for interpretation of the data presented.

**Private or government ownership.** A building is classified as 'private' or 'government' according to ownership at date of commencement. Thus 'government' includes buildings erected for Commonwealth and State Governments, semi-governmental and local government authorities, either by contractor or by day-labour, whether these buildings are for their own use or for rental or sale after completion. Houses erected for *particular persons* under government-sponsored home building schemes or with government financial assistance are classified as 'private'.

**Owner-built.** An 'owner-built' house is one actually erected or being erected by the owner or under the owner's direction without the services of a contractor who is responsible for the whole job.

**Contract-built.** Includes the operations of all building contractors and government authorities which undertake the erection of new buildings.

**Commenced.** A building is regarded as having been commenced when work on foundations has begun. Owing to the difficulty of defining the exact point that this represents in building operations, classifications made by informants may not be entirely uniform.

**Completed.** A building is regarded as having been completed when the contractor has fulfilled the terms of the contract. As with commencements, the classifications made may not be entirely uniform.

**Under construction.** A building is regarded as being under construction if it has been commenced but not completed, whether or not work on the building is actively proceeding.

**Values.** All values shown exclude the value of land and represent the estimated value of buildings on completion.

**Values of work done.** The values of work done during the period represent the estimated value of work actually carried out on buildings during the period. For any building the sum of these values obtained during its construction equals the value of the building on completion. Data relating to the value of work done on owner-built houses are not collected. However, the figures shown for the value of work done include a component relating to owner-built houses calculated on the basis of the figures collected for the value of owner-built houses commenced, completed and under construction.

**Type of building.** Classification is according to the function a building is intended to serve. A building which is ancillary to other buildings or forms part of a group of related buildings is classified according to the function of the group as a whole.

**Persons working.** Figures relate to persons working on the jobs of contractors who undertake the erection of new buildings and of government authorities which erect new buildings on their own account. They include persons working on alterations, additions, repairs and maintenance when these jobs are undertaken by such contractors and authorities. Contractors are asked to give details of all persons working on their jobs *on a specified day*, including working principals, men working as or for sub-contractors and men temporarily laid off on account of weather. Because of the intermittent employment of various types of sub-contractors on any particular job, it is sometimes difficult for contractors and authorities to provide precise particulars of the number of sub-contractors and the number of employees of sub-contractors working on their jobs on the specified day. This factor may cause some estimation by persons completing returns and some degree of understatement in figures shown in tables. On the other hand, because of frequent movement between jobs of some

types of tradesmen (such as electricians) who may work on several jobs on the one day, a small element of duplication may occur. The figures *exclude* persons working on owner-built houses, and employees of builders who undertake only alterations, additions, repairs and maintenance.

#### New houses approved, commenced, completed and under construction

The next table provides a summary for 1966-67 of the number of new houses approved, commenced, completed and under construction in each State and Territory. For a graph showing the number of new houses commenced, completed and under construction for the period 1957-58 to 1966-67 see plate 33, page 235.

#### NEW HOUSES: NUMBER, STATES AND TERRITORIES, 1966-67

	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Approved . . .	28,403	21,670	13,135	7,127	8,712	3,218	519	2,613	85,397
Commenced . . .	25,828	21,090	12,306	8,372	8,539	2,952	566	2,205	81,858
Completed . . .	24,779	22,126	12,277	9,354	8,272	2,765	357	2,030	81,960
Under construction at end of year . . .	12,564	10,423	3,460	3,869	3,524	1,729	557	1,276	37,402

The following table shows the number of *new houses approved* in each State or Territory, according to *private and government ownership*, during the years 1962-63 to 1966-67.

#### NEW HOUSES APPROVED, BY OWNERSHIP: NUMBER, STATES AND TERRITORIES 1962-63 TO 1966-67

Year	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
PRIVATE									
1962-63 . . .	23,412	19,894	8,347	7,438	4,738	1,921	156	943	66,849
1963-64 . . .	24,926	22,417	9,333	8,025	5,571	2,064	130	995	73,461
1964-65 . . .	24,685	20,301	10,269	7,289	5,512	2,062	203	1,189	71,510
1965-66 . . .	23,481	18,572	10,376	6,687	5,537	1,837	84	1,318	67,892
1966-67 . . .	23,666	20,068	11,331	5,495	7,127	2,500	91	1,458	71,736
GOVERNMENT									
1962-63 . . .	3,980	1,925	1,197	2,537	1,655	550	240	741	12,825
1963-64 . . .	5,243	2,301	1,643	4,085	1,876	584	333	569	16,634
1964-65 . . .	4,082	2,207	1,460	2,519	2,058	607	571	854	14,358
1965-66 . . .	3,116	1,889	1,526	2,470	1,892	591	492	709	12,685
1966-67 . . .	4,737	1,602	1,804	1,632	1,585	718	428	1,155	13,661
TOTAL									
1962-63 . . .	27,392	21,819	9,544	9,975	6,393	2,471	396	1,684	79,674
1963-64 . . .	30,169	24,718	10,976	12,110	7,447	2,648	463	1,564	90,095
1964-65 . . .	28,767	22,508	11,729	9,808	7,570	2,669	774	2,043	85,868
1965-66 . . .	26,597	20,461	11,902	9,157	7,429	2,428	576	2,027	80,577
1966-67 . . .	28,403	21,670	13,135	7,127	8,712	3,218	519	2,613	85,397

The number of *new houses commenced* in each State and Territory by *contractors and owner-builders* during the years 1962-63 to 1966-67 is shown in the following table.

**NEW HOUSES COMMENCED, CONTRACT-BUILT OR OWNER-BUILT  
NUMBER, STATES AND TERRITORIES, 1962-63 TO 1966-67**

<i>Year</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
<b>CONTRACT-BUILT(a)</b>									
1962-63 . . .	20,667	17,632	7,949	9,130	5,443	1,641	326	1,461	64,249
1963-64 . . .	23,545	20,873	8,917	11,014	6,448	1,756	395	1,561	74,509
1964-65 . . .	22,764	18,900	10,202	10,639	6,537	1,791	557	1,793	73,183
1965-66 . . .	20,704	17,587	10,650	8,826	6,647	1,576	484	1,945	68,419
1966-67 . . .	22,466	18,330	10,802	7,843	7,626	2,170	475	2,088	71,800
<b>OWNER-BUILT</b>									
1962-63 . . .	4,478	3,179	1,078	480	779	801	42	131	10,968
1963-64 . . .	4,412	2,775	1,264	550	872	794	35	92	10,794
1964-65 . . .	3,860	2,867	1,455	581	930	755	48	117	10,613
1965-66 . . .	3,864	2,943	1,416	569	930	626	30	167	10,545
1966-67 . . .	3,362	2,760	1,504	529	913	782	91	117	10,058
<b>TOTAL</b>									
1962-63 . . .	25,145	20,811	9,027	9,610	6,222	2,442	368	1,592	75,217
1963-64 . . .	27,957	23,648	10,181	11,564	7,320	2,550	430	1,653	85,303
1964-65 . . .	26,624	21,767	11,657	11,220	7,467	2,546	605	1,910	83,796
1965-66 . . .	24,568	20,530	12,066	9,395	7,577	2,202	514	2,112	78,964
1966-67 . . .	25,828	21,090	12,306	8,372	8,539	2,952	566	2,205	81,858

(a) Includes operations of government authorities.

The following table shows the number of *new houses completed* in each State and Territory by *contractors and owner-builders* during the years 1962-63 to 1966-67.

**NEW HOUSES COMPLETED, CONTRACT-BUILT OR OWNER-BUILT  
NUMBER, STATES AND TERRITORIES, 1962-63 TO 1966-67**

<i>Year</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
<b>CONTRACT-BUILT(a)</b>									
1962-63 . . .	19,939	16,355	7,827	9,059	5,661	1,649	381	1,508	62,379
1963-64 . . .	21,658	19,358	8,681	9,884	6,342	1,615	262	1,601	69,401
1964-65 . . .	22,976	19,544	10,158	10,490	6,396	1,779	424	1,673	73,440
1965-66 . . .	22,022	17,662	10,300	9,741	6,282	1,572	621	1,937	70,137
1966-67 . . .	21,216	19,149	10,675	8,739	7,398	1,850	265	1,861	71,153
<b>OWNER-BUILT</b>									
1962-63 . . .	5,652	3,973	1,192	587	932	855	51	175	13,417
1963-64 . . .	4,296	3,441	1,331	604	934	896	48	163	11,713
1964-65 . . .	3,788	3,277	1,388	560	1,049	800	49	133	11,044
1965-66 . . .	3,882	3,267	1,362	612	983	688	36	129	10,959
1966-67 . . .	3,563	2,977	1,602	615	874	915	92	169	10,807

(a) Includes operations of government authorities.

The number of *new houses completed* in each State and Territory during the years 1962-63 to 1966-67, according to *private and government ownership*, is shown in the following table.

**NEW HOUSES COMPLETED, BY OWNERSHIP: NUMBER, STATES AND TERRITORIES, 1962-63 TO 1966-67**

<i>Year</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
<b>PRIVATE</b>									
1962-63 . . .	21,727	19,125	7,962	6,921	4,843	1,941	133	962	63,614
1963-64 . . .	22,174	21,129	8,375	7,795	5,330	1,957	129	1,028	67,917
1964-65 . . .	21,935	20,781	10,117	7,873	5,612	2,000	117	1,086	69,521
1965-66 . . .	22,056	19,014	10,234	7,230	5,228	1,703	105	1,218	66,788
1966-67 . . .	21,343	19,558	10,711	6,252	6,676	2,138	153	1,336	68,167
<b>GOVERNMENT</b>									
1962-63 . . .	3,864	1,203	1,057	2,725	1,750	563	299	721	12,182
1963-64 . . .	3,780	1,670	1,637	2,693	1,946	554	181	736	13,197
1964-65 . . .	4,829	2,040	1,429	3,177	1,833	579	356	720	14,963
1965-66 . . .	3,848	1,915	1,428	3,123	2,037	557	552	848	14,308
1966-67 . . .	3,436	2,568	1,566	3,102	1,596	627	204	694	13,793
<b>TOTAL</b>									
1962-63 . . .	25,591	20,328	9,019	9,646	6,593	2,504	432	1,683	75,796
1963-64 . . .	25,954	22,799	10,012	10,488	7,276	2,511	310	1,764	81,114
1964-65 . . .	26,764	22,821	11,546	11,050	7,445	2,579	473	1,806	84,484
1965-66 . . .	25,904	20,929	11,662	10,353	7,265	2,260	657	2,066	81,096
1966-67 . . .	24,779	22,126	12,277	9,354	8,272	2,765	357	2,030	81,960

The following tables show the number of *new houses completed* in each State and Territory during 1966-67 and in Australia during the years 1962-63 to 1966-67, classified according to the *material of their outer walls*.

**NEW HOUSES COMPLETED, BY MATERIAL OF OUTER WALLS: NUMBER STATES AND TERRITORIES, 1966-67**

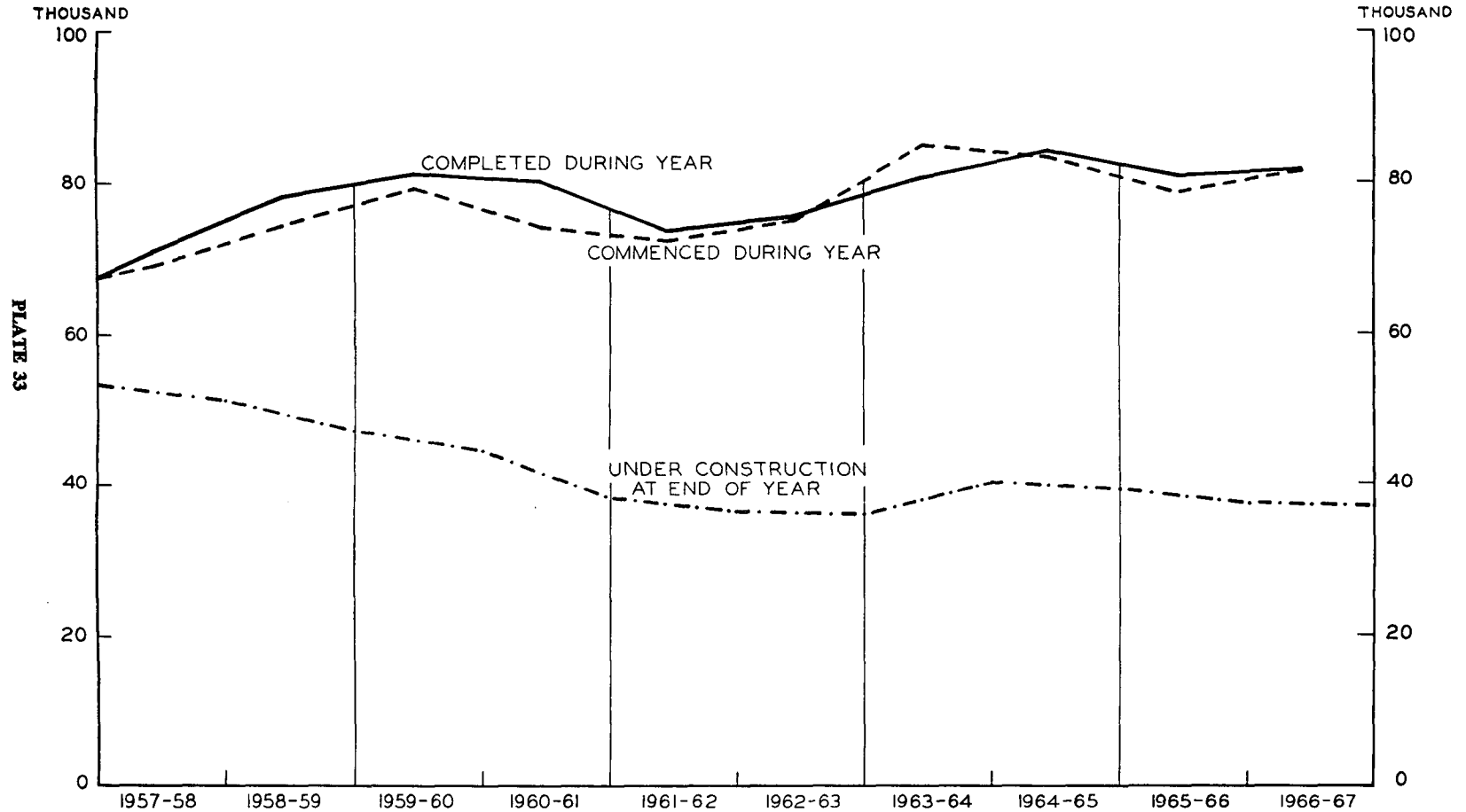
<i>Material of outer walls</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
Brick, brick veneer, concrete and stone . . .	13,351	18,224	3,975	8,778	6,336	1,326	106	2,020	54,116
Wood (weatherboard, etc.) . . .	2,858	1,913	5,407	6	21	1,073	7	9	11,294
Fibro-cement . . .	8,412	1,614	2,682	544	1,789	354	185	1	15,581
Other . . .	158	375	213	26	126	12	59	..	969
<b>Total . . .</b>	<b>24,779</b>	<b>22,126</b>	<b>12,277</b>	<b>9,354</b>	<b>8,272</b>	<b>2,765</b>	<b>357</b>	<b>2,030</b>	<b>81,960</b>

**NEW HOUSES COMPLETED, BY MATERIAL OF OUTER WALLS: NUMBER AUSTRALIA, 1962-63 TO 1966-67**

<i>Material of outer walls</i>	<i>1962-63</i>	<i>1963-64</i>	<i>1964-65</i>	<i>1965-66</i>	<i>1966-67</i>
Brick, brick veneer, concrete and stone . . .	40,194	47,754	52,285	52,148	54,116
Wood (weatherboard, etc.) . . .	19,212	16,678	14,480	12,247	11,294
Fibro-cement . . .	16,083	16,358	17,171	16,027	15,581
Other . . .	307	324	548	674	969
<b>Total . . .</b>	<b>75,796</b>	<b>81,114</b>	<b>84,484</b>	<b>81,096</b>	<b>81,960</b>

# NEW HOUSES: AUSTRALIA

1957-58 TO 1966-67



The number of *new houses under construction* at the end of each year 1962-63 to 1966-67 in each State and Territory is shown in the following table.

**NEW HOUSES UNDER CONSTRUCTION: NUMBER, STATES AND TERRITORIES  
1962-63 TO 1966-67**

<i>At end of year—</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
1962-63 . . .	10,988	12,063	2,747	4,563	2,879	1,594	239	1,062	36,135
1963-64 . . .	12,991	12,912	2,916	5,639	2,923	1,633	359	951	40,324
1964-65 . . .	12,851	11,858	3,027	5,809	2,945	1,600	491	1,055	39,636
1965-66 . . .	11,515	11,459	3,431	4,851	3,257	1,542	348	1,101	37,504
1966-67 . . .	12,564	10,423	3,460	3,869	3,524	1,729	557	1,276	37,402

**New flats approved, commenced, completed and under construction**

The figures in the foregoing tables do not include particulars of new flats, and in the following tables on pages 236-7 (a) the figures are additional to the numbers of houses shown in other tables, (b) each flat is counted as a separate unit, and the numbers shown therefore relate to individual flats, (c) new flats only are included, i.e. conversions of old buildings into flats are omitted, and (d) 'home units' are included as flats. The summary following shows the number of new flats approved, commenced, completed and under construction for the year 1966-67. For a graph showing the number of new flats commenced, completed and under construction for the period 1957-58 to 1966-67 see plate 34, page 238.

**NEW FLATS: NUMBER, STATES AND TERRITORIES, 1966-67**

	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
Approved . . .	13,920	12,938	3,786	1,355	2,735	227	381	198	35,540
Commenced . . .	13,145	11,987	3,662	1,321	2,455	186	308	194	33,258
Completed . . .	12,088	10,138	4,018	1,482	1,742	185	127	152	29,932
Under construction at end of year . . .	8,369	7,223	1,357	593	1,589	179	304	181	19,795

The following table shows the number of *new flats approved* in each State or Territory during the years 1962-63 to 1966-67 according to *private and government ownership*.

**NEW FLATS APPROVED, BY OWNERSHIP  
NUMBER, STATES AND TERRITORIES, 1962-63 TO 1966-67**

<i>Year</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
<b>PRIVATE</b>									
1962-63 . . .	6,511	3,269	785	787	999	145	27	102	12,625
1963-64 . . .	12,210	6,446	1,539	1,634	1,830	163	65	177	24,064
1964-65 . . .	16,337	9,418	3,132	2,488	1,718	224	90	368	33,775
1965-66 . . .	11,603	8,235	3,838	1,778	1,761	198	135	154	27,702
1966-67 . . .	12,544	11,495	3,766	1,355	2,708	209	156	190	32,423
<b>GOVERNMENT</b>									
1962-63 . . .	797	934	99	14	74	28	..	144	2,090
1963-64 . . .	1,105	878	68	..	..	2	84	128	2,265
1964-65 . . .	1,810	982	12	38	77	28	75	126	3,148
1965-66 . . .	1,049	772	14	..	12	20	38	..	1,905
1966-67 . . .	1,376	1,443	20	..	27	18	225	8	3,117
<b>TOTAL</b>									
1962-63 . . .	7,308	4,203	884	801	1,073	173	27	246	14,715
1963-64 . . .	13,315	7,324	1,607	1,634	1,830	165	149	305	26,329
1964-65 . . .	18,147	10,400	3,144	2,526	1,795	252	165	494	36,923
1965-66 . . .	12,652	9,007	3,852	1,778	1,773	218	173	154	29,607
1966-67 . . .	13,920	12,938	3,786	1,355	2,735	227	381	198	35,540

The number of *new flats commenced* in each State or Territory during the years 1962-63 to 1966-67 is shown in the following table.

**NEW FLATS COMMENCED: NUMBER, STATES AND TERRITORIES, 1962-63 TO 1966-67**

<i>Year</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
1962-63 . . .	6,730	3,662	699	683	876	125	14	263	13,052
1963-64 . . .	10,210	7,089	1,311	1,386	1,743	120	128	290	22,277
1964-65 . . .	15,583	10,054	2,428	2,158	1,730	251	148	561	32,913
1965-66 . . .	12,468	8,549	3,636	1,547	1,550	211	116	163	28,240
1966-67 . . .	13,145	11,987	3,662	1,321	2,455	186	308	194	33,258

The following table shows the number of *new flats completed* in each State and Territory during the years 1962-63 to 1966-67, according to *private and government ownership*.

**NEW FLATS COMPLETED, BY OWNERSHIP  
NUMBER, STATES AND TERRITORIES, 1962-63 TO 1966-67**

<i>Year</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
<b>PRIVATE</b>									
1962-63 . . .	5,037	2,864	684	545	642	91	33	33	9,929
1963-64 . . .	6,894	3,515	920	907	1,221	156	26	114	13,753
1964-65 . . .	12,150	7,884	1,946	1,775	1,826	131	53	191	25,956
1965-66 . . .	12,822	8,486	2,952	1,797	1,547	205	51	386	28,246
1966-67 . . .	10,853	9,218	4,004	1,482	1,730	153	85	152	27,677
<b>GOVERNMENT</b>									
1962-63 . . .	716	908	96	141	..	6	26	129	2,022
1963-64 . . .	882	755	29	82	74	8	..	36	1,866
1964-65 . . .	976	790	133	45	15	22	84	146	2,211
1965-66 . . .	2,040	1,020	12	59	77	16	74	126	3,424
1966-67 . . .	1,235	920	14	..	12	32	42	..	2,255
<b>TOTAL</b>									
1962-63 . . .	5,753	3,772	780	686	642	97	59	162	11,951
1963-64 . . .	7,776	4,270	949	989	1,295	164	26	150	15,619
1964-65 . . .	13,126	8,674	2,079	1,820	1,841	153	137	337	28,167
1965-66 . . .	14,862	9,506	2,964	1,856	1,624	221	125	512	31,670
1966-67 . . .	12,088	10,138	4,018	1,482	1,742	185	127	152	29,932

The number of *new flats under construction* at the end of each year 1962-63 to 1966-67 in each State and Territory is shown in the table below.

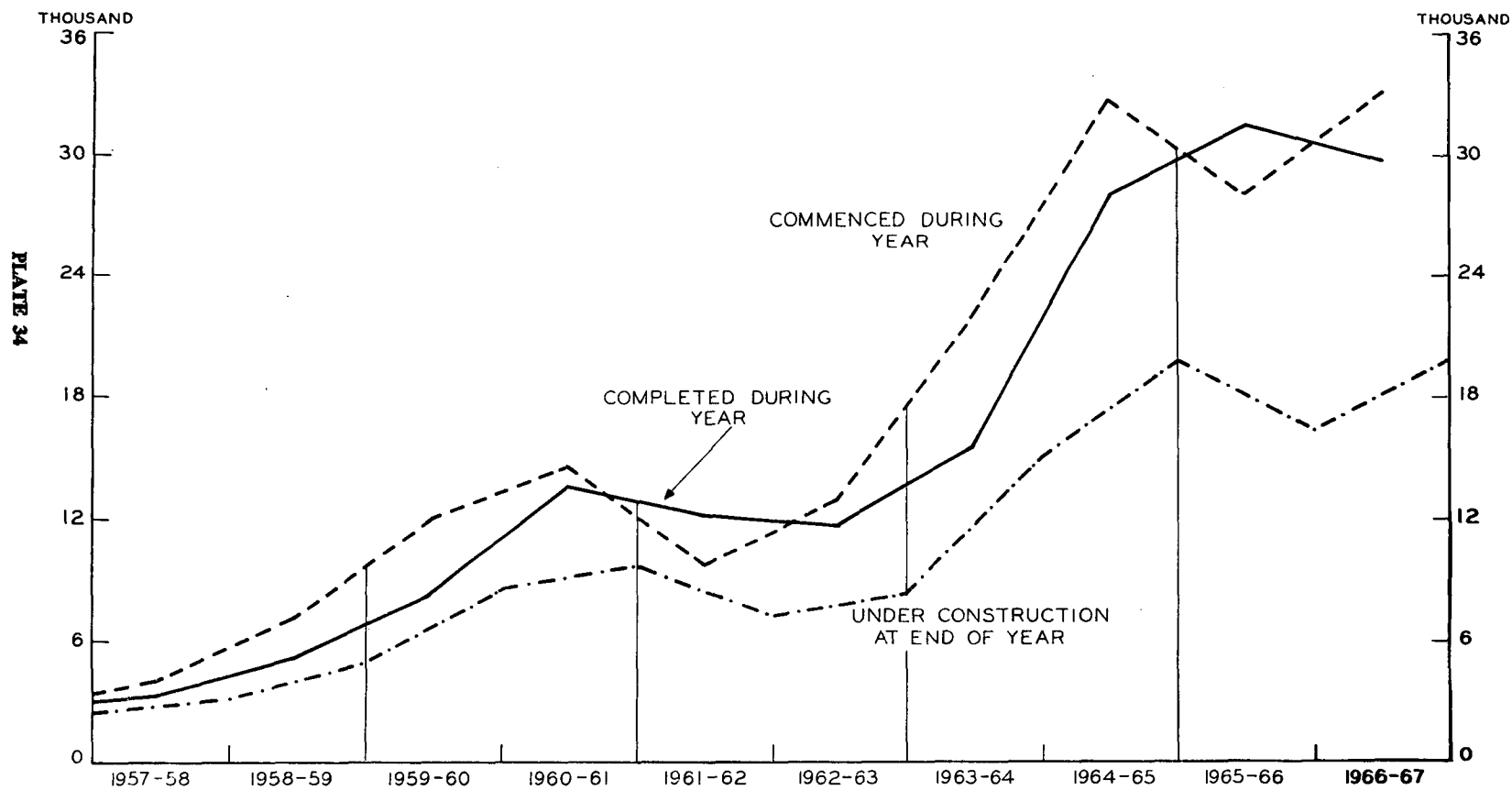
**NEW FLATS UNDER CONSTRUCTION  
NUMBER, STATES AND TERRITORIES, 1962-63 TO 1966-67**

<i>At end of year—</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
1962-63 . . .	4,815	2,132	330	328	613	134	19	124	8,495
1963-64 . . .	7,249	4,951	692	725	1,061	90	121	264	15,153
1964-65 . . .	9,706	6,331	1,041	1,063	950	188	132	488	19,899
1965-66 . . .	7,312	5,374	1,713	754	876	178	123	139	16,469
1966-67 . . .	8,369	7,223	1,357	593	1,589	179	304	181	19,795



# NEW FLATS: AUSTRALIA

1957-58 TO 1966-67



## Value of new buildings approved, commenced, completed and under construction

The following table summarises, for the years 1962-63 to 1966-67, the values of all new buildings approved, commenced, completed and under construction in each State and Territory. For explanation of the breaks in series in the following table see pages 230-1.

**NEW BUILDINGS: VALUE, STATES AND TERRITORIES, 1962-63 TO 1966-67**  
(\$'000)

<i>Year</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
<b>APPROVED</b>									
1962-63	403,234	328,342	128,688	115,124	78,116	35,752	9,254	45,584	1,144,094
1963-64	469,384	392,928	167,242	157,148	115,720	32,538	10,988	43,376	1,389,324
1964-65	531,344	437,514	203,386	166,010	131,958	42,760	17,658	48,220	1,578,850
1965-66	490,235	458,608	227,756	133,840	122,572	46,901	14,765	44,903	1,539,580
1966-67	597,416	494,050	219,283	116,623	162,937	53,955	17,604	60,594	1,722,462
<b>COMMENCED</b>									
1962-63	436,668	316,482	124,652	111,716	81,918	34,612	8,246	40,620	1,154,914
1963-64	514,054	394,698	150,356	149,776	118,556	34,664	10,164	42,400	1,414,668
1964-65	594,378	419,864	201,704	168,988	122,056	42,040	13,140	54,224	1,616,394
1965-66	558,427	450,737	225,553	145,997	130,982	43,789	15,405	49,935	1,620,825
1966-67	604,641	509,892	231,776	130,268	169,457	62,077	17,807	54,762	1,780,680
<b>COMPLETED</b>									
1962-63	411,526	333,568	112,694	121,120	86,428	34,128	8,872	38,124	1,146,460
1963-64	471,680	334,830	133,018	118,302	92,868	33,976	7,962	40,164	1,232,800
1964-65	531,544	402,280	178,470	154,500	107,100	37,744	11,784	42,986	1,466,408
1965-66	583,236	415,375	209,306	160,301	130,178	39,680	12,065	57,566	1,607,707
1966-67	625,956	471,943	219,098	135,221	162,135	48,218	13,243	57,582	1,733,396
<b>UNDER CONSTRUCTION AT END OF YEAR</b>									
1962-63	365,276	243,910	69,994	75,732	45,372	28,412	7,354	48,762	884,812
1963-64	413,202	306,278	87,888	111,514	71,848	29,094	9,770	52,048	1,081,642
1964-65	485,184	327,310	113,222	130,890	88,436	33,366	11,254	66,686	1,256,345
1965-66	473,627	369,747	133,544	120,662	90,982	37,412	14,816	59,615	1,300,408
1966-67	460,701	422,577	150,432	118,940	100,119	51,269	19,811	59,141	1,382,990
<b>VALUE OF WORK DONE DURING YEAR</b>									
1962-63	426,376	316,650	115,440	116,020	81,586	34,136	7,844	42,626	1,140,678
1963-64	490,116	362,740	148,578	135,936	97,692	35,850	9,432	43,510	1,323,854
1964-65	569,752	413,496	186,234	160,364	122,976	38,356	11,778	53,860	1,556,816
1965-66	614,477	442,402	221,780	156,762	133,483	43,201	13,749	55,308	1,681,162
1966-67	597,044	487,403	231,768	143,587	163,726	53,098	16,635	52,163	1,745,424

The following tables show the value of *all new buildings completed* in each State and Territory during 1966-67 and in Australia during the years 1962-63 to 1966-67, according to the *type of building*.

**NEW BUILDINGS COMPLETED, BY TYPE OF BUILDING: VALUE  
STATES AND TERRITORIES, 1966-67**

(\$'000)

<i>Type of building</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
<b>Houses—</b>									
Brick, brick veneer, concrete and stone	148,585	176,633	42,109	71,404	61,942	12,635	1,179	23,166	537,653
Wood (weatherboard, etc.)	23,213	13,997	40,888	40	107	6,987	140	99	85,471
Fibro-cement	52,709	9,659	17,996	3,440	14,985	2,410	2,336	7	103,542
Other	1,247	3,267	1,915	198	1,044	33	526	..	8,230
<b>Total, houses</b>	<b>225,754</b>	<b>203,556</b>	<b>102,908</b>	<b>75,082</b>	<b>78,078</b>	<b>22,065</b>	<b>4,181</b>	<b>23,272</b>	<b>734,896</b>
<b>Flats</b>	<b>79,891</b>	<b>55,958</b>	<b>24,441</b>	<b>6,998</b>	<b>9,322</b>	<b>1,167</b>	<b>1,002</b>	<b>1,112</b>	<b>179,891</b>
<b>Total, houses and flats</b>	<b>305,645</b>	<b>259,514</b>	<b>127,349</b>	<b>82,080</b>	<b>87,400</b>	<b>23,232</b>	<b>5,183</b>	<b>24,384</b>	<b>914,787</b>
<b>Hotels, hostels, etc.</b>	<b>20,803</b>	<b>5,103</b>	<b>9,218</b>	<b>3,211</b>	<b>4,990</b>	<b>1,301</b>	<b>1,974</b>	<b>4,545</b>	<b>51,145</b>
<b>Shops</b>	<b>33,454</b>	<b>21,810</b>	<b>7,555</b>	<b>3,213</b>	<b>7,692</b>	<b>835</b>	<b>181</b>	<b>1,722</b>	<b>76,462</b>
<b>Factories</b>	<b>62,006</b>	<b>66,199</b>	<b>11,314</b>	<b>7,328</b>	<b>9,841</b>	<b>5,891</b>	<b>762</b>	<b>1,247</b>	<b>164,588</b>
<b>Offices</b>	<b>56,749</b>	<b>46,420</b>	<b>12,655</b>	<b>8,377</b>	<b>7,093</b>	<b>2,711</b>	<b>329</b>	<b>9,911</b>	<b>144,245</b>
<b>Other business premises</b>	<b>20,998</b>	<b>16,198</b>	<b>21,050</b>	<b>4,160</b>	<b>7,150</b>	<b>4,338</b>	<b>397</b>	<b>1,845</b>	<b>76,136</b>
<b>Education</b>	<b>58,105</b>	<b>26,968</b>	<b>10,098</b>	<b>13,605</b>	<b>10,477</b>	<b>2,616</b>	<b>1,240</b>	<b>5,383</b>	<b>128,492</b>
<b>Religious</b>	<b>4,981</b>	<b>3,262</b>	<b>1,377</b>	<b>1,658</b>	<b>1,147</b>	<b>321</b>	<b>172</b>	<b>1,206</b>	<b>14,124</b>
<b>Health</b>	<b>13,491</b>	<b>10,631</b>	<b>4,591</b>	<b>6,634</b>	<b>8,927</b>	<b>4,103</b>	<b>1,082</b>	<b>1,647</b>	<b>51,106</b>
<b>Entertainment and recreation</b>	<b>27,947</b>	<b>4,691</b>	<b>3,208</b>	<b>1,843</b>	<b>3,080</b>	<b>577</b>	<b>56</b>	<b>907</b>	<b>42,309</b>
<b>Miscellaneous</b>	<b>21,777</b>	<b>11,147</b>	<b>10,683</b>	<b>3,112</b>	<b>14,338</b>	<b>2,293</b>	<b>1,867</b>	<b>4,785</b>	<b>70,002</b>
<b>Total, other buildings</b>	<b>320,311</b>	<b>212,429</b>	<b>91,749</b>	<b>53,141</b>	<b>74,735</b>	<b>24,986</b>	<b>8,060</b>	<b>33,198</b>	<b>818,609</b>
<b>Total, new buildings</b>	<b>625,956</b>	<b>471,943</b>	<b>219,098</b>	<b>135,221</b>	<b>162,135</b>	<b>48,218</b>	<b>13,243</b>	<b>57,582</b>	<b>1,733,396</b>

**NEW BUILDINGS COMPLETED, BY TYPE OF BUILDING: VALUE  
AUSTRALIA, 1962-63 TO 1966-67**

(\$'000)

<i>Type of building</i>	<i>1962-63</i>	<i>1963-64</i>	<i>1964-65</i>	<i>1965-66</i>	<i>1966-67</i>
<b>Houses—</b>					
Brick, brick veneer, concrete and stone	330,048	398,664	461,528	490,492	537,653
Wood (weatherboard, etc.)	124,182	111,202	100,948	89,318	85,471
Fibro-cement	84,252	90,330	99,474	99,078	103,542
Other	2,068	2,062	3,772	5,005	8,230
<b>Total, houses</b>	<b>540,550</b>	<b>602,258</b>	<b>665,722</b>	<b>683,893</b>	<b>734,896</b>
<b>Flats</b>	<b>69,666</b>	<b>83,560</b>	<b>157,270</b>	<b>185,997</b>	<b>179,891</b>
<b>Total, houses and flats</b>	<b>610,216</b>	<b>685,818</b>	<b>822,992</b>	<b>869,890</b>	<b>914,787</b>
<b>Hotels, hostels, etc.</b>	<b>37,068</b>	<b>27,818</b>	<b>29,074</b>	<b>31,279</b>	<b>51,145</b>
<b>Shops</b>	<b>49,112</b>	<b>51,490</b>	<b>46,366</b>	<b>68,396</b>	<b>76,462</b>
<b>Factories</b>	<b>115,822</b>	<b>128,426</b>	<b>152,638</b>	<b>167,867</b>	<b>164,588</b>
<b>Offices</b>	<b>71,796</b>	<b>90,076</b>	<b>116,826</b>	<b>103,867</b>	<b>144,245</b>
<b>Other business premises</b>	<b>43,792</b>	<b>54,004</b>	<b>68,110</b>	<b>66,832</b>	<b>76,136</b>
<b>Education</b>	<b>85,554</b>	<b>80,572</b>	<b>95,336</b>	<b>141,566</b>	<b>128,492</b>
<b>Religious</b>	<b>16,904</b>	<b>13,998</b>	<b>16,572</b>	<b>15,001</b>	<b>14,124</b>
<b>Health</b>	<b>44,972</b>	<b>38,602</b>	<b>43,740</b>	<b>54,460</b>	<b>51,106</b>
<b>Entertainment and recreation</b>	<b>33,782</b>	<b>26,606</b>	<b>31,282</b>	<b>28,797</b>	<b>42,309</b>
<b>Miscellaneous</b>	<b>37,442</b>	<b>35,390</b>	<b>43,472</b>	<b>59,752</b>	<b>70,002</b>
<b>Total, other buildings</b>	<b>536,244</b>	<b>546,982</b>	<b>643,416</b>	<b>737,817</b>	<b>818,609</b>
<b>Total, new buildings</b>	<b>1,146,460</b>	<b>1,232,800</b>	<b>1,466,408</b>	<b>1,607,707</b>	<b>1,733,396</b>

The following table shows the value of *all new buildings completed* in Australia during the years 1964-65 to 1966-67, classified by *type of building and private and government ownership*.

**NEW BUILDINGS COMPLETED, BY TYPE OF BUILDING AND OWNERSHIP: VALUE  
AUSTRALIA, 1964-65 TO 1966-67  
(\$'000)**

Type of building	Private			Government		
	1964-65	1965-66	1966-67	1964-65	1965-66	1966-67
<b>Houses—</b>						
Brick, brick veneer, concrete and stone . . . . .	411,346	434,475	484,364	50,182	56,017	53,289
Wood (weatherboard, etc.) . . . . .	89,370	78,394	75,032	11,578	10,924	10,439
Fibro-cement . . . . .	69,430	69,938	71,220	30,044	29,140	32,322
Other . . . . .	3,472	3,405	5,493	300	1,600	2,737
Total, houses . . . . .	573,618	586,212	636,109	92,104	97,681	98,787
Flats . . . . .	145,284	165,462	165,670	11,986	20,535	14,221
Total, houses and flats . . . . .	718,902	751,674	801,779	104,090	118,216	113,008
Hotels, hostels, etc. . . . .	27,664	30,135	36,447	1,410	1,144	14,698
Shops . . . . .	44,912	66,152	75,334	1,454	2,244	1,128
Factories . . . . .	135,554	155,052	147,060	17,084	12,815	17,528
Offices . . . . .	76,340	60,720	82,820	40,486	43,147	61,425
Other business premises . . . . .	48,912	46,824	46,163	19,198	20,008	29,973
Education . . . . .	18,574	27,578	31,685	76,762	113,988	96,807
Religious . . . . .	16,572	15,001	14,124	..	..	..
Health . . . . .	6,660	8,590	10,471	37,080	45,870	40,635
Entertainment and recreation . . . . .	24,730	22,329	23,698	6,552	6,468	18,611
Miscellaneous . . . . .	15,992	16,893	24,546	27,480	42,859	45,456
Total, other buildings . . . . .	415,910	449,274	492,348	227,506	288,543	326,261
Total, new buildings . . . . .	1,134,812	1,200,948	1,294,127	331,596	406,759	439,269

**Value of building approved**

The following table shows the values of approvals for houses and flats, other new buildings, and alterations and additions in Australia for the years 1962-63 to 1966-67. Before 1 July 1966 additions of \$10,000 and over were included with new buildings in all States except New South Wales, where they were included in 'alterations and additions'. From 1 July 1966 alterations and or additions of \$10,000 and over are included with new buildings in all States.

**BUILDING APPROVED: VALUE, AUSTRALIA, 1962-63 TO 1966-67  
(\$'000)**

Type of building	1962-63	1963-64	1964-65	1965-66	1966-67
Houses and flats . . . . .	632,732	794,514	886,324	836,861	953,587
Other new buildings . . . . .	511,362	594,810	692,526	702,719	768,875
Total, new buildings . . . . .	1,144,094	1,389,324	1,578,850	1,539,580	1,722,462
Alterations and additions . . . . .	172,256	184,142	212,580	195,182	134,805
Total, building . . . . .	1,316,350	1,573,466	1,791,430	1,734,762	1,857,267
Private . . . . .	1,004,310	1,161,564	1,380,326	1,314,673	1,397,455
Government . . . . .	312,040	411,902	411,104	420,089	459,812

**Persons working on jobs carried out by builders of new buildings**

The following table shows the number of contractors, sub-contractors and wage earners working on jobs *carried out by builders of new buildings* in each State and Territory at 30 June 1967. It also shows the numbers of these persons classified according to their main building occupations and the type of building on which they were working.

**PERSONS WORKING ON JOBS CARRIED OUT BY BUILDERS OF NEW BUILDINGS  
STATES AND TERRITORIES, 30 JUNE 1967**

INCLUDING CONTRACTOR AND SUB-CONTRACTOR PRINCIPALS ACTUALLY WORKING ON JOBS  
BUT EXCLUDING PERSONS WORKING ON OWNER-BUILT HOUSES

	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Contractors . . .	4,356	2,990	2,186	619	639	475	65	267	11,597
Sub-contractors . . .	8,998	9,685	3,155	2,790	2,539	886	190	934	29,177
Wage earners . . .	33,254	30,256	17,113	9,058	11,327	4,993	799	3,273	110,073
Carpenters . . .	15,796	14,647	9,859	3,266	4,026	2,685	265	1,067	51,611
Bricklayers . . .	5,235	5,552	1,760	1,971	1,966	457	90	488	17,519
Painters . . .	3,900	3,577	1,871	1,112	1,341	485	82	391	12,759
Electricians . . .	2,949	2,395	1,158	675	1,014	331	71	274	8,867
Plumbers . . .	4,590	4,092	1,942	1,074	1,275	371	93	383	13,820
Builders' labourers . . .	6,731	5,290	3,252	1,779	2,210	1,072	224	652	21,210
Other . . .	7,407	7,378	2,612	2,590	2,673	953	229	1,219	25,061
New houses and flats . . .	22,713	21,593	9,739	5,967	7,185	2,527	490	1,944	72,158
Other new buildings(a) . . .	20,914	19,551	11,226	6,232	6,231	3,364	563	2,253	70,334
Repairs and maintenance(b) . . .	2,981	1,787	1,489	268	1,089	463	1	277	8,355
<b>Total . . .</b>	<b>46,608</b>	<b>42,931</b>	<b>22,454</b>	<b>12,467</b>	<b>14,505</b>	<b>6,354</b>	<b>1,054</b>	<b>4,474</b>	<b>150,847</b>

(a) Includes persons working on alterations and additions carried out by builders of new buildings. (b) Carried out by builders of new buildings.

The number of persons in each State and Territory working on jobs *carried out by builders of new buildings* at the end of June of each year 1963 to 1967 is shown in the following table.

**PERSONS WORKING ON JOBS CARRIED OUT BY BUILDERS OF NEW BUILDINGS  
STATES AND TERRITORIES, JUNE 1963 TO 1967**

INCLUDING CONTRACTOR AND SUB-CONTRACTOR PRINCIPALS ACTUALLY WORKING ON JOBS  
BUT EXCLUDING PERSONS WORKING ON OWNER-BUILT HOUSES

	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
28 June 1963 . . .	44,693	37,878	19,923	12,948	9,964	5,312	578	4,397	135,693
30 " 1964 . . .	48,848	39,697	20,544	14,532	11,553	5,198	902	4,486	145,760
30 " 1965 . . .	54,152	42,995	21,666	15,267	12,636	5,392	992	4,735	157,835
30 " 1966 . . .	50,368	42,305	23,305	13,506	12,348	5,350	863	4,525	152,570
30 " 1967 . . .	46,608	42,931	22,454	12,467	14,505	6,354	1,054	4,474	150,847

## Government activities in the housing field

### Housing Agreements between Commonwealth and State Governments

Under the Commonwealth-State Housing Agreements the Commonwealth Government makes substantial long-term loans to the States for the provision of housing.

*The 1945 Agreement.* In November 1945 the Commonwealth Government entered into an Agreement with the Governments of the States whereby the Commonwealth Government would provide finance for, and the State Governments would undertake the building of, housing projects. Between 1945-46 and 1955-56, under this Agreement, the Commonwealth Government advanced to the States a total of \$479,118,000.

Initially, dwellings constructed under the 1945 Agreement were only sold to tenants if the tenant was able to arrange payment of the full purchase price to the State immediately on sale. Subsequent amendments to the Agreement progressively eased conditions of sale. For information on the conditions of sale, etc., under the 1945 Agreement see Year Book No. 48, page 367.

*The 1956 Agreement.* In 1956 the Commonwealth and the States entered into a new Agreement under which added emphasis was placed on the construction of dwellings for private ownership. The Agreement provided that parts of the loans advanced to each State were to be advanced to building societies and other approved institutions for lending to private home builders and purchasers. The balance of the amounts advanced to each State was used by the States for the erection of dwellings for either rental or sale. The Commonwealth was entitled to specify that up to five per cent of the moneys allocated for the erection of dwellings by the State be set aside for the erection of dwellings for serving members of the defence forces. For features of the 1956 Commonwealth and State Housing Agreement see Year Book No. 48, pages 367-8.

*The 1961 Agreement.* The period during which Commonwealth advances to the States could be made under the 1956 Agreement terminated on 30 June 1961. A new Agreement was entered into which extended for a further five years the period during which advances could be made and also amended the 1956 Agreement in certain respects concerning funds for the erection of dwellings for rental to servicemen and the rate of interest payable on Commonwealth advances.

*The 1966 Agreement.* A new Agreement was entered into which extended for a further five years the period during which advances could be made, and also amended the 1956-1961 Agreement in certain respects concerning the definition of 'member of the forces', the erection by the States of blocks of flats in metropolitan areas, the erection of dwellings for rental to servicemen, and the provision of finance to home builders in rural areas.

For further information regarding the above Agreements see Year Book No. 53, pages 276-277.

#### Operations under the various Housing Agreements

The following tables show the operations under the various Housing Agreements during 1966-67 and to 30 June 1967. The earliest single year for which details are given in the tables is 1962-63; for earlier years see Year Book No. 53, pages 278-9.

#### COMMONWEALTH AND STATE HOUSING AGREEMENTS: SUMMARY, 1966-67

	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	Total
ADVANCES TO STATES (\$'000)							
Advances to States(a) . . . . .	43,325	32,960	13,740	20,750	9,478	7,500	127,753
State Housing Programme(b) . . . . .	29,050	22,414	6,342	10,000	6,419	5,250	79,475
Home Builders' Account—							
Advances(c) . . . . .	12,450	9,606	2,718	10,750	2,751	2,250	40,525
Amounts drawn by institutions . . . . .	18,133	15,140	3,693	11,764	3,174	2,679	54,583
Service Housing Funds allocated by—							
Commonwealth . . . . .	1,825	940	4,680	..	308	..	7,753
States . . . . .	1,452	940	317	..	308	..	3,017

#### NUMBER OF DWELLINGS

State Housing Programme—							
Commenced . . . . .	4,936	3,041	743	1,700	738	703	11,861
Completed . . . . .	3,717	3,116	723	2,022	697	595	10,870
Under construction at 30 June 1967 . . . . .	3,438	1,790	237	1,437	365	365	7,632
Home Builders' Account—							
Purchased—New . . . . .	758	863	207	742	91	147	2,808
Other . . . . .	79	..	..	..	..	65	144
New construction—							
Approved . . . . .	2,149	3,506	335	1,251	372	255	7,868
Commenced . . . . .	1,458	1,565	309	1,229	366	204	5,131
Completed . . . . .	1,312	1,177	322	1,265	340	219	4,635
Service Housing—							
Agreed programme . . . . .	343	161	478	..	63	..	1,045
Completed(d) . . . . .	500	412	132	..	26	..	1,070
Sold under—							
1945 Agreement . . . . .	427	600	101	7	313	(e)	(e) 1,448
1956 to 1966 Agreements . . . . .	1,075	1,259	30	995	254	460	4,073

(a) Includes supplementary advances for Service Housing. (b) The maximum amount is 70 per cent of the Commonwealth advances, other than supplementary advances for Service Housing. (c) The minimum amount must be 30 per cent of the Commonwealth advances other than supplementary advances for Service Housing. (d) Also included in State Housing Programme above. (e) Tasmania did not operate under the 1945 Agreement after August 1950.

**COMMONWEALTH AND STATE HOUSING AGREEMENTS: ADVANCES TO STATES(a)**  
**1962-63 TO 1966-67 AND TO 30 JUNE 1967**  
 (\$'000)

<i>Year</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.(b)</i>	<i>Total</i>
1962-63 . . .	33,800	26,600	8,502	19,012	7,010	5,200	100,124
1963-64 . . .	34,164	27,628	10,020	19,400	7,052	6,000	104,264
1964-65 . . .	38,132	34,360	8,232	20,500	7,492	6,400	115,116
1965-66 . . .	44,375	33,566	8,950	21,057	8,846	7,448	124,242
1966-67 . . .	43,325	32,960	13,740	20,750	9,478	7,500	127,753
<b>Total from 1 July 1945</b>	<b>529,420</b>	<b>460,236</b>	<b>139,691</b>	<b>190,179</b>	<b>132,036</b>	<b>64,551</b>	<b>1,516,162</b>

(a) Includes supplementary advances (Service Housing) under the 1956 to 1966 Agreements. (b) Tasmania withdrew from the 1945 Agreement in August 1950 and repaid all advances made to it.

**COMMONWEALTH AND STATE HOUSING AGREEMENTS: NUMBER OF DWELLINGS PROVIDED(a), STATES, 1962-63 TO 1966-67 AND TO 30 JUNE 1967**

<i>Year</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.(b)</i>	<i>Total</i>
1962-63 . . .	5,654	3,921	1,239	3,560	1,519	804	16,697
1963-64 . . .	5,553	3,922	1,435	3,429	1,460	824	16,623
1964-65 . . .	6,342	4,431	1,121	3,637	1,022	895	17,448
1965-66 . . .	6,385	4,258	1,349	3,569	1,357	942	17,860
1966-67 . . .	5,866	5,156	1,252	4,029	1,128	1,026	18,457
<b>Total from 1 July 1945(c)</b>	<b>95,262</b>	<b>74,633</b>	<b>23,742</b>	<b>36,983</b>	<b>25,522</b>	<b>9,410</b>	<b>265,552</b>

(a) The total number of houses and flats completed under State Housing Programmes plus, since 30 June 1956, the numbers completed and purchased under the Home Builders' Account. (b) Tasmania withdrew from the 1945 Agreement in August 1950 and repaid all advances made to it. (c) Includes some dwellings erected before 1945-46 to which the 1945 Agreement applied and also 1,130 dwellings completed in Tasmania up to the time of that State's withdrawal from the 1945 Agreement in August 1950.

**COMMONWEALTH AND STATE HOUSING AGREEMENTS: NUMBER OF HOUSES SOLD 1962-63 TO 1966-67 AND TO 30 JUNE 1967**

<i>Year</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>Total</i>
1962-63 . . .	2,598	1,791	255	96	590	311	5,641
1963-64 . . .	1,521	1,799	382	457	210	431	4,800
1964-65 . . .	2,361	2,028	230	812	180	532	6,143
1965-66 . . .	1,919	2,219	488	886	203	464	6,179
1966-67 . . .	1,502	1,859	131	1,002	567	460	5,521
<b>Total from 1 July 1948</b>	<b>28,650</b>	<b>24,140</b>	<b>4,928</b>	<b>4,539</b>	<b>6,232</b>	<b>4,044</b>	<b>72,533</b>

**War service homes**

The *War Service Homes Act* 1918-1966 makes provision for assistance to be granted to persons who satisfy the eligibility conditions set out in the Act, to enable them to acquire on concessional terms a soundly constructed home that they would occupy as a residence.

Persons eligible for assistance under the Act include members of the Australian forces and nursing services enlisted or appointed for or employed on active service outside Australia or on a ship of war during the 1914-1918 and 1939-1945 Wars and persons who served in the warlike operations in Korea or Malaya or who have served on 'special service' as defined in the *Repatriation (Special Overseas Service) Act* 1962-1966. 'Special service' includes 'special duty' in an area which

by reason of warlike operations or a state of disturbance has been declared a 'special area' under the Repatriation (Special Overseas Service) Act. The areas declared as a 'special area' under the Act are:

- Vietnam (Southern Zone) from 31 July 1962;
- certain areas of Borneo, Sabah and Sarawak from 8 December 1962 to 30 September 1967;
- certain areas of Malaya from 28 May 1963;
- Malaysia (the remainder) and Singapore from 7 July 1965 to 30 September 1967.

The categories of eligible persons also include the widow and, in some circumstances, the widowed mother of an eligible person and persons domiciled in Australia and employed in certain sea-going service during the 1914-1918 and 1939-1945 Wars.

The Director of War Service Homes is responsible for the execution of the War Service Homes Act subject to the directions of the Minister for Housing.

#### Operations under the War Service Homes Act

The following tables give details of the operations under the War Service Homes Act in the year 1966-67 and from the inception of the scheme on 6 March 1919 to 30 June 1967. The earliest single year for which details are given in the tables is 1962-63; for earlier years *see* previous issues of the Year Book. The figures shown include operations in the Territories of Papua, New Guinea and Norfolk Island.

#### WAR SERVICE HOMES ACT: OPERATIONS, AUSTRALIA, 1966-67 AND TO 30 JUNE 1967

	1966-67			From inception to 30 June 1967		
	<i>Eligibility established from service in—</i>			<i>Eligibility established from service in—</i>		
	1914-18 War	1939-45 War, Korea, etc. (a)	Total	1914-18 War	1939-45 War, Korea, etc. (a)	Total
Applications received . No.	478	9,682	10,160	117,292	390,532	507,824
Applications approved . "	346	7,569	7,915	57,365	232,184	289,549
Homes purchased . "	282	5,725	6,007	19,581	119,053	138,634
Homes built, or assistance given to build them . "	59	1,011	1,070	24,068	67,543	91,611
Mortgages discharged . "	30	1,274	1,304	4,192	30,401	34,593
Total homes provided . "	371	8,010	8,381	47,841	216,997	264,838
Transfers or resales . "	46	572	618	9,500	13,598	23,098
Total capital expenditure \$'000	n.a.	n.a.	59,123	n.a.	n.a.	1,214,540
Total receipts . "	n.a.	n.a.	67,050	n.a.	n.a.	696,339

(a) Korea, Singapore, Malaysia or Vietnam (Southern Zone).

#### WAR SERVICE HOMES ACT: OPERATIONS, AUSTRALIA 1962-63 TO 1966-67

		<i>Number of—</i>				<i>Total capital expenditure</i>	<i>Total receipts</i>
<i>Year</i>	<i>Applications received</i>	<i>Homes provided</i>			<i>Total</i>		
		<i>Homes purchased (a)</i>	<i>Homes built (b)</i>	<i>Mortgages discharged</i>			
1962-63	16,015	6,855	1,944	1,857	10,656	\$'000 75,020	\$'000 48,250
1963-64	13,812	6,206	1,784	1,636	9,626	70,016	55,166
1964-65	12,381	6,727	1,398	1,551	9,676	70,104	60,866
1965-66	10,841	7,252	1,143	1,452	9,847	70,010	62,166
1966-67	10,160	6,007	1,070	1,304	8,381	59,123	67,050

(a) Homes purchased with assistance under the War Service Homes Act.

(b) Or assistance given to build a home.



**WAR SERVICE HOMES ACT: NUMBER OF HOMES PROVIDED  
STATES AND TERRITORIES, 1962-63 TO 1966-67**

<i>Year</i>	<i>N.S.W. (a)</i>	<i>Vic.</i>	<i>Qld (b)</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
1962-63	4,037	2,841	1,394	889	1,139	229	5	122	10,656
1963-64	3,747	2,787	1,140	695	939	222	3	93	9,626
1964-65	3,901	2,670	1,184	752	885	216	..	68	9,676
1965-66	3,812	2,799	1,350	856	727	229	4	70	9,847
1966-67	3,654	2,164	1,145	575	615	171	5	52	8,381

(a) Includes Norfolk Island.

(b) Includes Territories of Papua and New Guinea.

In addition to the homes provided under the War Service Homes Act and shown above, 2,297 homes, which had been provided originally under the Housing Agreements with the States, have been taken over in accordance with those Agreements.

### Home Savings Grant Scheme

The administration of the Homes Savings Grant Scheme is a function of the Commonwealth Department of Housing. The purpose of the scheme is to assist young married persons to purchase or build their own homes. A further objective is to increase the proportion of total private savings available for housing purposes by encouraging young people to save with those institutions which provide the bulk of long-term housing finance.

The scheme is governed by the *Home Savings Grant Act 1964-1967*. Amendments made to the Act in May 1967 have extended the original scheme, which was introduced in 1964, to young widowed persons with dependent children, raised the limit on the value of a home that may attract a grant from \$14,000 to \$15,000, and have given the Department of Housing wider discretionary powers in certain cases. The Act authorises the payment of grants from the National Welfare Fund.

The scheme provides for the payment of grants of \$1 for every \$3 saved by eligible persons under 36 years of age for the first home they own after marriage. The savings must be made over a period of at least three years and held in an approved form. The maximum grant to a married couple, or to husband or wife if only one is eligible, or to a widowed person, is \$500 on savings of \$1,500 or more. Smaller grants down to a minimum of \$10 are payable on lesser amounts saved. To be eligible for the grant, a person must be married, or widowed with one or more dependent children, and must have—or must be married to a person who has—entered into a contract to buy a home or have one built, or begun to build a home as an owner-builder. The person must be under 36 years of age at the time of marriage and at the date of the contract to buy or build or the date building began, must have either been an Australian citizen or lived in Australia during the three years immediately preceding that date, and must also have saved in Australia in an approved form throughout that period. Those three years are known as the applicant's 'savings years'. The grant is payable in respect of existing homes and homes being built. Flats and home-units may also be eligible provided separate title can be obtained. The home, including the land, the house itself and any other improvements, must not cost more than \$15,000, or \$14,000, if the contract to buy or build the home was made, or the building of the home as an owner-builder began, before 28 November 1966. Most homes are eligible, the main exception being homes purchased from State housing authorities, which have been built with money advanced by the Commonwealth under the Commonwealth-State Housing Agreement at concessional rates of interest.

The main forms of savings acceptable under the scheme are Home Savings Accounts with savings banks, fixed deposits with trading banks designated Home Savings Accounts, and deposits with or shares in registered building or co-operative housing societies. Savings spent in connection with the purchase or construction of the home prior to the date of the contract to buy or build the home, or the date building began, are also acceptable. In addition, savings in certain other forms up to 31 December 1964 are acceptable up to 31 December 1967 if they remain in those forms. These forms are accounts with savings and trading banks other than Home Savings Accounts, and deposits with registered friendly societies and credit unions. However, all new and additional savings after 1 January 1965 must be in one or more of the forms mentioned earlier to be acceptable. The amount of savings that qualify for a grant is the sum of the amounts saved, in acceptable forms, in each savings year. However, the limit on the amount of savings in any savings year that can qualify for a grant is \$1,120 for savings years commencing before 1 January 1965, \$500 for savings years commencing on or after 1 January 1965, and \$600 for savings years commencing on or after 1 May 1966.

Full details of the scheme are set out in the official pamphlet *A Grant for Your Home* available from banks, building and housing societies, post offices, and offices of the Department of Housing throughout Australia. Additional statistical information is contained in the Annual Reports by the Secretary, Department of Housing, on the *Homes Savings Grant Act 1964-1967*, which are available from the Government Printer, Canberra.

#### Operations under the Home Savings Grant Scheme

Particulars of applications received and approved during 1966-67 and during the period from 20 July 1964, when the scheme commenced to operate, to 30 June 1967 are set out below.

#### HOME SAVINGS GRANT SCHEME: OPERATIONS, STATES AND TERRITORIES, 1966-67

		N.S.W.	Vic.	Qld	S.A. (a)	W.A.	Tas.	A.C.T. (b)	Aust.
Applications received . . . . .	No.	11,023	9,902	3,948	3,027	1,916	738	275	30,829
Applications approved(c) . . . . .		9,869	8,929	3,703	2,716	1,605	684	262	27,768
Grants approved . . . . .	\$'000	4,309	3,928	1,561	1,132	667	278	112	11,987
Average grant approved . . . . .	\$	437	440	422	417	416	407	429	432
Expenditure from National Welfare Fund . . . . .	\$'000	4,269	3,891	1,550	1,122	666	273	114	11,885

(a) Includes Northern Territory. (b) Includes Municipality of Queanbeyan, N.S.W. (c) Includes applications received on or before 30 June 1966 and approved after that date.

#### HOME SAVINGS GRANT SCHEME: OPERATIONS, 1964-65 TO 1966-67 AND TO 30 JUNE 1967

Year	Applications received	Applications approved	Grants approved	Average grant approved	Expenditure from National Welfare Fund
			\$'000	\$	\$'000
1964-65 . . . . .	35,283	25,079	11,510	458	11,349
1965-66 . . . . .	29,021	29,647	13,348	450	13,346
1966-67 . . . . .	30,829	27,768	11,987	432	11,885
Total from 20 July 1964 . . . . .	95,133	82,494	36,846	447	36,580

#### Homes qualifying for grants

The two following tables contain particulars of homes in respect of which grants were approved during 1966-67. As grants are payable only to persons under 36 years of age and in respect of homes costing no more than \$15,000 (or \$14,000 if acquired before 28 November 1966), these statistics should not be regarded as being applicable to home owners in general.

#### HOME SAVINGS GRANT APPLICATIONS APPROVED: MANNER OF ACQUISITION, TOTAL COST, AND AVERAGE COST OF HOME (INCLUDING LAND) STATES AND TERRITORIES, 1966-67

State or Territory	Purchase of house(a)			Purchase of flat or home unit			Home built under contract		
	Number of approvals	Total value(b)	Average value(b)	Number of approvals	Total value(b)	Average value(b)	Number of approvals	Total value(c)	Average value(c)
		\$'000	\$		\$'000	\$		\$'000	\$
New South Wales . . . . .	5,459	54,052	9,901	271	2,946	10,871	3,749	41,896	11,175
Victoria . . . . .	4,725	48,411	10,246	35	352	10,043	3,703	41,827	11,295
Queensland . . . . .	1,882	15,502	8,237	6	55	9,233	1,530	14,561	9,517
South Australia(d) . . . . .	1,496	14,068	9,404	2	16	7,925	1,113	12,100	10,871
Western Australia . . . . .	831	7,471	8,991	..	..	..	712	7,829	10,996
Tasmania . . . . .	395	3,425	8,670	..	..	..	172	1,760	10,235
Australian Capital Territory(e) . . . . .	146	1,853	12,695	..	..	..	80	1,011	12,641
Australia . . . . .	14,934	144,783	9,695	314	3,369	10,729	11,059	120,984	10,940

For footnotes see next page, where table is continued.

**HOME SAVINGS GRANT APPLICATIONS APPROVED: MANNER OF ACQUISITION,  
TOTAL COST, AND AVERAGE COST OF HOME (INCLUDING LAND)  
STATES AND TERRITORIES, 1966-67—continued**

State or Territory	Owner-built home			All homes		
	Number of approvals	Total value(f)	Average value(f)	Number of approvals	Total value	Average value
		\$'000	\$		\$'000	\$
New South Wales . . . . .	390	3,994	10,240	9,869	102,888	10,425
Victoria . . . . .	466	4,917	10,551	8,929	95,507	10,696
Queensland . . . . .	285	2,597	9,113	3,703	32,715	8,835
South Australia(d) . . . . .	105	1,088	10,365	2,716	27,272	10,041
Western Australia . . . . .	62	669	10,783	1,605	15,969	9,950
Tasmania . . . . .	117	1,109	9,475	684	6,294	9,201
Australian Capital Territory(e) . . . . .	36	435	12,090	262	3,300	12,595
<b>Australia . . . . .</b>	<b>1,461</b>	<b>14,808</b>	<b>10,136</b>	<b>27,768</b>	<b>283,945</b>	<b>10,226</b>

(a) Includes previously occupied houses. (b) Usually based on the purchase price. (c) Usually based on the cost of the land and the contract price of the dwelling. (d) Includes Northern Territory. (e) Includes Municipality of Queanbeyan, N.S.W. (f) Usually based on the cost of the land and the assessed value of the dwelling.

**HOME SAVINGS GRANT APPLICATIONS APPROVED: METHOD OF FINANCING HOMES,  
AND AVERAGE MORTGAGE LOANS, STATES AND TERRITORIES, 1966-67**

State or Territory	Method of financing homes					
	With first mortgage loan and without second mortgage loan			Total	Average first mortgage loan (b)	Average second mortgage loan
	With first mortgage loans	Others(a)				
	number	number	number	number	\$	\$
New South Wales . . . . .	8,161	1,394	314	9,869	7,018	1,740
Victoria . . . . .	6,942	1,320	667	8,929	7,030	1,507
Queensland . . . . .	3,281	265	157	3,703	6,332	1,676
South Australia(c) . . . . .	1,752	818	146	2,716	6,969	1,717
Western Australia . . . . .	1,078	347	180	1,605	6,626	1,528
Tasmania . . . . .	514	118	52	684	6,613	1,427
Australian Capital Territory(d) . . . . .	74	186	2	262	7,091	3,029
<b>Australia . . . . .</b>	<b>21,802</b>	<b>4,448</b>	<b>1,518</b>	<b>27,768</b>	<b>6,894</b>	<b>1,692</b>

(a) Homes financed without mortgage loan. Includes homes financed from the applicants' own resources only, with personal or unsecured loans, purchased under a terms contract of sale, etc. (b) Includes homes financed with and without second mortgage loans. (c) Includes Northern Territory. (d) Includes Municipality of Queanbeyan, N.S.W.

**Housing loans insurance scheme**

The Housing Loans Insurance Corporation was established by the *Housing Loans Insurance Act* 1965 to insure approved lenders against losses arising from the making of housing loans. The main purpose of the activities of the Corporation is to assist people to borrow, as a single loan and at a reasonable rate of interest, the money they need and can afford to repay to obtain a home suited to their requirements.

To encourage the making of high-ratio loans the Corporation will insure loans up to 95 per cent of valuation for houses valued at \$15,000 or less. Where the valuation of a home exceeds \$15,000 the maximum insurable amount is 95 per cent of the first \$15,000 of valuation plus 70 per cent of the balance, or \$20,000, whichever is the lesser. The minimum loan for the purchase of a home unit held under strata title is the lesser of \$20,000 or 80 per cent of valuation. A once-and-for-all premium of 2 per cent of the amount of the loan is charged by the Corporation. The premium is payable by the borrower, but lenders may agree to add it to the amount of the loan for repayment by the borrower over the duration of the loan. The maximum rate of interest that may be charged on insured loans is

7½ per cent (January 1968) per annum and the maximum period for repayment is thirty-five years. The maximum rate of interest is kept under continuing review and may be varied by the Corporation, with the concurrence of the Minister for Housing, whenever changes appear to be warranted by movements in interest rates generally or by other developments.

The Corporation insures loans that are made for a wide range of purposes in addition to the purchase or construction of a dwelling. The other purposes include alterations, extensions or improvements to a dwelling, and the provision or improvement of roads, kerbing and footpaths. An insured loan may be made only by an approved lender. Approved lenders are appointed by the Corporation from within approved classes of lenders specified by the Minister for Housing. The approved classes include banks, building societies, co-operative housing societies, friendly societies, life insurance companies, and trustee companies. The Corporation commenced its operations in November 1965.

#### State housing authorities

The following paragraphs describe briefly the organisation of the various State housing authorities and their activities in the fields of home construction and provision of homes on a rental basis (*see* pages 252–5 for their financial advances to persons wishing to purchase or build a home). For summarised figures of total government construction of houses and flats, *see* pages 232, 234, and 236–7. For a fuller description of the activities of State housing authorities and their financial advances to home purchasers or builders *see* Year Book No. 53, pages 283–291.

*New South Wales—The Housing Commission of New South Wales.* The Housing Commission of New South Wales was constituted in 1942, its principal function being the provision of low-cost housing for rental or sale to persons in the lower or moderate income groups.

Advances from the Commonwealth have provided most of the Housing Commission's capital funds. Of the \$507,554,942 total capital funds available to the Commission from its inception to 30 June 1967, \$433,376,414 (or 85.4 per cent) came from Commonwealth advances, \$11,604,048 (2.3 per cent) from Consolidated Revenue, \$13,991,900 (2.7 per cent) from General Loans Account, \$19,340,314 (3.8 per cent) from other State funds, and \$29,242,266 (5.8 per cent) from the Commission's own funds. During the year 1966–67 the Housing Commission's income and expenditure (other than capital transactions) was—total income, \$30,093,253 (consisting of rent \$20,822,877, interest \$7,242,995, other \$2,027,381); and total expenditure \$27,436,516.

Most of the permanent dwellings provided by the Commission have been erected under the Commonwealth-State Housing Agreements. In 1966, 4,529 houses and flats, valued at \$26,316,000, were completed for the Housing Commission by private builders on contract to the Commission.

Upon request by other State Departments the Housing Commission will erect houses for employees of those Departments, the Departments providing the necessary lands and funds. In addition, the Commission erects (with State funds) dwellings for employees of industries connected with decentralisation and development. Specially designed units are erected by the Housing Commission to provide dwellings for elderly persons at rentals within their means. The rents of these units are approximately \$2 a week for elderly single persons and \$3 a week for elderly couples, and 3,382 units had been completed at 30 June 1967.

Applicants for Commission housing may elect either to purchase or to rent the dwelling allocated to them. Terms of sale provide for a minimum deposit of \$100 with repayments spread over a maximum period of forty-five years. Further, those tenants who originally elect to rent may subsequently purchase the dwellings occupied by them on similar terms. Applicants may also apply to have a standard type of dwelling erected on their own block of land.

*Victoria—Housing Commission, Victoria.* The Housing Commission of Victoria was set up in 1938 as a result of the Housing Act of the previous year. The objects of the Commission as now laid down are the improvement of existing housing conditions; the provision of suitable rental housing for persons displaced by slum reclamation or living under unsatisfactory conditions, and for other eligible persons; the sale of houses to eligible persons and the making of advances to such persons to enable them to own their homes; the development of land for housing and related purposes; and the responsibility of maintaining housing standards. Since the signing of the 1945 Commonwealth-State Housing Agreement the construction of dwellings has been financed by the Commonwealth Government and Commission Funds.

At 30 June 1967 the Housing Commission had completed 1,328 dwellings units under the State Housing Scheme, and 58,478 dwelling units under Commonwealth-State Agreements. Specially designed dwelling units are erected by the Commission to provide dwellings for elderly persons at rentals within their means. To 30 June 1967, 3,459 units had been completed. Under the *Aborigines*

*Act 1958*, as amended by the *Aborigines (Houses) Act 1959*, the Aborigines Welfare Board is empowered to buy houses, or land on which to erect houses, for occupation as dwellings by Aborigines. To 30 June 1967, 123 units had been completed.

State Government Authorities provide to the Commission, from time to time, the necessary land and finance for the erection of dwellings for their employees. At 30 June 1967 a total of 3,322 houses had been erected by the Housing Commission on behalf of the Rural Finance and Settlement Commission for provision to ex-servicemen.

*Queensland—The Queensland Housing Commission.* The Queensland Housing Commission was established in 1945 to assist in meeting the housing shortage. In addition, the Commission was empowered to build houses itself, either for sale or for rental.

The Housing Commission finances its operations through two Treasury Trust Funds—the Queensland Housing Commission Fund and the Commonwealth-State Housing Fund. In addition, a Home Builders' Deposit Trust Fund is available to assist eligible persons to accumulate money to acquire land and erect a Commission dwelling thereon, or to purchase a dwelling under contract of sale conditions. Total disbursements by the Commission for the year 1966–67 amounted to \$27,794,275, representing \$8,655,173 from the Queensland Housing Commission Fund and \$19,139,102 from the Commonwealth-State Housing Fund, while the Home Builders' Deposit Fund had a balance of \$1,248 at 30 June 1967.

During 1966–67 the Commission completed 1,643 house units, bringing the total completions under all schemes since the revival of housing construction in 1944–45 to 34,889. Of this number, 20,843 houses, or 59.7 per cent, were for home ownership, and 14,046 or 40.3 per cent, were for rental.

In the field of rental housing the Commission administers and acts as the constructing authority under the Commonwealth-State Housing Agreements. Operating under the provisions of '*The State Housing Acts, 1945 to 1966*' the Commission, through its scheme of workers' dwellings, makes advances for the construction of dwellings to eligible persons who own a suitable building site. The number of workers' dwellings completed during 1966–67 amounted to 290, making a total of 30,063 completions since the inception of the scheme. The Commission also has power to make advances, secured by mortgage, to firms for housing of employees. The Commission has power to sell houses under contract of sale conditions. Contract of sale agreements were made to purchase 746 of the Commission's houses during 1966–67.

*South Australia—The South Australian Housing Trust.* The South Australian Housing Trust operates under the South Australian Housing Trust Act, 1936–1965 for the purpose of providing comfortable homes for workers in regular employment on the lower ranges of income and for tenants in serious financial straits. The Housing Trust builds houses for both rental and sale, and from July 1946 to 30 June 1967, 59,596 houses were erected by the Trust in both city and country areas. As at 30 June 1967 the rents of five-roomed (i.e. three bedrooms) double-unit houses ranged from \$4.25 a week for houses of an older type to \$8.00 a week for houses then being completed. Single unit rents ranged between \$4.75 and \$13.00. Two- and three-storey groups of flats with weekly rentals ranging from \$8.25 to \$15.50 per flat have been built in the Metropolitan Area and at Elizabeth. At 30 June 1967, 1,199 of these flats had been completed in the Metropolitan Area and 220 at Elizabeth. In 1953 the Trust began building cottage or pensioner flats for elderly people. At 30 June 1967 it had built 962 cottage flats for its own scheme and an additional 560 for charitable organisations, and in 1958 the State Government instituted the rental-grant scheme for the purpose of providing houses in the country towns for people who cannot afford to pay an economic rent.

More than 32,600 houses have been completed under the sales scheme inaugurated in 1946.

During 1962–63 the Trust commenced construction of rental-purchase houses. The aim of this scheme is to provide less expensive houses for the lower-middle income group, and it is expected that such houses will, as far as possible, replace the demand for the double-unit type rental houses. Upon request by State Government Departments the Trust will erect houses for purchase by those Departments for the accommodation of their employees. By 30 June 1967 the Trust had built 182 houses in country towns for the Department of Aboriginal Affairs. The houses are owned and managed by the Department and let by it to specially selected Aboriginal families. In order to assist primary producers the Trust will erect houses on the applicant's own land for his own use or that of his employees, either using local materials or transporting prefabricated houses to the site.

*Western Australia—State Housing Commission of Western Australia.* The State Housing Commission was established in January 1947, under the *State Housing Act, 1946*, to replace the Worker's Homes Board. The *State Housing Act, 1946–1964* has as its objects 'the improvement of existing housing conditions' and 'the provision of adequate and suitable housing accommodation for persons of limited means and certain other persons not adequately housed'. It provides for the erection of homes for workers, the making of advances to workers for the purchase of homes, the erection of

homes for letting on a weekly rental basis, the acquisition and development of land, the clearing of slums, the erection of hostels, and the planning of community facilities. The Commission builds houses for letting or sale and lends money for home building. The houses are built by private contract on land provided by the applicant or the Commission. The administration of the Commonwealth and State Housing Agreements and the War Service Homes Act is included in the functions of the Commission. The number of houses completed under the State Housing Act up to 30 June 1967 was: freehold, 4,839; leasehold, 3,585; assistance by second mortgage, 1,703.

The Commission also conducts certain other housing schemes and has completed or is currently engaged in other specific projects, details of which are given in previous Year Books. Included among current activities are the building and maintenance of houses for the Government Employees' Housing Authority, which has taken over 154 homes built in country areas under the former Government Employees' Housing Scheme and acquired 405 houses including 400 previously owned by various Government Departments; the construction of up to 100 houses to be built under the provisions of the *Laporte Industrial Factory Agreement Act, 1961-1965*; the building of up to 30 homes a year until 1969-70 as part of the Broken Hill Proprietary Company's Agreement with the State to establish an integrated steel industry; and the erection of 128 houses at Exmouth as part of the support town and for personnel employed on the United States Navy V.L.F. radio station. A third block of flats for the accommodation of elderly ladies was completed in May 1966 and the Commission is building a fourth block in the Fremantle area. The Commission also built during 1966-67 a block of flats for single working women to encourage the various organisations to undertake similar projects themselves.

The Commission administers building society legislation and the *Housing Loan Guarantee Act, 1957-1965*, under which the Government guarantees lenders of funds to building societies and other approved financial organisations making advances to families interested in owning their own home on low deposits, and at an interest rate not exceeding 6½ per cent per annum reducible.

*Tasmania—The Housing Department.* The Housing Department was established in July 1953 and is responsible for administering that portion of the *Homes Act 1935* which relates to the acquisition and development of land for housing purposes and the erection of homes for rental and ultimate sale, and the *Homes (Old Age Pensioners') Act 1940*.

During 1966-67, 595 dwellings were completed. Construction since 1944 has comprised 10,161 dwelling units, of which 9,623 were single units (8,166 of timber), 220 were elderly persons' flatettes, 22 were maisonettes, and 296 were multi-unit flats.

Flats, maisonettes and elderly persons' homes are for rental only. Allottees of single unit dwellings are encouraged to acquire properties on purchase contract, although some of these dwellings are occupied on a rental basis. The rental of a newly erected three-bedroom timber house in the Hobart metropolitan area approximated \$13.15 in the June quarter of 1967. In certain necessitous cases rental rebates are allowed. Under the current rental rebate formula a married couple whose only income is the age pension pay \$3.80, while a single person solely dependent on the pension pays \$2 a week.

Allotments are usually made on a no-deposit purchase contract basis, repayments being over a maximum term of fifty-three years. Purchase contracts are sometimes surrendered to the Department. Net of surrenders, 6,694 purchase contracts had been entered into by June 1967. The sale price, excluding land, of a new three-bedroom house in the Hobart metropolitan area was approximately \$7,340 in the June quarter of 1967.

### Housing schemes in Commonwealth Territories

*Northern Territory.* In 1946 control of all government-owned residences in the Territory (excluding those belonging to the Defence Services or Commonwealth Railways, or attached to post offices) was vested in the Administration. The Northern Territory Housing Commission provides rental housing for persons of limited means who are not adequately housed and who are not officers of either the Commonwealth or the Northern Territory Public Service. The Commission was established in 1959 and operates under authority of the *Housing Ordinance 1959-1966*; to 30 June 1967 a total of 1,107 houses and flats had been completed; 735 of these are in Darwin (including 158 flats), 244 in Alice Springs (including 24 flats), 61 in Katherine, and 67 in Tennant Creek. A further 370 houses and 196 flats were under construction.

*Australian Capital Territory.* The Commonwealth Government provides houses and flats for rental to persons employed in the Australian Capital Territory. At 30 June 1967 the Department of the Interior controlled 7,389 houses and 2,018 flats for rental purposes. Government rental houses may be purchased by tenants. From 1 July 1950 to 30 June 1967, 6,022 houses had been sold to tenants.

*Papua and New Guinea.* In 1960 the Administration, through the Commissioner for Housing, commenced a scheme for providing low-cost houses for rental and eventual sale, where possible, to indigenes, mixed race peoples and Asians. To 30 June 1967, 290 houses had been completed.

A Housing Commission is to be established to improve existing housing conditions, to provide adequate and suitable housing for letting and sale to persons who are of limited means or unsatisfactorily housed, to make advances for home purchase, and to develop land for housing. The Housing Commission Ordinance 1967 received the Governor-General's assent on 1 June 1967. Active planning for the Commission's operations is under way.

#### Summary of rental activities of government authorities

The first of the two following tables shows the revenue from rental for dwellings under control of government housing authorities each year from 1962-63 to 1966-67, and the second the number of tenants paying rent for dwellings under control of government housing authorities at the end of each year 1962-63 to 1966-67.

#### GOVERNMENT HOUSING AUTHORITIES: REVENUE FROM RENTALS, STATES AND TERRITORIES, 1962-63 TO 1966-67 (\$'000)

Year	N.S.W.	Vic.	Qld (a)	S.A. (b)	W.A.	Tas.	N.T.	A.C.T.	Aust.
1962-63	14,232	11,410	3,966	7,504	4,384	1,122	500	3,480	46,598
1963-64	16,112	12,024	4,372	8,788	4,792	1,234	622	3,638	51,582
1964-65	17,414	13,322	4,732	9,184	5,177	1,266	654	3,493	55,242
1965-66	18,864	13,918	5,459	9,440	5,532	1,344	820	3,708	59,085
1966-67	20,823	15,406	6,181	10,915	6,678	1,522	985	3,853	66,363

(a) Excludes rentals in respect of tenanted temporary dwellings. (b) Excludes rentals in respect of temporary and emergency dwellings.

#### GOVERNMENT HOUSING AUTHORITIES: NUMBER OF TENANTS PAYING RENT STATES AND TERRITORIES, 1962-63 TO 1966-67

Year	N.S.W. (a)	Vic.	Qld (b)	S.A. (c)	W.A.	Tas.	N.T.	A.C.T. (d)	Aust.
1962-63	41,207	32,371	11,575	24,632	13,848	3,144	1,678	9,073	137,528
1963-64	43,007	32,870	12,084	26,024	14,875	3,230	1,752	9,143	142,985
1964-65	44,994	33,541	12,605	27,113	15,394	3,238	2,166	9,054	148,105
1965-66	47,407	33,995	13,439	27,632	16,639	3,283	2,398	9,073	153,866
1966-67	50,596	35,307	14,046	28,305	17,393	3,451	2,869	9,143	161,110

(a) Excludes tenants of 'aged units'. (b) Excludes tenanted temporary dwellings. (c) Excludes temporary and emergency dwellings. (d) Number of occupied dwellings at 30 June.

#### Advances to home purchasers

Many prospective home purchasers wish to borrow for the purpose of constructing or purchasing their own homes. Usually the loan is covered by way of mortgage of the home to be constructed or bought. Such loans are provided from a number of private sources and from agencies owned or guaranteed by the State or Commonwealth Governments. The information in this section concerns the direct loans made to home purchasers by the more important institutional lenders. Loans to institutions which in turn lend moneys to home purchasers and loans to contract builders, etc. are excluded as far as possible. The loans may be for the construction of new dwellings, the purchase of existing dwellings, for additions, renovations, etc., as first or subsequent mortgages, overdrafts and so on. While figures of all loans to home purchasers are not available, the institutions mentioned account for a significant proportion of total loans. Details of the terms and conditions of lending are given, together with available information on the number and value of loans made.

## State authorities and agencies

*New South Wales*

*Rural Bank of New South Wales—Sale of Homes Agency.* A Sale of Homes Agency was established in 1954 to arrange for the sale on terms of houses erected by the Housing Commission of New South Wales. The Agency's operations began with the sale to selected purchasers of 100 houses made available by the Commission during 1954–55 and 1955–56. The sales were made on the basis of 10 per cent deposit and repayment of the balance over a maximum period of forty years, with interest at 4½ per cent per annum. Total advances under that scheme amounted to \$646,648; at 30 June 1967 the advances outstanding amounted to \$393,950 in respect of 81 houses.

Since 1956 the Sale of Homes Agency has acted as the agent of the Housing Commission in arranging the sale on terms of houses erected under the Commonwealth-State Housing Agreements. The terms of sale provide for a minimum deposit of \$100 and repayment of the balance over a maximum period of forty-five years, with interest rates, since the inception of the scheme, ranging from 4½ to 5½ per cent per annum. Particulars of the advances made by the Agency in connection with the sale of houses erected under the 1956 and 1961 Agreements are given in the following table.

**RURAL BANK OF NEW SOUTH WALES—SALE OF HOMES AGENCY  
ADVANCES FOR HOMES SOLD UNDER THE 1956 AND 1961  
COMMONWEALTH-STATE HOUSING AGREEMENT  
1962-63 TO 1966-67**

Year	Advances during year		Advances outstanding at end of year(a)	
	Number of houses	Amount	Number of houses	Amount
		\$'000		\$'000
1962-63 . . .	1,825	13,504	13,830	88,974
1963-64 . . .	957	7,362	14,568	94,178
1964-65 . . .	1,777	14,356	16,042	105,648
1965-66 . . .	1,486	12,197	17,126	114,154
1966-67 . . .	1,125	9,417	18,181	121,710

(a) Comprises principal outstanding and loan charges due but not paid.

*Rural Bank of New South Wales—other loans.* The Rural Bank of New South Wales provides assistance to individuals for the erection or purchase of homes and for other approved purposes associated with homes. Advances are based on the bank's official valuation of the dwelling. The rate of interest on long-term loans for housing purposes is 5½ per cent per annum.

**RURAL BANK OF NEW SOUTH WALES: ADVANCES FOR HOMES  
1962-63 TO 1966-67**

Year	Advances during year(a)		Advances outstanding at end of year(b)	
	Number of dwellings	Amount	Number of dwellings	Amount
		\$'000		\$'000
1962-63 . . .	2,014	13,084	18,017	62,762
1963-64 . . .	2,434	15,148	18,972	68,790
1964-65 . . .	2,613	18,250	19,936	76,450
1965-66 . . .	1,406	11,699	19,577	76,286
1966-67 . . .	1,578	13,256	19,398	77,587

(a) The number of advances during a year represents the number of dwellings in respect of which an advance was first made in the year, but the amount of advances includes subsequent advances made in respect of the dwellings. (b) The number of advances outstanding at the end of a year represents the number of dwellings on which a debt was still outstanding. The amounts shown comprise principal outstanding and loan charges due but not paid.



*Victoria*

*Housing Commission, Victoria.* Very few houses were sold by the Commission until 1954. The amendments to the Commonwealth-State Housing Agreement in 1955-56 have had the effect of substantially increasing the number of houses sold. Whereas between 1949 and 1954 only about 100 houses were sold, a total of 23,871 houses were sold on terms to 30 June 1967, the total value of terms sales exceeding \$190 million. Until 1964-65, houses were sold on a minimum deposit of \$200, but during that year provision was made to sell without deposit in very special circumstances. The maximum repayment term is forty-five years with interest currently at  $4\frac{1}{2}$  per cent.

*Home Finance Trust.* In 1956 a Home Finance Trust was established with the object of receiving money from institutions and others in order to make loans for the erection or purchase of houses. Applicants for loans must declare that they intend to use the houses as homes for themselves, their families and dependants.

Loans granted are on the basis of a first mortgage over the house. Loans are not to exceed ninety-five per cent of the value of the security (house and land) and are not made if the value of the security exceeds \$11,600. The house must not have been erected more than two years before the date of mortgage. Repayment of loans may be made over a maximum period of thirty years, with interest charges determined by the Trust. At 30 June 1967, 3,284 loans totalling \$20,831,876 were outstanding.

In 1963 the Trust was empowered to make housing loans on the security of second mortgages subject to conditions similar to those applying to the first mortgage loans, except that the maximum term for repayment of a loan is ten years and no restriction is placed on the percentage of loan to valuation. At 30 June 1967, 1,643 second mortgage loans were outstanding, the amount involved being \$1,729,250.

(See Savings Banks, page 257, for activities of the State Savings Bank of Victoria.)

*Queensland*

*Queensland Housing Commission.* The present maximum advance allowable under the Acts is \$8,000 for a timber, brick veneer, brick, or concrete building. The rate of interest charged on new advances in 1966-67 was  $5\frac{1}{2}$  per cent per annum. Repayment may be made at the option of the borrower over either a thirty year or a forty-five year period.

*Workers' dwellings.* From 4 October 1962 the maximum advance under this scheme was increased to \$7,000 for all types of workers' dwellings. This was increased to \$8,000 from 2 June 1966. Total advances made for dwellings since operations commenced in 1910 to 30 June 1967 amounted to \$64,891,061.

*South Australia*

*South Australian Housing Trust Sales Scheme.* A minimum deposit of \$100 is required for houses under the Rental-Purchase Scheme for a loan, repayable at an interest rate of  $4\frac{1}{2}$  per cent per annum over a period not exceeding forty years. Prospective purchasers of Housing Trust houses (other than rental-purchase houses) can arrange or have arrangements made for a first mortgage to be granted by a lending institution of their choice. In cases where the deposit and the first mortgage so raised are insufficient, the Trust may advance the balance of the house price by way of a second mortgage, the repayment term of which is a maximum of thirty years, interest being at the rate of 6 per cent per annum. Principal is adjusted quarterly. During 1966-67 the Trust commenced 721 second mortgages valued at \$927,000. At 30 June 1967 second mortgages totalled 8,650, and the balance outstanding at that date was \$9,100,000.

*State Bank of South Australia.* The State Bank, together with the Housing Trust, is the principal agent of the State Government for the distribution through the Home Builders' Fund of moneys received under the Commonwealth-State Housing Agreement. During 1966-67 the Bank opened 1,773 new accounts worth \$12,049,361 in the Home Builders' Fund. The balance of loans in this Fund outstanding at 30 June 1967 totalled \$65,011,171. In addition, during 1966-67, \$761,148 was advanced to the public under the Advances for Homes Act, 1928-1958, which is administered by the Bank on behalf of the State Government. Under this Act 133 new accounts were opened during 1966-67, leaving a balance outstanding at 30 June 1967 of \$25,760,844. The present maximum housing loan under either of these schemes is \$7,000, repayable over a period not exceeding fifty years at a rate of interest of  $5\frac{1}{2}$  to 6 per cent per annum calculated on monthly balances. Persons who have received benefit under either of these schemes are ineligible for another mortgage.

*Western Australia*

*State Housing Commission of Western Australia.* Under the State Housing Act and the Commonwealth-State Housing Agreement the maximum loan is \$6,000 by way of mortgage, while under contract of sale the maximum is \$5,800 on the building plus the value of the land in the metropolitan area, and greater amounts in rural areas, depending on the circumstances.

To proceed under the mortgage conditions, a deposit of not less than 10 per cent is required, but under contract of sale the deposit may be as low as \$200. The interest rate on all advances is  $5\frac{1}{2}$  per cent per annum and the repayment period is forty-five years. The income eligibility figure varies according to the movement of the basic wage, and as at the basic wage adjustment on 24 October 1966 an applicant in the metropolitan area cannot have an income exceeding \$2,645 a year, plus \$50 for each dependent child under sixteen years of age. For the country the corresponding amount is \$3,158 per annum plus \$50 for each dependent child under sixteen years, and north of the twenty-sixth parallel the Minister may allow families with an income of up to \$4,225 to be given financial assistance. A second-mortgage scheme exists under the State Housing Act, which provides that assistance be limited to those applicants who are building or purchasing new homes, the cost of which, excluding land, does not exceed \$8,000. The Commission limits the second mortgage to a maximum of \$2,000.

(See Savings Banks, page 257, for activities of the Savings Bank Division of The Rural and Industries Bank of Western Australia.)

*Tasmania*

*Housing Department.* The interest rate on purchase contract loans from the Housing Department signed after 1 May 1965 is  $4\frac{1}{2}$  per cent. To be eligible for a house on purchase contract terms an applicant must be married or about to be married, or have dependants for whom it is necessary to provide a home. The number of loans outstanding at 30 June 1967 was 6,163, and the amount outstanding \$40,583,000.

*Agricultural Bank of Tasmania.* The Agricultural Bank, as an approved institution under the Commonwealth-State Housing Agreement, receives part of those funds allocated for advances to home builders. To be eligible for a loan an applicant must be married or about to be married, be over the age of twenty-one, and own a block of land. The maximum amount of an advance to an applicant is \$8,000 for all types of houses in certain areas, provided that the total advance does not exceed ninety per cent of the Bank's valuation of land and dwelling. Advances to borrowers are repayable by equated instalments over thirty-one years. Advances made as from 1 July 1965 were at an interest rate of  $5\frac{1}{2}$  per cent.

During 1966-67, 279 advances were approved, valued at \$2,159,000. Since November 1945 a total of 3,456 loans amounting to \$20,553,000 has been approved, of which 2,910 have been for erection of dwellings and 546 for the purchase of existing homes. Total advances outstanding at 30 June 1967 amounted to \$14,960,000. These figures exclude advances to building societies.

**Commonwealth authorities and Territories***Department of Housing*

In December 1963 the Department of Housing was created, and to it were transferred the functions and staff of the War Service Homes Division and the Housing and Building Industry Branch of the Department of National Development. Further details relating to the Department of Housing may be found on page 83 of Year Book No. 50.

*War service homes*

The maximum amount of loan or advance which may be granted under the *War Service Homes Act* 1918-1966 is \$7,000. The period of repayment may be up to forty-five years. In the case of a widow or widowed mother of an Australian ex-serviceman, the period may be extended to a maximum of fifty years.

The following table gives details of advances under the War Service Homes Act in each State and Territory of Australia, and the Territories of Papua, New Guinea and Norfolk Island, for the years 1962-63 to 1966-67. (See tables on pages 245-6 for the number of homes provided.)

**WAR SERVICE HOMES ACT: ADVANCES FOR HOUSING, STATES AND TERRITORIES  
1962-63 TO 1966-67**

<i>Period or date</i>	<i>N.S.W. (a)</i>	<i>Vic.</i>	<i>Qld (b)</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Total</i>
<b>TOTAL CAPITAL ADVANCED DURING YEAR (\$'000)</b>									
1962-63 . . .	27,200	21,000	9,900	6,470	7,960	1,550	30	910	75,020
1963-64 . . .	26,502	21,300	8,100	5,078	6,770	1,584	22	660	70,016
1964-65 . . .	27,680	19,874	8,540	5,510	6,500	1,486	2	512	70,104
1965-66 . . .	27,052	19,716	9,667	6,172	5,310	1,562	28	503	70,010
1966-67 . . .	25,153	15,350	8,430	4,113	4,500	1,170	37	370	59,123

<b>NUMBER OF SECURITIES IN FORCE</b>									
<i>At end of June—</i>									
1963 . . .	54,409	49,740	21,644	15,481	17,551	3,676	55	817	163,373
1964 . . .	56,619	51,188	22,237	15,718	18,005	3,827	57	872	168,523
1965 . . .	58,899	52,493	22,698	16,008	18,348	3,889	51	927	173,313
1966 . . .	61,050	53,839	23,397	16,457	18,579	4,005	52	975	178,354
1967 . . .	63,011	54,434	23,894	16,583	18,555	4,035	54	998	181,564

<b>VALUE OF ADVANCES OUTSTANDING (\$'000)</b>									
<i>At end of June—</i>									
1963 . . .	260,236	219,662	85,324	65,470	79,460	15,958	(c)	(d)	726,110
1964 . . .	278,856	233,648	90,326	67,900	83,364	16,976	(c)	(d)	771,070
1965 . . .	297,244	244,726	95,076	70,564	86,458	17,798	(c)	(d)	811,866
1966 . . .	313,915	255,695	100,938	74,117	88,513	18,684	(c)	(d)	851,862
1967 . . .	327,969	260,617	105,308	75,402	89,064	19,025	(c)	(d)	877,385

(a) Includes Norfolk Island. (b) Includes Territory of Papua and New Guinea. (c) Included in South Australia.  
(d) Included in New South Wales.

#### *Northern Territory*

**Loans Scheme.** This scheme was commenced in 1953 and is administered by the Home Finance Trustee under the *Housing Loans Ordinance* 1949-1966. Advances may be made for the erection of a house, the purchase or enlargement of an existing house, the completion of a partially erected dwelling, or the discharge of a mortgage already existing. Loans are provided on a deposit of 5 per cent of the first \$4,000 and 10 per cent of the balance of the Trustee's valuation up to a maximum of \$7,000. The rate of interest charged is 6 per cent per annum reducible to 5 per cent per annum if instalment payments are made by the due date. The maximum period of repayment is forty-five years. Up to 30 June 1967, 1,193 loans totalling \$6,677,030 had been approved. These were for: erection, 738; purchase, 351; enlargement or completion, 52; discharge of mortgage, 52.

**Sales Scheme.** Tenants of government-owned houses under the control of the Administration may purchase the dwellings they occupy either for cash or on terms requiring a minimum deposit of 5 per cent of the first \$4,000 and 10 per cent of the balance of the purchase price with repayments over a maximum period of forty-five years including interest at 4½ per cent per annum.

**Housing Commission Sales Scheme.** Since the November 1963 amendment of the *Housing Ordinance* 1959-1966 the Housing Commission has been permitted to sell its houses to tenants in occupation. The terms require a minimum cash deposit of \$200 and repayment of the remainder of the loan over a period not exceeding forty-five years; there is no prescribed limit to the amount of the loan and the rate of interest is fixed by the Commission from time to time.

#### *Australian Capital Territory*

Loans may be granted by the Commissioner for Housing to enable persons to purchase or build a new house in the Australian Capital Territory. Where the Commissioner's valuation does not exceed \$4,000 the maximum loan may not exceed ninety-five per cent of the valuation. If the Commissioner's valuation exceeds \$4,000 the maximum loan is ninety-five per cent of the first \$4,000 and ninety per cent of the balance (but in no case can the amount lent exceed \$7,000). Repayment may be made over a maximum period of forty-five years. The current rate of interest is 5½ per cent per annum with a concession of 1 per cent for payments made on or before the due date. At 30 June 1967, 4,254 houses were under mortgage to the Commissioner.

Government rental houses may be purchased by tenants. The basis of the sale is a minimum deposit of 5 per cent of the purchase price fixed by the Department of the Interior with no limit to the amount which may be held on mortgage from the Department. Repayment of the amount covered by mortgage may be made over a maximum period of forty-five years. The interest rate is  $5\frac{1}{2}$  per cent per annum with a concession of 1 per cent for payments made on or before the due date. To 30 June 1967, 6,022 houses had been sold to tenants.

#### *Papua and New Guinea*

Under authority of the *Housing Loans Ordinance* 1953–1963 the Commissioner for Housing may make advances to any member of the community for the erection of a house, the purchase or enlargement of an existing house, the completion of a partially erected dwelling, or the discharge of a mortgage already existing. The maximum loan is \$7,000. The maximum period of repayment is twenty-five years for timber and thirty-five years for brick dwellings. The Commissioner's responsibilities will be transferred to the Housing Commission when it commences operations. Minimum cash deposit is 5 per cent of the first \$4,000 plus 10 per cent of the remainder of the Commissioner's valuation. The effective rate of interest is 5 per cent per annum. Up to 30 June 1967, 382 loans totalling \$2,010,995 had been approved.

#### **Savings banks**

All savings banks lend funds for housing to both individuals and building societies. Separate figures of loans to individuals are not available for all savings banks. The amounts outstanding on housing loans of all savings banks (including loans to building societies) were \$1,186 million, \$1,359 million and \$1,549 million at the end of June 1965, 1966 and 1967 respectively. Some details in respect of three savings banks are shown below.

*State Savings Bank of Victoria.* The Bank grants long-term loans to depositors to enable them to build, purchase or improve homes. These loans are granted by both the Cr dit Foncier and Savings Bank Departments.

The maximum proportion of valuation to be granted as Cr dit Foncier loan is eighty per cent and the maximum loan is \$7,000. Interest is 5 per cent and the term of the loan is ten years, subject to renewal. The maximum proportion of valuation granted as Savings Bank Department loan is seventy-five per cent and the maximum loan is \$10,000. The interest rate is  $5\frac{1}{2}$  per cent if the property is occupied by the borrower and  $6\frac{1}{4}$  per cent in other cases. The term of the loan is three years, subject to renewal. During the year 1966–67 the Bank advanced \$58,623,493 to 9,034 borrowers in addition to \$397,969 to Co-operative Housing Societies and \$750,000 to the Home Finance Trust. At 30 June 1967 the total debt of 61,106 individual borrowers was \$294,450,029, while indebtedness of Co-operative Housing Societies and the Home Finance Trust amounted to \$16,431,208 and \$9,313,587 respectively.

*Savings Bank of South Australia.* The Bank grants mortgage loans for the building or purchase of houses for personal occupation, the maximum loan available being \$8,000 for all types of homes. Normally advances are made up to 85 per cent of the Bank's valuation but, if the loan is granted under the Homes Act, 1941–1962, 95 per cent of such valuation may be advanced (maximum loan, \$6,000). The maximum loan period is thirty years at a rate of interest of  $5\frac{1}{4}$  per cent per annum; this rate is subject to review after five years. During 1966–67 the Bank advanced \$16,968,094 by way of housing loans, the number of new loans totalling 2,345. At 30 June 1967 there were 24,641 loans current with a balance outstanding of \$114,349,812.

*Rural and Industries Bank of Western Australia (Savings Bank Division).* The Rural and Industries Bank of Western Australia is authorised by the *Rural and Industries Bank Act, 1944–1966* to make loans from moneys on deposit with its Savings Bank Division to a person or body for the purchase or erection of a dwelling. It is the policy of the Bank to provide funds for housing primarily for occupancy by the borrower. There is no fixed limit on the amount of a loan. The average loan in the case of a brick or timber house is \$8,000. The rate of interest varies with the current bank rate and is usually  $\frac{3}{4}$  per cent lower. The rate at 30 June 1967 was  $5\frac{1}{4}$  per cent. The average term of housing loans is twenty-two years.

#### **Trading banks**

Apart from loans by certain State banks as Government agencies (*see* pages 253–5) advances for housing to individuals are also provided by the trading banks. Amounts outstanding in respect of advances to individuals for housing purposes made by the major trading banks were \$261 million on the second Wednesday of July 1967 (*see* the chapter Private Finance for further details).

**Life insurance companies**

The life insurance companies are another source of funds for housing. Details of new loans made during the twelve months ended June 1963 to 1967 are given in the following table.

**LIFE INSURANCE COMPANIES: HOUSING LOANS PAID OVER  
STATES AND TERRITORIES, 1962-63 TO 1966-67**

State or Territory	Amount (\$'000)				
	1962-63	1963-64	1964-65	1965-66	1966-67
New South Wales . . . . .	20,122	19,976	23,073	24,823	22,486
Victoria . . . . .	12,276	14,742	17,788	17,113	16,843
Queensland(a) . . . . .	3,972	3,510	5,665	5,538	4,856
South Australia(b) . . . . .	3,228	3,334	4,686	4,809	4,371
Western Australia . . . . .	2,090	2,488	3,561	3,564	4,157
Tasmania . . . . .	1,486	1,530	1,396	1,526	1,321
Australian Capital Territory . . . . .	242	396	827	870	945
<b>Total . . . . .</b>	<b>43,416</b>	<b>45,976</b>	<b>56,995</b>	<b>58,237</b>	<b>54,979</b>

(a) Includes loans made in Papua and New Guinea.

(b) Includes loans made in Northern Territory.

Amounts outstanding at the end of June 1964, 1965, 1966 and 1967 in respect of housing loans made by insurance companies were \$323 million, \$339 million, \$356 million and \$366 million respectively.

**Registered building societies**

There are 3,776 registered building societies in Australia, of which 132 are permanent societies and the remainder terminating societies. The permanent societies are in the main investment societies which make loans for housing purposes, usually on *crédit foncier* terms, and obtain their funds from share capital deposits and borrowings from banks and other lending institutions. The terminating societies are co-operative societies which make loans to members from funds obtained from lending institutions (usually government guaranteed), members' subscriptions, and, since 1956, from moneys provided under the Commonwealth-State Housing Agreements. Details of new loans granted and net advances outstanding for each of the years ended June 1962 to 1966 are given in the following table (*see also* the chapter Private Finance).

**REGISTERED BUILDING SOCIETIES: STATES, 1961-62 TO 1965-66**

Year	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	Total
<b>LOANS GRANTED DURING YEAR (\$'000)</b>							
1961-62 . . . . .	48,738	28,856	12,646	2,246	6,346	2,988	101,820
1962-63 . . . . .	53,446	29,843	13,164	2,833	7,270	4,049	110,605
1963-64 . . . . .	72,284	30,880	13,184	3,102	10,430	5,999	135,879
1964-65 . . . . .	82,329	37,007	16,550	3,819	13,091	6,728	159,524
1965-66 . . . . .	90,635	34,357	18,559	3,521	12,611	5,314	164,997
<b>NET ADVANCES OUTSTANDING(a) AT END OF YEAR (\$'000)</b>							
1961-62 . . . . .	292,898	175,160	41,272	11,114	25,158	12,210	557,812
1962-63 . . . . .	317,221	189,466	48,776	12,530	28,216	14,464	610,673
1963-64 . . . . .	351,841	199,704	55,543	13,967	35,483	17,798	674,336
1964-65 . . . . .	393,343	214,288	64,449	15,790	44,171	21,413	753,454
1965-66 . . . . .	441,676	225,778	74,659	17,238	52,182	23,767	835,300

(a) Net of borrowing members' funds.

**Other lenders**

Little information is available on advances made by other lenders such as superannuation and other trust funds, private finance and investment companies, etc. In South Australia advances on first mortgage made by the South Australian Superannuation Fund are granted under the Homes Act, 1941-1962, by which the State Government guarantees up to 25 per cent of the value of the mortgage, thus raising the limit of the advance. Loans so made are limited to 95 per cent of the Superannuation Board's valuation to a maximum of \$6,000, or 85 per cent of the Board's valuation to a maximum of \$7,000. The rate of interest is 6 per cent per annum, calculated on quarterly balances, reducing to 5½ per cent when payments are made within a prescribed period of twenty-one days from the end of the quarter. The term of the mortgage may run for thirty years on a stone or brick home or twenty years on a timber-framed construction. Trustee mortgages may be granted as an alternative to the foregoing. A maximum of 70 per cent of the Board's valuation may be granted for a trustee mortgage, other conditions being those applicable to mortgages granted under the Homes Act. At 30 June 1967 there were 5,678 loans current, the principal outstanding totalling \$24,142,994. During 1966-67 the value of advances made was \$3,649,424.



## CHAPTER 10

### LABOUR, WAGES AND PRICES

For particulars of the Farm Production Price Index, *see* the chapter Miscellaneous. For current information on the subjects dealt with in this chapter, *see* the *Monthly Review of Business Statistics*, the *Digest of Current Economic Statistics* (monthly), and the *Quarterly Summary of Australian Statistics*, also the mimeographed statements *Wage Rates and Earnings*, *Consumer Price Index*, *Wholesale Price (Basic Materials and Foodstuffs) Index*, *Wholesale Prices—Price Index of Electrical Installation Materials*, and *Export Price Index*. For further information on these subjects, except the Export Price Index, *see* the *Labour Report* issued by this Bureau.

### RETAIL PRICES AND PRICE INDEXES

Retail prices of food and groceries and average rentals of houses for years extending back to 1901 have been collected by the Commonwealth Statistician, and in some cases were recorded by the Statisticians of various States for earlier years.

Retail prices of a more extensive range of commodities (including clothing) and certain services in common demand have been ascertained at frequent and regular intervals since 1923, and comparable information was ascertained for the month of November in each year from 1914 to 1922. The range of items for which retail prices data are obtained was considerably expanded in 1948 and in later years. Average retail prices of certain food and grocery items in current periods are published in the annual *Labour Report*.

An explanation of the nature and purposes of retail price indexes is given in the various editions of the annual *Labour Report*, together with further particulars of indexes then current. Previous retail price indexes for Australia are briefly described below. The current retail price index, entitled the Consumer Price Index, was published for the first time in August 1960. It was compiled retrospectively to 1948–49. A description of the Consumer Price Index is given on pages 262–3.

#### Previous retail price indexes

Five series of retail price indexes had been compiled at various times for Australia by the Commonwealth Statistician prior to 1960. Each of these was continued until changed conditions required the compilation of indexes more directly relevant to current conditions. The respective indexes were as follows.

- (i) *The 'A' Series Index* (covering food, groceries and house rents) was first compiled in 1912 with the year 1911 as base = 1,000. It was discontinued in June 1938.
- (ii) *The 'B' Series Index* (covering food, groceries and rent of 4 and 5 roomed houses) was first compiled in 1925 and continued until December quarter 1953. It was the food and rent constituent of the 'C' Series Index and was designed to replace the 'A' Series Index for general statistical purposes.
- (iii) *The 'C' Series Index* (covering food and groceries, rent of 4 and 5 roomed houses, clothing, household drapery, household utensils, fuel, lighting, fares, smoking, and some other miscellaneous items) was first compiled in 1921. It was last issued on its original basis for December quarter 1960. For certain transitional purposes a 'C' Series Index was issued for some quarters after that. This was calculated by varying the index numbers of December quarter 1960 in proportion to movements shown by the Consumer Price Index.
- (iv) *The 'D' Series Index*, derived by combining the 'A' and 'C' Series Indexes, was used by the Commonwealth Court of Conciliation and Arbitration from May 1933 to May 1934 and then discontinued.
- (v) *The Interim Index* (covering food and groceries, rent of 4 and 5 roomed houses, clothing, household drapery, household utensils, fuel, lighting, fares, smoking, certain services and some miscellaneous items) was first compiled in 1954 with the year 1952–53 as base = 100. As its title indicated, it was constructed as a transitional index. Its compilation was discontinued following its replacement by the Consumer Price Index in June quarter 1960.



An index of retail price movements from 1901 to 1967 is shown on page 267 of this Year Book. It is derived by linking together successive indexes (the 'A' Series, the 'C' Series and the Consumer Price Index) available for that period.

In 1937 the Commonwealth Court of Conciliation and Arbitration introduced a 'Court' Index for the purpose of its system of making automatic quarterly adjustments to the basic wage within its jurisdiction. By decision of the Court the 'Court' Index ceased to be issued by the Industrial Registrar as at December quarter 1953. These 'Court' Index numbers were an arithmetical conversion of the 'C' Series Retail Price Index.

### Consumer Price Index

This retail price index was first compiled in 1960, retrospectively to September quarter 1948. A full description of the index is given in *Labour Report* No. 52, 1965 and 1966.

#### Origin

The list of component items and the weighting pattern of the 'C' Series Retail Price Index, first adopted in 1921, were slightly revised by Conference of Statisticians in 1936, but otherwise continued almost unchanged until the index was discontinued in 1960. The reasons for this and the circumstances which led to the present Consumer Price Index appear from ensuing paragraphs.

From the outbreak of war in 1939 to late in 1948, periodic policy changes in regard to various war-time controls (including rationing) caused recurrent changes in consumption and in the pattern of expenditure. This rendered changes desirable, but made it impracticable either to produce a new index, or to revise the old one, on any basis that would render the index more representative than it already was of the changing pattern of household expenditure in those years.

When commodity rationing had virtually ceased in the latter part of 1948, action was taken by the Statistician to collect price data of about 100 additional items and to gather information about current consumption and expenditure patterns. This was done to facilitate review of the component items and weighting system of the 'C' Series Retail Price Index in the light of the new pattern of wage-earner expenditure and consumption that appeared to be emerging. But there supervened, in the next few years, conditions which caused wide price dispersion coupled with a very rapid rise in prices and a new sequence of changes in consumption and in the pattern of wage-earner expenditure. Under these conditions it was not possible to devise any new weighting pattern likely to be more continuously representative of conditions then current than was the existing 'C' Series Retail Price Index on the 1936 revision.

A Conference of Statisticians considered the matter in June 1953, and resolved (in part) as follows:

- '(a) that, in view of the persistence of recurrent changes in the pattern of consumer expenditure in the post-war period it is undesirable to make a general revision of the list of items and weighting system of the 'C' Series Retail Price Index at present, unless industrial tribunals expressly desire some revision for special purposes;
- '(b) that an Interim Retail Price Index be compiled with putative weights and components representative, as nearly as may be, of the post-war pattern of consumer usage and expenditure.'

The 'C' Series Index continued to be compiled on its pre-war basis without significant change in procedures. The Interim Retail Price Index was introduced in 1954 and continued until March quarter 1960.

The Interim Index was a transitional index designed to measure retail price variations on the 'C' Series model in terms of post-war consumption weights as emerging in the early 1950's. It embraced a wider range of commodities and services than did the 'C' Series Retail Price Index, but it did not take into account successive major changes in the pattern of expenditure and modes of living that began to occur early in 1950 and through to 1960. These changes could not in fact be detected and measured promptly and incorporated into an index concurrently with their happening. Nor was it envisaged as desirable to adopt fundamentally new procedures in price index construction until it was fully evident that far-reaching procedural changes were necessary to meet the situation that had developed between about 1950 and 1960.

In this period home-owning largely replaced house-renting, the use of the motor car greatly increased and partly replaced use of public transport, and various items of electrical household equipment and television came into widespread use. The impact of these (and other) changes in usage upon the pattern of household expenditure was heightened by disparate movements in prices. Together, they rendered nugatory the attempt to meet the situation by devising a single Interim Retail Price Index. As studies progressed and new data became available it was clear that no single

list of items and no single set of fixed weights would be adequately representative as a basis for measuring retail price changes at all times throughout the post-war period. In consequence, the situation was met by compiling the Consumer Price Index constructed as a chain of linked indexes with significant changes in composition and weighting effected at short intervals.

#### **Purpose, scope and composition**

The Consumer Price Index is a quarterly measure of variations in retail prices for goods and services representing a high proportion of the expenditure of wage-earner households. The weighting pattern relates to estimated aggregates of wage-earner household expenditures and not to estimated expenditures of an 'average' or individual household of specified size, type, or mode of living. In this way it is possible to give appropriate representation to owner-occupied houses as well as rented houses and to include motor cars, television sets, and other major expenditures which relate to some households and not to others.

Consumer (retail) price indexes are sometimes loosely called 'cost of living indexes' and are thought to measure changes in the 'cost of living'. Neither the Consumer Price Index nor any other retail price index measures those changes in the cost of living that result directly from changes in the mode or level of living. Changes of that kind are matters for consideration apart from price indexes, but the change in prices of goods and services is a very important part of the change in the cost of living and this part is measured by consumer (retail) price indexes.

The Consumer Price Index covers a wide range of commodities and services arranged in the following five major groups:

- Food;
- Clothing and drapery;
- Housing;
- Household supplies and equipment;
- Miscellaneous.

These groups do not include every item of household spending. It is both impracticable and unnecessary for them to do so. Prices are collected regularly for specified quantities and qualities of a large and representative selection of commodities and services. Movements in the prices of these items, when combined in suitable proportions, provide a representative measure of price change as affecting a high proportion of the expenditure of wage-earner households.

#### **Structure—a chain of linked indexes**

Substantial changes have occurred in consumer usage and patterns of expenditure since the 1939-45 War. In order to keep the weighting pattern representative of current expenditures it has been necessary to construct indexes with additional items and changes in the weighting pattern at intervals, rather than on the basis of a list of items and set of weights that remained unchanged throughout the whole period covered. For the six State capital cities five series for short periods (namely, from the September quarter of 1948 to the June quarter of 1952, from the June quarter of 1952 to the June quarter of 1956, from the June quarter of 1956 to the March quarter of 1960, from the March quarter of 1960 to the December quarter of 1963, and from the December quarter of 1963 onwards) have therefore been constructed and linked to form a continuous retail price index series known as the Consumer Price Index. (For information regarding these links for Canberra see *Labour Report* No. 52, 1965 and 1966.)

During each period between links the items and weighting remained unchanged. At times of linking the weighting pattern was altered, and new items (mainly ones that had become significant in household expenditure) were introduced. Under this method, in effect, average percentage price movements are assessed on one pattern up to the time of the link and on another pattern thereafter. The process of linking ensures that the series reflects only price variations and not differences in cost of the old and new lists of items. The introduction of new items and weights by linking does not, of itself, raise or lower the level of the index.

### **Tabular statements of Retail Price Index numbers**

#### **Consumer Price Index**

The index has been compiled for each quarter from September quarter 1948 and for each year from 1948-49. 'All Groups' index numbers and 'Group' index numbers for each of the five major groups are compiled and published regularly for the six State capital cities separately and combined and for Canberra. The reference base for each of these indexes is: year 1952-53 = 100.0. Figures

appearing after the decimal point possess little significance for general statistical purposes. They are inserted to avoid distortions that would occur in rounding off the figures to the nearest whole number.

Index numbers for each quarter are first issued in mimeographed statistical bulletins available from the Commonwealth Statistician about three weeks after the end of the quarter. These bulletins contain comment on the index and on significant price movements in that quarter. Tables showing index numbers for preceding quarters and years are presented.

The following table shows Consumer Price Index Numbers (Total all groups) for the six State capital cities separately and combined and for Canberra, for periods from the year 1950-51.

**CONSUMER PRICE INDEX: ALL GROUPS INDEX NUMBERS**  
**SIX STATE CAPITAL CITIES AND CANBERRA, YEARS 1950-51 TO 1966-67 AND QUARTERS**  
**MARCH 1965 TO DECEMBER 1967**

(Base of each index: year 1952-53 = 100.0)(a)

The separate city indexes measure price movements within each city individually. They do not compare price levels as between cities.

State Capital Cities—separately and combined										
Period	Six State Capital Cities(b)			Sydney	Mel- bourne	Bris- bane	Adel- aide	Perth	Hobart	Can- berra
Year—										
1950-51 . . .	74.6	74.5	74.6	75.1	74.7	74.4	73.3	74.0		
1951-52 . . .	91.4	91.9	91.0	91.8	91.4	90.4	90.4	91.1		
1952-53 . . .	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		
1953-54 . . .	102.0	101.6	102.0	102.0	102.3	103.0	105.0	102.9		
1954-55 . . .	102.6	102.3	102.0	102.9	103.5	105.2	104.9	104.2		
1955-56 . . .	106.9	105.7	108.1	106.3	106.9	107.9	110.2	107.8		
1956-57 . . .	113.1	112.9	114.0	112.0	111.1	112.9	116.9	113.3		
1957-58 . . .	114.2	114.5	114.4	114.4	111.9	113.6	117.0	114.0		
1958-59 . . .	116.0	115.3	116.6	118.2	114.5	114.7	118.7	115.4		
1959-60 . . .	118.9	117.8	120.0	121.2	118.0	116.9	120.8	117.8		
1960-61 . . .	123.8	122.1	125.9	125.4	122.9	121.2	127.5	121.4		
1961-62 . . .	124.3	122.6	126.3	127.3	122.5	121.6	128.1	123.1		
1962-63 . . .	124.5	123.2	126.2	127.7	122.1	122.2	128.0	123.4		
1963-64 . . .	125.7	124.5	127.1	129.0	123.5	123.8	129.4	124.3		
1964-65 . . .	130.4	128.8	132.2	133.9	128.6	127.6	133.6	128.1		
1965-66 . . .	135.2	133.1	137.1	140.4	132.7	132.5	138.3	131.9		
1966-67 . . .	138.8	136.3	140.7	144.0	136.9	137.9	141.2	134.5		
Quarter—										
1965—March . .	130.9	129.1	132.9	134.6	128.9	128.0	134.0	128.4		
June . . .	132.1	130.3	134.4	135.7	129.9	129.3	135.2	129.5		
September . .	133.5	131.8	135.6	138.3	130.7	130.0	137.0	130.8		
December . . .	135.2	133.3	137.2	140.0	132.7	131.7	138.8	132.3		
1966—March . .	135.4	133.3	137.2	141.4	133.1	132.8	138.1	132.0		
June . . .	136.5	134.0	138.5	141.7	134.4	135.3	139.3	132.4		
September . .	137.1	134.7	139.1	142.5	135.0	136.3	139.2	133.0		
December . . .	138.4	136.2	140.1	143.6	136.5	136.9	140.1	134.0		
1967—March . .	138.9	136.4	140.7	144.4	137.2	138.3	142.0	134.6		
June . . .	140.6	137.8	142.9	145.5	138.9	140.1	143.3	136.2		
September . .	142.5	139.7	144.8	148.0	140.5	140.7	147.2	137.4		
December . . .	142.9	140.3	145.3	148.3	139.7	141.3	148.2	137.7		

(a) Figures appearing after the decimal point possess little significance for general statistical purposes. They are inserted to avoid distortions that would occur in rounding off the figures to the nearest whole number. (b) Weighted average.

The following table shows Consumer Price Index Group Index Numbers for the six State capital cities combined for periods from the year 1950-51.

**CONSUMER PRICE INDEX: GROUP INDEX NUMBERS**  
**WEIGHTED AVERAGE OF SIX STATE CAPITAL CITIES, YEARS 1950-51 TO 1966-67**  
**AND QUARTERS MARCH 1963 TO DECEMBER 1967**

(Base of each index: year 1952-53 = 100.0) (a)

<i>Period</i>	<i>Food</i>	<i>Clothing and drapery</i>	<i>Housing</i>	<i>Household supplies and equipment</i>	<i>Miscel- laneous</i>	<i>All groups</i>
<b>Year—</b>						
1950-51 . . . .	68.6	77.8	81.0	78.1	76.3	74.6
1951-52 . . . .	89.9	93.5	89.1	92.9	92.3	91.4
1952-53 . . . .	100.0	100.0	100.0	100.0	100.0	100.0
1953-54 . . . .	103.5	100.7	104.8	101.6	99.9	102.0
1954-55 . . . .	104.3	101.0	108.4	101.4	99.9	102.6
1955-56 . . . .	110.2	102.0	115.1	101.6	105.9	106.9
1956-57 . . . .	115.3	103.9	122.1	105.8	118.0	113.1
1957-58 . . . .	113.3	107.0	127.3	107.5	119.7	114.2
1958-59 . . . .	115.4	108.2	130.6	108.7	121.2	116.0
1959-60 . . . .	119.8	109.4	135.2	109.8	123.9	118.9
1960-61 . . . .	127.7	111.6	144.8	111.2	127.3	123.8
1961-62 . . . .	125.5	112.8	150.7	112.7	128.1	124.3
1962-63 . . . .	124.3	113.2	155.0	112.4	128.8	124.5
1963-64 . . . .	126.0	114.0	159.6	111.0	129.9	125.7
1964-65 . . . .	133.0	115.6	165.0	111.9	136.1	130.4
1965-66 . . . .	139.3	117.0	171.9	113.8	142.5	135.2
1966-67 . . . .	141.6	119.5	179.3	115.1	148.9	138.8
<b>Quarter—</b>						
1963—March . . .	124.1	113.2	155.3	112.1	129.0	124.5
June . . . .	124.5	113.4	156.8	112.4	129.2	124.9
September . . .	125.0	113.7	157.9	110.6	129.7	125.1
December . . . .	124.5	113.7	159.0	110.8	129.5	125.0
1964—March . . .	126.0	113.8	159.9	111.1	130.1	125.8
June . . . .	128.5	114.6	161.7	111.4	130.3	127.0
September . . .	130.7	115.0	163.0	110.7	133.1	128.5
December . . . .	132.1	115.4	164.4	111.3	136.5	130.0
1965—March . . .	133.1	115.8	165.3	112.5	137.3	130.9
June . . . .	135.9	116.3	167.2	112.9	137.3	132.1
September . . .	139.3	116.3	168.6	113.4	137.8	133.5
December . . . .	139.5	116.6	171.4	113.7	142.7	135.2
1966—March . . .	138.4	116.9	172.4	113.7	144.7	135.4
June . . . .	139.8	118.0	175.3	114.5	144.8	136.5
September . . .	139.7	118.2	176.6	114.7	146.9	137.1
December . . . .	140.7	119.3	178.4	115.1	148.9	138.4
1967—March . . .	141.6	119.7	179.5	115.0	149.3	138.9
June . . . .	144.2	120.8	182.5	115.6	150.4	140.6
September . . .	148.3	121.2	184.4	115.8	151.5	142.5
December . . . .	147.0	122.0	186.7	116.3	153.1	142.9

(a) Figures appearing after the decimal point possess little significance for general statistical purposes. They are inserted to avoid distortions that would occur in rounding off the figures to the nearest whole number.

The following table shows Consumer Price Index Group Index numbers for each State capital city and for Canberra for recent years and quarters.

**CONSUMER PRICE INDEX: GROUP INDEX NUMBERS  
SIX STATE CAPITAL CITIES AND CANBERRA, YEARS 1948-49 TO 1966-67  
AND QUARTERS MARCH TO DECEMBER 1967**

*(Base of each index: year 1952-53 = 100.0) (a)*

The index numbers hereunder are designed to measure movements in retail prices of specified groups of items for specified cities individually. They measure variations from time to time and not differences in price level as between cities.

City	Year						1967			
	1948-49	1952-53	1963-64	1964-65	1965-66	1966-67	March qtr	June qtr	Sept. qtr	Dec. qtr
<b>FOOD GROUP</b>										
Six State Capitals(b)	54.1	100.0	126.0	133.0	139.3	141.6	141.6	144.2	148.3	147.0
Sydney . . . . .	52.2	100.0	122.6	129.6	136.2	137.8	137.8	139.4	143.3	142.6
Melbourne . . . . .	54.9	100.0	127.2	133.9	139.5	140.9	140.9	144.4	149.5	148.4
Brisbane . . . . .	56.4	100.0	133.1	141.5	150.9	153.5	154.3	155.7	159.0	157.6
Adelaide . . . . .	56.1	100.0	129.1	136.6	141.2	145.5	145.2	149.0	152.8	148.8
Perth . . . . .	55.0	100.0	125.4	130.5	136.6	143.5	143.3	146.7	147.5	145.8
Hobart . . . . .	56.0	100.0	128.8	134.5	141.4	143.1	144.0	146.0	155.3	153.8
Canberra . . . . .	51.9	100.0	123.2	129.4	135.4	138.1	138.4	141.0	144.6	143.2
<b>CLOTHING AND DRAPERY GROUP</b>										
Six State Capitals(b)	58.4	100.0	114.0	115.6	117.0	119.5	119.7	120.8	121.2	122.0
Sydney . . . . .	58.0	100.0	112.5	114.2	115.6	118.2	118.4	119.5	119.9	120.7
Melbourne . . . . .	58.6	100.0	115.2	116.8	118.1	120.5	120.7	121.8	122.1	123.0
Brisbane . . . . .	59.2	100.0	117.8	119.5	121.0	123.7	123.8	125.1	125.6	126.6
Adelaide . . . . .	58.3	100.0	112.8	114.4	115.5	118.1	118.3	119.4	119.7	120.6
Perth . . . . .	59.6	100.0	112.8	114.1	115.4	117.9	118.1	119.2	119.6	120.3
Hobart . . . . .	58.0	100.0	115.1	116.7	117.9	120.3	120.4	121.7	122.1	123.0
Canberra . . . . .	57.8	100.0	111.5	113.1	114.4	116.9	117.0	118.3	118.6	119.6
<b>HOUSING GROUP</b>										
Six State Capitals(b)	72.5	100.0	159.6	165.0	171.9	179.3	179.5	182.5	184.4	186.7
Sydney . . . . .	74.2	100.0	160.1	166.6	172.3	180.9	180.8	185.0	186.8	188.9
Melbourne . . . . .	76.0	100.0	164.5	169.2	177.2	184.0	184.0	187.3	187.9	190.8
Brisbane . . . . .	67.1	100.0	145.2	149.0	158.3	162.8	163.2	164.2	171.0	171.8
Adelaide . . . . .	68.7	100.0	158.5	164.6	171.1	178.8	180.0	180.5	181.5	182.4
Perth . . . . .	62.7	100.0	155.9	160.0	165.6	173.7	174.5	177.5	179.6	183.3
Hobart . . . . .	70.3	100.0	174.0	180.8	185.9	191.4	192.4	194.2	194.6	198.5
Canberra . . . . .	70.9	100.0	162.6	164.4	166.9	169.4	169.3	169.3	168.2	170.2
<b>HOUSEHOLD SUPPLIES AND EQUIPMENT GROUP</b>										
Six State Capitals(b)	67.0	100.0	111.0	111.9	113.8	115.1	115.0	115.6	115.8	116.3
Sydney . . . . .	67.0	100.0	111.3	110.7	111.4	112.2	112.1	112.8	113.1	113.2
Melbourne . . . . .	66.1	100.0	112.6	115.2	118.7	120.3	120.0	120.6	120.9	122.0
Brisbane . . . . .	68.6	100.0	111.7	112.7	115.0	116.5	116.5	117.2	117.6	117.7
Adelaide . . . . .	69.5	100.0	104.4	104.9	106.2	107.1	107.1	107.3	107.5	107.3
Perth . . . . .	66.5	100.0	105.2	106.4	108.1	110.0	110.3	110.7	110.4	110.4
Hobart . . . . .	68.1	100.0	123.8	124.5	125.7	127.5	127.4	128.5	129.0	131.9
Canberra . . . . .	69.8	100.0	112.8	113.2	113.4	113.7	113.7	114.0	114.1	114.0
<b>MISCELLANEOUS GROUP</b>										
Six State Capitals(b)	66.6	100.0	129.9	136.1	142.5	148.9	149.3	150.4	151.5	153.1
Sydney . . . . .	67.7	100.0	130.0	135.1	140.4	145.6	146.2	146.7	148.0	150.1
Melbourne . . . . .	64.4	100.0	130.8	138.3	145.2	152.7	152.5	154.7	155.2	156.1
Brisbane . . . . .	69.2	100.0	135.2	140.9	148.7	155.8	156.0	156.9	159.4	161.0
Adelaide . . . . .	67.2	100.0	122.3	129.6	136.4	142.6	143.6	144.7	145.3	146.2
Perth . . . . .	67.7	100.0	128.5	134.2	142.1	149.1	150.2	151.0	151.4	154.4
Hobart . . . . .	63.1	100.0	128.2	133.5	140.3	145.1	146.9	147.3	149.7	151.9
Canberra . . . . .	69.7	100.0	124.1	129.3	134.8	138.9	139.3	141.0	141.2	143.2

(a) Figures appearing after the decimal point possess little significance for general statistical purposes. They are inserted to avoid distortions that would occur in rounding off the figures to the nearest whole number. (b) Weighted average.

## Retail Price Index Numbers, 1901 to 1967

The index numbers shown below are presented as a continuous series, but they give only a broad indication of long-term trends in retail price levels. They are derived by linking a number of indexes that differ greatly in scope. The successive indexes used are: from 1901 to 1914, the 'A' Series Retail Price Index; from 1914 to 1946-47, the 'C' Series Retail Price Index; from 1946-47 to 1948-49, a composite of Consumer Price Index Housing Group (partly estimated) and 'C' Series Index excluding Rent; and from 1948-49 onwards, the Consumer Price Index.

RETAIL PRICE INDEX NUMBERS: SIX STATE CAPITAL CITIES  
COMBINED, 1901 TO 1967

(Base: year 1911 = 100)

Year	Index number	Year	Index number	Year	Index number
1901	88	1923	166	1945	187
1902	93	1924	164	1946	190
1903	91	1925	165	1947	198
1904	86	1926	168	1948	218
1905	90	1927	166	1949	240
1906	90	1928	167	1950	262
1907	90	1929	171	1951	313
1908	95	1930	162	1952	367
1909	95	1931	145	1953	383
1910	97	1932	138	1954	386
1911	100	1933	133	1955	394
1912	110	1934	136	1956	419
1913	110	1935	138	1957	429
1914(a)	114	1936	141	1958	435
1915(a)	130	1937	145	1959	443
1916(a)	132	1938	149	1960	459
1917(a)	141	1939	153	1961	471
1918(a)	150	1940	159	1962	469
1919(a)	170	1941	167	1963	472
1920(a)	193	1942	181	1964	483
1921(a)	168	1943	188	1965	502
1922(a)	162	1944	187	1966	517
				1967	534

(a) November.

## International comparisons

The following table shows index numbers of consumer (retail) prices for various countries. Except where otherwise noted, the year 1958 is taken as base (= 100). The index numbers show fluctuations in prices in each country, and do not measure relative price levels as between countries.

INDEX NUMBERS OF CONSUMER (RETAIL) PRICES IN VARIOUS COUNTRIES  
ALL GROUPS INDEXES, 1958 TO 1967(Source: *Monthly Bulletin of Statistics* of the Statistical Office of the United Nations)

(Base of each index: year 1958 = 100)

Period	Argentina (Buenos Aires)	Australia (a)	Belgium	Brazil (Sao Paulo)	Canada	France (b)	Germany, Federal Republic	India	Indonesia (Djaka- rta) (c)	Ireland	Italy
1958	100	100	100	100	100	100	100	100	n.a.	100	100
1959	214	102	101	137	101	106	101	104	n.a.	100	100
1960	272	-106-	102	185	102	110	102	106	13	100	102
1961	309	108	103	256	103	114	105	108	17	103	104
1962	396	108	104	390	104	119	108	112	46	108	109
1963	-491-	-109-	106	675	106	105	111	115	100	110	117
1964	600	111	111	1,266	108	108	114	131	205	117	124
1965	771	116	115	2,048	111	111	118	143	830	123	129
1966	1,017	119	120	3,003	115	114	122	159	9,502	127	132
1967— qtr—											
March	1,184	121	122	3,553	117	116	123	171	20,719	129	136
June	1,250	122	123	3,821	118	117	124	177	22,789	131	137
Sept.	1,359	124	124	3,998	120	117	123	184	25,440	131	138
Dec.		124	125						33,501	132	

For footnotes see next page.

**INDEX NUMBERS OF CONSUMER (RETAIL) PRICES IN VARIOUS COUNTRIES**  
**ALL GROUPS INDEXES, 1958 TO 1967—continued**

<i>Period</i>	<i>Japan (d)</i>	<i>Nether- lands</i>	<i>New Zealand</i>	<i>Norway</i>	<i>Pakistan (Kara- chi)</i>	<i>Philip- pines (Manila)</i>	<i>Republic of South Africa (e)</i>	<i>Sweden</i>	<i>Switzer- land (f)</i>	<i>United King- dom</i>	<i>United States of America</i>
1958 .	100	100	100	100	100	100	-100-	100	100	100	100
1959 .	101	102	104	-102-	97	99	101	101	99	101	101
1960 .	105	103	105	102	103	103	103	105	101	102	102
1961 .	110	105	106	105	-105-	105	105	107	103	105	103
1962 .	118	108	109	111	105	111	106	112	107	-110-	105
1963 .	127	-113-	111	114	107	117	107	116	111	112	106
1964 .	104	119	115	120	111	127	110	119	114	115	-107-
1965 .	111	126	-119-	125	117	133	114	126	118	121	109
1966 .	116	133	123	129	126	137	118	134	124	126	112
1967—											
qtr—											
March	117	134	127	132	133	145	121	138	102	128	114
June .	120	139	130	134	135	140	122	139	103	129	115
Sept. .	120	138	131	136	136	146	123	140	104	128	116
Dec. .									105		117

(a) Consumer Price Index converted to base 1958 = 100 by Commonwealth Statistician. (b) Beginning 1963, new index—base: 1962 = 100. Before 1963, index for Paris. (c) Base: 1963 = 100. (d) Beginning 1964, base: 1963 = 100. (e) Index for Europeans only. (f) Beginning October 1966, new index—base: 1966 = 100.

NOTE. Symbol — on each side of an index number (e.g. -95-) indicates that two series have been linked during that period. Symbol — between two index numbers indicates that it is not possible to link two series (because of change in scope, etc.) and therefore the index numbers are not comparable with each other even though they are shown on the same base period.

## WHOLESALE PRICES AND PRICE INDEXES

Two indexes of wholesale prices of basic materials have been compiled by the Commonwealth Bureau of Census and Statistics. These are:

- (i) the Melbourne Wholesale Price Index;
- (ii) the Wholesale Price (Basic Materials and Foodstuffs) Index.

Work is proceeding on the preparation of new series of wholesale price index numbers relating to materials used and articles produced by sectors of industry. The first of these new series will relate to materials used in the building industry and in manufacturing industry. To a considerable extent, these first series will constitute a currently representative replacement for the present Basic Materials and Foodstuffs Wholesale Price Index. In the interim the existing index will continue to be compiled and published mainly to meet the needs of those who require it for special purposes. The groups of the existing index relate primarily to a commodity type classification and have never purported to represent the materials used or articles produced by defined sectors of industry.

A special purpose index 'Wholesale Price Index of Electrical Installation Materials' is also published by the Bureau (see page 270).

A brief note on the Melbourne Wholesale Price Index, which is now obsolete, is given on page 270. The Wholesale Price (Basic Materials and Foodstuffs) Index is compiled monthly and extends back to 1928.

## Wholesale Price (Basic Materials and Foodstuffs) Index

### Price quotations

The prices used in the index have, in the main, been obtained directly from manufacturers and merchants, and, with a few important exceptions, from Melbourne sources. Apart from locally-produced building materials and one or two minor commodities, however, the price movements may be taken as representative of variations in wholesale prices of the selected items in most Australian markets.

Commodities in the index are priced in their primary or basic form wherever possible and in respect of imported materials as nearly as may be at the point where they first make effective impact on the local price structure. Thus the prices of imported goods are not taken at the time of import but rather on an ex-bond (or into factory) basis. Broadly, where home-consumption prices exist for local products, they have been used in this index. During the year 1950-51 wool for local manufacture was subsidised, and the home-consumption price for wool was used to calculate the index numbers shown in the table on pages 269-70.

## Commodities and grouping

For purposes of this index, 'basic' materials (as opposed to certain of the foodstuffs) are commodities in the primary or basic forms in which they first enter into productive processes carried out in Australia. The list of items is divided into seven main groups, each of which is sub-divided into goods which are mainly imported and goods which are mainly home-produced. The percentage of the total aggregate in 1966-67 contributed by each group was as follows: metals and coal, 15.82; oils, fats and waxes, 7.50; textiles, 2.85; chemicals, 4.04; rubber and hides, 1.48; building materials, 11.38; foodstuffs and tobacco, 56.93. Goods principally imported comprised 21.83 per cent of the total aggregate in 1966-67, and goods principally home-produced 78.17. A full list of the commodities and the quantity-multipliers (weights) is published in *Labour Report* No. 52, 1965 and 1966, page 39.

## Method of construction

The index is constructed on the simple aggregative fixed-weights formula. The weights (quantity-multipliers) are based on estimates of the average annual consumption of the commodities in Australia during the period 1928-29 to 1934-35 inclusive. The validity of the weighting and the representativeness of the index have become increasingly affected by changes in usage and in industrial structure.

## Index numbers

Index numbers for each group of commodities, and for all groups combined, for the index of wholesale prices of basic materials and foodstuffs are given in the following table. Current index numbers on the base: average of three years ended June 1939 = 100 are published monthly in the mimeographed statement *Wholesale Price (Basic Materials and Foodstuffs) Index* and in the *Monthly Review of Business Statistics*. A table showing index numbers computed to the base: 1928 = 100 is published in the *Labour Report*.

WHOLESALE PRICE (BASIC MATERIALS AND FOODSTUFFS) INDEX NUMBERS  
YEARS 1928-29 TO 1966-67 AND MONTHS 1967-68

(Base of each index: average of 3 years ended June 1939 = 100)

Period	Basic materials							Basic materials and foodstuffs			
	Metals and coal	Oils, fats and waxes	Textiles	Chemicals	Rubber and hides	Building materials	Total	Foodstuffs and tobacco (a)	Goods principally imported (b)	Goods principally home-produced (a)	Total, all groups (a)
1928-29 . . . . .	127	106	129	121	115	95	114	107	91	118	110
1929-30 . . . . .	126	111	99	116	87	94	107	110	94	118	111
1930-31 . . . . .	116	117	80	117	73	96	105	91	100	99	99
1931-32 . . . . .	108	113	77	119	74	95	101	86	100	92	95
1932-33 . . . . .	104	109	75	119	69	95	98	80	97	87	90
1933-34 . . . . .	103	84	102	111	80	94	92	84	89	89	90
1934-35 . . . . .	97	90	78	102	77	93	89	87	92	89	90
1935-36 . . . . .	92	95	100	99	88	93	90	92	95	92	93
1936-37 . . . . .	96	99	118	99	111	99	99	98	99	98	99
1937-38 . . . . .	101	101	100	100	97	104	102	102	102	101	101
1938-39 . . . . .	103	100	82	101	92	97	99	101	99	100	100
1939-40 . . . . .	105	115	104	107	116	108	109	99	111	101	104
1940-41 . . . . .	107	137	111	124	126	128	122	107	133	106	114
1941-42 . . . . .	117	151	118	137	135	135	133	116	153	112	124
1942-43 . . . . .	129	167	147	142	138	163	149	126	176	120	136
1943-44 . . . . .	131	170	150	143	140	174	153	130	182	122	140
1944-45 . . . . .	131	168	152	143	140	175	152	132	182	124	141
1945-46 . . . . .	130	156	152	142	140	177	149	136	178	127	142
1946-47 . . . . .	132	145	191	140	131	180	149	139	177	130	144
1947-48 . . . . .	146	161	283	148	126	190	166	154	192	145	159
1948-49 . . . . .	185	173	342	159	130	198	188	174	201	172	180
1949-50 . . . . .	214	184	434	187	143	225	214	196	223	196	204
1950-51 . . . . .	256	196	641	242	292	268	264	229	256	240	244
1951-52 . . . . .	343	220	577	314	298	370	321	276	288	300	297
1952-53 . . . . .	392	234	607	350	224	404	350	293	292	331	319

For footnotes see next page.



**WHOLESALE PRICE (BASIC MATERIALS AND FOODSTUFFS) INDEX NUMBERS**  
YEARS 1928-29 TO 1966-67 AND MONTHS 1967-68—continued

(Base of each index: average of 3 years ended June 1939 = 100)

Period	Basic materials						Basic materials and foodstuffs				
	Metals and coal	Oils, fats and waxes	Textiles	Chemicals	Rubber and hides	Building materials	Total	Food-stuffs and tobacco (a)	Goods principally imported (b)	Goods principally home produced (a)	Total, all groups (a)
1953-54 . . . . .	388	222	566	323	191	363	332	308	271	339	319
1954-55 . . . . .	391	214	510	314	246	372	330	315	277	340	322
1955-56 . . . . .	404	220	456	317	328	415	345	325	292	352	334
1956-57 . . . . .	409	241	520	344	302	463	367	324	311	357	344
1957-58 . . . . .	398	238	437	349	280	453	355	325	301	355	339
1958-59 . . . . .	392	231	362	327	293	423	340	332	283	358	336
1959-60 . . . . .	395	225	403	331	379	431	347	348	281	375	348
1960-61 . . . . .	399	222	387	331	341	439	346	372	278	394	360
1961-62 . . . . .	392	212	400	333	302	439	340	332	270	363	336
1962-63 . . . . .	388	209	432	317	262	439	336	342	272	368	340
1963-64 . . . . .	383	207	484	286	221	473	339	352	275	376	346
1964-65 . . . . .	391	207	427	286	242	503	345	364	277	388	355
1965-66 . . . . .	390	218	432	325	306	507	355	385	280	409	371
1966-67 . . . . .	396	220	419	381	281	511	362	401	283	425	383
1967-68—											
July . . . . .	394	220	400	388	227	509	358	427	284	442	395
August . . . . .	394	220	381	398	221	510	358	432	284	446	398
September . . . . .	394	226	380	398	223	510	360	422	287	438	393
October . . . . .	394	226	380	398	232	511	360	397	287	419	380
November . . . . .	p395	225	387	398	224	511	p360	396	288	p418	p380
December . . . . .	p398	225	392	398	204	511	p360	396	287	p419	p380
January . . . . .	p398	225	393	398	205	511	p361	p396	p287	p419	p380
February . . . . .	p398	227	p399	398	207	513	p362	p396	p287	p420	p380

(a) Excludes potatoes and onions from 1936-37. (b) Represents only such imported commodities as are included in the Wholesale Price Index and does not measure changes in the prices of all imports.

### Melbourne Wholesale Price Index

An index of Melbourne wholesale prices was first compiled in 1912. It related chiefly to basic materials and foods weighted in accordance with consumption in the years immediately preceding that year. Neither the list of items nor the weighting was varied, except for some changes in the building materials group in 1949. The series has some historical significance as a measure of changes, since the year 1861, in the prices of its component items combined in the proportions in which they were in common use about the year 1910. A description of the index and a list of the commodities included in it were published in *Labour Report* No. 38, 1949, pages 43-5. Index numbers up to the year 1961, the last period for which the index was compiled, were published in *Year Book* No. 48, 1962.

### Wholesale Price Index of Electrical Installation Materials

This special purpose index was introduced in 1964, and index numbers have been published at quarterly intervals from August 1959 onwards. In addition to its use in connection with the Bureau's constant price estimates in the national accounting field, the index has a direct value as a measure of changes in aggregate cost of materials used in an important part of the building industry (other than house-building).

#### Commodities and grouping

The items in this index have been selected as representative of materials used in electrical installation in structures such as hospitals, schools, factories and multi-storied commercial buildings and flats. These items are divided into three main groups for which separate indexes are compiled in addition to the All Groups index. The combination of materials selected is fixed as to quantity and quality. A list of the components of the index is set out opposite with the percentage contribution of each to the All Groups index in the reference base year 1959-60.

**Price quotations**

The items are priced as at the middle of the month for which index numbers are published. The basis of pricing is the price to electrical contractors, delivered on site or into store, metropolitan area Sydney and Melbourne. The price series used relate to specific standards for each item and in some cases are combinations of prices for different makes, types, etc. The units of quantity specified as the basis for collecting prices are representative lots normally purchased by electrical contractors, inclusive of quantity discounts and packing and quantity extras, etc.

**Method of construction**

The index is a fixed-weights index with the reference base: year 1959-60 = 100. In general, the weights were derived from information relating to the values of materials used in selected representative projects in Sydney and Melbourne during the three years 1960-61 to 1962-63. The projects selected for this purpose had a minimum electrical materials and labour content of \$10,000. Selected representative items carry the weights of similar items not directly priced. The index is compiled by the method known as 'weighted average of price relatives'. Each quarter, base period percentage value weights are applied to indexes of price movement relative to 1959-60.

**WHOLESALE PRICE INDEX OF ELECTRICAL INSTALLATION MATERIALS  
COMPOSITION AND WEIGHTING PATTERN AS AT REFERENCE BASE  
YEAR 1959-1960**

<i>Component</i>		<i>Percentage contribution to All groups index</i>	
1. CONDUCTORS GROUP			40.00
	Mains—		
	Insulated cables . . . . .	14.79	
	Glands . . . . .	0.70	
	Bare copper strand . . . . .	0.50	
	Copper bus-bar . . . . .	3.50	
			19.49
	Circuits—		
	Insulated cables and wire . . . . .	19.08	
	Bare copper strand . . . . .	1.43	
			20.51
2. CONDUIT AND ACCESSORIES GROUP			25.00
	Conduit and ducting—		
	Metal conduit . . . . .	10.79	
	Metal and plastic ducting . . . . .	9.46	
			20.25
	Accessories—		
	Metal and plastic junction boxes . . . . .	2.59	
	Metal and plastic accessories—other . . . . .	2.16	
			4.75
3. SWITCH-BOARD AND SWITCH-GEAR MATERIAL GROUP			35.00
	Bakelite accessories—		
	Mounting blocks . . . . .	0.65	
	Switches . . . . .	1.40	
	Terminal boxes . . . . .	0.10	
			2.15
	Fluorescent components and lamps—		
	Fluorescent tubes and starters . . . . .	1.37	
	Incandescent lamps . . . . .	0.58	
			1.95
	Iron clad accessories—		
	Switch plug . . . . .	1.67	
	Plug top . . . . .	0.64	
	Other accessories . . . . .	1.30	
			3.61
	Switch-board accessories' components—		
	Mild steel . . . . .	3.07	
	Aluminium bar . . . . .	0.86	
	Contactors . . . . .	4.90	
	Circuit breakers . . . . .	11.00	
	Other accessories . . . . .	7.46	
			27.29
	<b>Total . . . . .</b>		<b>100.00</b>

**Index numbers**

Index numbers for each group of items and for all groups combined for the index of wholesale prices of electrical installation materials are given in the following table. Current index numbers are published quarterly in the mimeographed statement *Wholesale Prices—Price Index of Electrical Installation Materials*.

**WHOLESALE PRICE INDEX OF ELECTRICAL INSTALLATION MATERIALS  
GROUP INDEX NUMBERS, YEARS 1959-60 TO 1966-67 AND  
MAY 1962 TO FEBRUARY 1968**

*(Base of each index : year 1959-60 = 100.0) (a)*

<i>Period</i>	<i>Conductors</i>	<i>Conduit and accessories</i>	<i>Switch-board and switch-gear material</i>	<i>All groups</i>
<b>Year—</b>				
1959-60 . . . . .	100.0	100.0	100.0	100.0
1960-61 . . . . .	99.5	102.3	100.9	100.7
1961-62 . . . . .	98.7	102.8	99.8	100.1
1962-63 . . . . .	96.8	103.6	100.5	99.8
1963-64 . . . . .	93.2	103.7	100.8	98.5
1964-65 . . . . .	110.6	104.6	105.2	107.2
1965-66 . . . . .	105.8	104.2	106.6	105.7
1966-67 . . . . .	120.2	105.8	109.2	112.8
 1961-62—May . . . . .	98.7	103.6	99.9	100.4
1962-63—August . . . . .	97.9	103.6	100.1	100.1
November . . . . .	97.9	103.6	100.6	100.3
February . . . . .	97.9	103.6	100.6	100.3
May . . . . .	93.4	103.6	100.7	98.5
1963-64—August . . . . .	93.3	103.4	100.8	98.5
November . . . . .	93.3	103.8	100.8	98.6
February . . . . .	93.5	103.8	100.8	98.7
May . . . . .	92.6	103.8	100.9	98.3
1964-65—August . . . . .	96.4	104.4	103.8	101.0
November . . . . .	103.3	104.4	104.7	104.0
February . . . . .	121.3	104.4	106.0	111.7
May . . . . .	121.3	105.1	106.3	112.0
1965-66—August . . . . .	104.2	105.3	106.3	105.2
November . . . . .	104.3	104.1	106.3	105.0
February . . . . .	108.3	103.7	106.9	106.6
May . . . . .	106.5	103.8	106.9	106.0
1966-67—August . . . . .	124.1	104.5	106.9	113.2
November . . . . .	122.6	106.2	109.8	114.0
February . . . . .	122.6	106.3	110.1	114.2
May . . . . .	111.3	106.3	110.0	109.6
1967-68—August . . . . .	111.5	106.3	110.3	109.8
November . . . . .	123.1	105.3	109.9	114.0
February . . . . .	127.7	105.7	110.5	116.1

(a) The figures appearing after the decimal points are inserted to avoid the distortions that would sometimes occur in rounding off the figures to the nearest whole number.

## EXPORT PRICES AND PRICE INDEXES

### Previous export price indexes

#### 1901 to 1917

An annual index of export prices has been published by the Bureau since its inception. The first index was compiled annually for the years 1901 to 1916-17. The method of computation was to select all articles of export which were recorded by units of quantity, and to apply to the quantities of these export commodities actually exported during any year the average price per unit ruling in the year 1901 (adopted as the base year). The 'total value' so obtained was divided into the total recorded value of these exports for the year concerned and the result (multiplied by 1,000) was the export price index number for that year.

**1918 to 1930**

The method was changed in 1918. Weights for all principal exports were calculated, based on the average quantities of exports for the nineteen and a half years from 1 January 1897 to 30 June 1916. To these weights were applied the 'average unit export values' of each export in successive years, and a weighted aggregative index of 'price' variations was derived. This index was published for the years 1897 to 1929-30. Particulars of this index were last published in Year Book No. 24, page 147.

**1928 to 1962**

After the 1914-18 War the relative importance of different exports changed considerably, and the pattern of exports varied considerably from year to year. For these reasons two new series of monthly export price indexes—one using fixed weights and the other using changing weights—were published in 1937, compiled back to 1928. The data on which both series were based differed from those used in the previous series of annual index numbers. The most important change was the use of actual (or calculated) export prices in place of the 'unit values' declared at the Customs. Brief notes on these two indexes are given below. A full description of both indexes was last published in Year Book No. 48, 1962, pages 500-4.

*The Fixed Weights Index.* This was a weighted aggregative index of price variations. It was compiled back to 1928, with that year taken as base. In later years it was published on the base: average of three years ended June 1939 = 100. The original weights (used for the period 1928 to 1936) were the average annual exports (production in the case of gold) during the five years 1928-29 to 1932-33. From July 1936 the weights were revised and were based on average annual exports (production in the case of gold) during the three years 1933-34 to 1935-36. This index was published from 1937 until July 1962, after which it was replaced by the current Export Price Index described below.

*The Changing Weights Index.* This index was designed for shorter period comparisons—from one or more months of the current year to the corresponding months of the previous year. In computing these index numbers the 'quantity multipliers' were the quantities actually exported (sold, in some cases) in the months (or periods) to which the index numbers related. This index was discontinued in 1962.

### **The current Export Price Index**

The current Export Price Index was first published in October 1962, but index numbers were compiled back to July 1959. The reference base of this index is: year 1959-60 = 100. This index is a fixed-weights index, and its purpose (as was that of the previous fixed-weights index) is to provide comparisons monthly, over a limited number of years, of the level of export prices of the selected items, making no allowance for variations in quantities exported. The index numbers are thus measures of price change only. The price series used in the index relate to specified standards for each commodity and in most cases are combinations of prices for a number of representative grades, types, etc. For some commodities price movements in the predominant market, or markets, are used, while for other commodities average realisations in all export markets are used. As nearly as possible, prices used are on the basis f.o.b. at the main Australian ports of export. The index is compiled by the method known as 'weighted average of price relatives'.

**Composition and weighting**

There are twenty-nine items in the current index compared with twenty items in the previous index. These twenty-nine items have constituted approximately 83 per cent of the total value of Australian exports in recent years. The weights for the current index are based on average annual values of exports during the five years 1956-57 to 1960-61.

The following table sets out a list of the items, and groups of items, in the index, together with the percentage contribution of each item and group to the All Groups index in the reference base year 1959-60. The weights used for some of the items are adjusted to cover some related commodities which are not priced directly. The most important instances of this are wool, which includes wool exported on sheepskins, and copper, zinc, lead and silver, which include the estimated metallic content of ores and concentrates exported. In the previous index the weight for gold was derived from production instead of export figures. For the period 1956-57 to 1960-61 production and exports of gold were similar, and therefore in the current index the weight for gold (as for the other items) is based on average annual exports during the period.

**EXPORT PRICE INDEX**  
**LIST OF ITEMS AND PERCENTAGE CONTRIBUTION OF ITEMS AND GROUPS TO ALL**  
**GROUPS INDEX IN 1959-60**

<i>Group and item</i>	<i>Percentage contribution to All groups index in 1959-60</i>	<i>Group and item</i>	<i>Percentage contribution to All groups index in 1959-60</i>
<i>Wool</i> . . . . .	50.73	<i>Canned—Pineapples</i> . . . . .	0.20
<i>Meats—</i>		<i>Apricots</i> . . . . .	0.11
<i>Beef</i> . . . . .	6.71	<i>Peaches</i> . . . . .	0.37
<i>Lamb</i> . . . . .	0.76	<i>Pears</i> . . . . .	0.68
<i>Mutton</i> . . . . .	0.59	<i>Total, dried and canned fruits.</i> . . . .	2.54
<i>Canned—Beef</i> . . . . .	1.65	<i>Sugar</i> . . . . .	3.99
<i>Mutton</i> . . . . .	0.21	<i>Hides and tallow—</i>	
<i>Total, meats</i> . . . . .	9.92	<i>Cattle hides</i> . . . . .	0.72
<i>Dairy produce—</i>		<i>Tallow.</i> . . . .	0.54
<i>Processed milk</i> . . . . .	1.36	<i>Total, hides and tallow</i> . . . . .	1.26
<i>Butter</i> . . . . .	4.02	<i>Metals and coal—</i>	
<i>Cheese</i> . . . . .	0.64	<i>Coal</i> . . . . .	0.63
<i>Eggs</i> . . . . .	0.47	<i>Iron and steel</i> . . . . .	3.48
<i>Total, dairy produce</i> . . . . .	6.49	<i>Copper</i> . . . . .	1.57
<i>Cereals—</i>		<i>Zinc</i> . . . . .	1.23
<i>Wheat and flour</i> . . . . .	10.11	<i>Lead</i> . . . . .	2.97
<i>Barley</i> . . . . .	1.77	<i>Silver</i> . . . . .	0.66
<i>Oats</i> . . . . .	0.66	<i>Total, metals and coal</i> . . . . .	10.54
<i>Total, cereals</i> . . . . .	12.54	<i>Gold</i> . . . . .	1.99
<i>Dried and canned fruits—</i>		<i>Total</i> . . . . .	100.00
<i>Dried—Sultanas</i> . . . . .	1.06		
<i>Currants</i> . . . . .	0.12		

**Index numbers**

Index numbers for each of the groups and 'All groups' are shown in the table on page 275. The yearly index numbers are simple averages of the twelve monthly index numbers in each year.

**Link between current and previous indexes**

In order to show approximate movements in export prices over a long period, the 'All groups' indexes of the previous and current series have been linked together at the year 1959-60, the earliest year for which the new index has been compiled. The table on page 276 shows this linked series and a long-term price index for wool, which is the most important single component in the movement of the 'All groups' index.

**EXPORT PRICE INDEX NUMBERS**  
**YEARS 1959-60 TO 1966-67 AND MONTHS JULY 1964 TO FEBRUARY 1968**  
*(Base of each index: year 1959-60 = 100)*

<i>Period</i>	<i>Wool</i>	<i>Meats</i>	<i>Dairy produce</i>	<i>Cereals</i>	<i>Dried and canned fruits</i>	<i>Sugar</i>	<i>Hides and tallow</i>	<i>Metals and coal</i>	<i>Gold</i>	<i>All groups</i>
1959-60 .	100	100	100	100	100	100	100	100	100	100
1960-61 .	92	104	82	99	99	101	92	97	100	95
1961-62 .	97	100	81	106	95	91	84	91	100	96
1962-63 .	104	101	88	107	90	107	72	89	100	101
1963-64 .	120	105	93	107	98	175	73	101	100	114
1964-65 .	102	110	94	107	100	100	91	123	101	105
1965-66 .	107	120	86	107	102	84	107	122	101	107
1966-67 .	103	124	84	114	101	67	89	117	101	105
1964-65—										
July .	112	109	92	109	101	139	81	114	100	110
August .	112	110	92	110	100	122	83	117	100	110
September .	110	109	92	111	100	113	85	119	101	109
October .	108	110	93	112	100	104	87	123	101	109
November .	107	110	95	110	100	102	89	126	101	108
December .	101	111	95	104	100	94	90	126	101	104
January .	98	112	95	106	100	89	90	124	101	102
February .	99	111	95	104	100	86	93	128	101	103
March .	94	110	95	104	100	85	94	129	101	101
April .	94	111	96	104	100	83	98	127	101	101
May .	96	112	93	104	100	91	100	122	101	101
June .	96	110	91	104	100	91	99	117	101	100
1965-66—										
July .	98	114	90	104	102	101	100	117	101	102
August .	98	115	89	104	102	107	102	117	101	102
September .	99	116	89	105	101	100	101	118	101	103
October .	105	114	88	106	102	93	99	120	100	106
November .	108	116	88	106	101	85	100	120	100	107
December .	108	117	87	107	102	82	100	125	100	108
January .	108	118	85	109	102	75	109	125	100	108
February .	108	121	84	109	102	81	121	129	100	109
March .	111	126	84	107	101	73	122	126	100	110
April .	113	130	84	110	101	72	119	129	101	112
May .	113	130	84	110	101	70	111	119	101	111
June .	113	127	84	111	101	69	105	124	101	111
1966-67—										
July .	113	121	84	113	102	69	105	122	101	110
August .	111	117	84	113	102	100	105	122	101	110
September .	107	120	84	115	102	86	96	117	101	107
October .	102	120	84	113	102	73	88	116	101	104
November .	102	119	84	112	102	63	88	116	101	104
December .	102	121	84	114	102	64	92	116	101	104
January .	100	127	84	114	100	55	92	114	101	103
February .	102	129	84	114	100	62	86	115	101	105
March .	100	128	84	113	100	60	85	116	101	103
April .	100	128	85	113	100	56	80	115	101	103
May .	102	128	85	115	100	57	77	113	101	104
June .	100	126	85	115	100	59	76	116	101	103
1967-68—										
July .	98	p127	85	113	p99	59	72	116	101	p102
August .	92	p127	85	112	p99	61	70	117	101	p99
September .	92	p126	85	111	p99	73	69	117	101	p99
October .	92	p128	85	112	p98	122	68	117	101	p101
November .	92	p127	82	108	p99	p72	65	116	101	p98
December .	94	p121	75	106	p98	p63	65	123	101	p99
January .	94	p126	75	105	p97	p60	65	119	101	p98
February .	p98	p124	75	106	p90	p62	66	122	101	p101

## EXPORT PRICE INDEX NUMBERS—LINKED SERIES 1936-37 TO 1966-67

(Base of each index: year 1959-60 = 100)

Period	Wool	All groups	Period	Wool	All groups
1936-37 . . . . .	29	30	1952-53 . . . . .	145	128
1937-38 . . . . .	23	27	1953-54 . . . . .	145	125
1938-39 . . . . .	19	22	1954-55 . . . . .	127	114
1939-40 . . . . .	23	26	1955-56 . . . . .	109	105
1940-41 . . . . .	24	28	1956-57 . . . . .	136	117
1941-42 . . . . .	24	28	1957-58 . . . . .	111	102
1942-43 . . . . .	28	30	1958-59 . . . . .	85	90
1943-44 . . . . .	28	31	1959-60 . . . . .	100	100
1944-45 . . . . .	28	34	1960-61 . . . . .	92	95
1945-46 . . . . .	28	39	1961-62 . . . . .	97	96
1946-47 . . . . .	41	54	1962-63 . . . . .	104	101
1947-48 . . . . .	68	75	1963-64 . . . . .	120	114
1948-49 . . . . .	86	88	1964-65 . . . . .	102	105
1949-50 . . . . .	111	101	1965-66 . . . . .	107	107
1950-51 . . . . .	235	173	1966-67 . . . . .	103	105
1951-52 . . . . .	133	125			

## WAGES, EARNINGS AND HOURS

## Arbitration and Wages Boards Acts and associated legislation

Particulars regarding the operation of Commonwealth and State Laws for the regulation of wages, hours and other conditions of employment were first compiled for the year 1913, and revised particulars have appeared annually in the *Labour Report*. A summary of the Commonwealth legislation and brief particulars of Commonwealth and State industrial tribunals are given in the following paragraphs.

## Commonwealth industrial legislation and tribunals

Under placitum (xxxv) of section 51 of the Commonwealth of Australia Constitution, the Commonwealth Parliament is empowered to make laws with respect to 'conciliation and arbitration for the prevention and settlement of industrial disputes extending beyond the limits of any one State'. The Parliament has made such a law, namely the *Conciliation and Arbitration Act 1904-1967*.

This Act defines an 'industrial dispute' as:

'(a) A dispute (including a threatened, impending or probable dispute) as to industrial matters which extends beyond the limits of any State; and (b) a situation which is likely to give rise to a dispute as to industrial matters which so extends; and includes—(c) such a dispute in relation to employment in an industry carried on by, or under the control of, a State or an authority of a State; (d) a dispute in relation to employment in an industry carried on by, or under the control of, the Commonwealth or an authority of the Commonwealth, whether or not the dispute extends beyond the limits of any one State; and (e) a claim which an organization is entitled to submit to the Commission under section eleven A of the *Public Service Arbitration Act 1920-1966* or an application or matter which the Public Service Arbitrator has refrained from hearing, or from further hearing, or from determining under section fourteen A of that Act, whether or not there exists in relation to the claim, application or matter a dispute as to industrial matters which extends beyond the limits of any one State.'

The Conciliation and Arbitration Act was extensively amended by an Act (No. 44 of 1956) assented to on 30 June 1956. This amendment altered the structure of the arbitration machinery by separating the judicial functions from the conciliation and arbitration functions. The Commonwealth Industrial Court was established to deal with judicial matters under the Act, and the Commonwealth Conciliation and Arbitration Commission to handle the functions of conciliation and arbitration. A summary of the provisions of the *Conciliation and Arbitration Act 1904-1967* is given in the following paragraphs.

The Commonwealth Industrial Court is at present composed of a Chief Judge and five other Judges. The jurisdiction of the Court shall be exercised by not less than two Judges, except in the following circumstances. A single Judge may exercise the jurisdiction of the Court with respect to the dismissal or injury of an employee on account of industrial action, interpretation of awards, questions concerning eligibility of membership of an organisation, disputes between an organisation and its members, and a prescribed matter of practice or procedure. A single Judge may refer a question of law for the opinion of the Court constituted by not less than two Judges. The Court is a Superior Court of Record with the same power to punish contempts of its power and authority as is possessed by the High Court. In general, decisions of the Industrial Court are final; however, an appeal lies to the High Court, but only when the latter grants leave to appeal. The Act provides for the registration of associations of employees and employers, and for inquiries to be held concerning disputed elections in organisations; and certain powers in connection therewith are, by the Act, given to the Industrial Court. Provision is also made for the Commission to exercise the powers of the Court with regard to an application for cancellation of registration of an organisation. Any such change of jurisdiction must be notified by proclamation. This provision could be used if the powers of the Court in this regard were declared, in whole or in part, to be invalid.

Special provision is made concerning the right of audience before the Commonwealth Industrial Court. Briefly, except in proceedings which, in general, involve questions of law or offences against the Act, parties are able to elect whether to appear personally or to be represented by lawyers or officials. Even in proceedings involving questions of law, except appeals from decisions by other Courts to the Industrial Court, on matters arising under this Act or the *Public Service Arbitration Act 1920-1966*, the parties may, if they wish and the Court grants leave, be represented by officials.

The Commonwealth Conciliation and Arbitration Commission at the end of 1967 was composed of a President, five Deputy Presidents, a Senior Commissioner, ten Commissioners and three Conciliators. The Commission is empowered to prevent or settle industrial disputes by conciliation or arbitration, and to make suggestions and to do such things as appear right and proper for (a) effecting a reconciliation between parties to industrial disputes; (b) preventing and settling industrial disputes by amicable agreement; and (c) preventing and settling, by conciliation or arbitration, industrial disputes not prevented or settled by amicable agreement. The Commission may exercise its powers of its own motion or on the application of a party.

The President may assign a Commissioner to deal with industrial disputes relating to particular industries, or members of the Commission to deal with a particular industrial dispute. However, subject to the approval of the President, it is the duty of the Senior Commissioner to organise and allocate the work of the Commissioners and Conciliators. When an industrial dispute occurs or is likely to occur, a Commissioner shall take steps for the prompt prevention or settlement of that dispute by conciliation or, if in his opinion conciliation is unlikely to succeed or has failed, by arbitration. A Commissioner may arrange with the Senior Commissioner for a Conciliator to assist the parties to reach an amicable agreement and shall do so if the parties so request. If an agreement is reached, a memorandum of its terms shall be made in writing, and may be certified by the Commission. A certified memorandum shall have the same effect as an award.

Only the Commission in Presidential Session, that is, the Commission constituted by at least three presidential members nominated by the President, has the power to make awards, or to certify agreements, concerning standard hours, basic wages and long-service leave. Upon application by a party to an industrial dispute, a Commissioner shall consult with the President as to whether in the public interest any matter in dispute should be dealt with by a Commission constituted by not less than three members nominated by the President, at least one of whom shall be a presidential member and one, where practicable, the Commissioner concerned. The President may direct the Commission to hear the matter in dispute; however, after consideration, the Commission may refer the matter in dispute back for determination to the Commissioner originally dealing with the dispute.

An appeal against the decision of a Commissioner shall be heard by not less than three members nominated by the President, of whom at least two shall be presidential members of the Commission. However, an appeal will not be heard unless the Commission considers it is necessary as a matter of public interest. The President, after taking account of the views of the parties to a dispute, may appoint a member of the Commission to take evidence on behalf of a presidential bench of the Commission, so that it may have this evidence before it when it commences its hearing.

Full benches of the Commission not constituted by the same persons may sit in joint session at the direction of the President when he considers it desirable and has the opinion that a question is common to the matters before those benches. A joint session may be held whether the benches concerned are constituted pursuant to the Conciliation and Arbitration Act or the Public Service Arbitration Act, and whether they are constituted to hear references or appeals. However, it is left to each appropriate full bench to determine any of the matters before it.



Provision is also made in the Act for a presidential member of the Commission to handle industrial matters in connection with the maritime industries, the Snowy Mountains Area and the stevedoring industry, except in those matters for which the Act requires that the Commission shall be constituted by more than one member. The Commonwealth Conciliation and Arbitration Commission also deals with disputes and industrial matters, interstate or intra-state, associated with undertakings or projects of the Commonwealth Government which have been declared by the Minister to be Commonwealth projects for the purposes of this Act. In effect, this places employees of Commonwealth projects, so declared, under the jurisdiction of the Commission. The Minister has the power to exempt certain persons or classes of persons working on these projects from the jurisdiction of the Commission.

The Commission may make an award in relation to an industrial dispute concerning employees of a Commonwealth project or when the Public Service Arbitrator refrains from dealing with claims made by a Public Service employee organisation or consents to the claims being presented to the Commission, though such an award may be inconsistent with a law of the Commonwealth relating to salaries, wages, rates of pay or terms or conditions of service of employees in the Public Service as defined by section three of the *Public Service Arbitration Act 1920-1966*, not being the *Commonwealth Employees' Compensation Act 1930-1964*, the *Commonwealth Employees' Furlough Act 1943-1959*, the *Superannuation Act 1922-1966* or any other prescribed Act.

An amendment of the Conciliation and Arbitration Act operative from November 1967 provided for the appointment of a person to be the Flight Crew Officers Industrial Tribunal empowered to prevent or settle industrial disputes relating to pilots, navigators, or flight engineers of aircraft.

The Conciliation and Arbitration Act provides that where a State law, or an order, award, decision or determination of a State industrial authority is inconsistent with or deals with a matter dealt with in an award of the Commission, the latter shall prevail, and the former, to the extent of the inconsistency or in relation to the matter dealt with, shall be invalid.

For further particulars regarding Commonwealth arbitration legislation, see the annual *Labour Report*. For information concerning the Australian Stevedoring Industry Authority and the Coal Industry Tribunal see the Transport and Communication chapter and the Mineral Industry chapter respectively of this Year Book, and for further information on the Commonwealth Public Service Arbitrator see the *Labour Report*.

### State industrial tribunals

#### New South Wales

The controlling authority is the Industrial Commission of New South Wales, consisting of a President and seven other Judges. Subsidiary tribunals are the Conciliation Commissioners, the Apprenticeship Commissioner, Conciliation Committees, and Apprenticeship Councils constituted for particular industries. Each Conciliation Committee consists of a Conciliation Commissioner as Chairman and equal numbers of representatives of employers and employees. The Apprenticeship Commissioner and the members of the Conciliation Committee for an industry constitute the Apprenticeship Council for the industry. These subsidiary tribunals may make awards binding on industries, but an appeal to the Industrial Commission may be made against any award. Special Commissioners with conciliatory powers and limited arbitration powers may be appointed. Compulsory control commenced in 1901, after the earlier Acts of 1892 and 1899 providing for voluntary submission of matters in dispute had proved abortive.

#### Victoria

The authorities are separate Wages Boards for the occupations and industries covered, each consisting of a chairman and equal numbers of representatives of employers and employees, and a Court of Industrial Appeals, the latter presided over by a Judge of the County Court. The system was instituted in the State in 1896, and represented the first example in Australia of legal regulation of wage rates.

#### Queensland

Legal control was first instituted in 1908 with the passing of the Wages Boards Act. 'The Industrial Conciliation and Arbitration Act of 1961' established the Industrial Conciliation and Arbitration Commission and preserved and continued in existence the Industrial Court. The Industrial Court is constituted by the President (a Judge of the Supreme Court of Queensland) sitting alone, and the Full Industrial Court by the President and two Commissioners. The Conciliation and Arbitration Commission is constituted by a Commissioner sitting alone; and the Full Bench of the Commission by at least three Commissioners. Not more than five Commissioners shall be appointed. A Commissioner shall not be capable of being a member of the Executive Council or of the Legislative Assembly, and shall not take part in the management of any business.

### South Australia

In South Australia from July 1966 the system of control consists of an Industrial Commission, an Industrial Court and Conciliation Committees. The Industrial Commission is composed of a President and two Commissioners and has power to make awards. The President of the Commission is also Judge of the Industrial Court which deals with legal matters. The two Commissioners are chairmen of each of the Conciliation Committees consisting of an equal number of representatives of employers and employees. These committees issue awards. Where complete agreement cannot be reached in these committees the chairman sits as a Commissioner to determine the unresolved matters. Provision is made for references and appeals to the full Commission.

### Western Australia

Legal control dates back to 1900. The present system of control comprises a four-man Western Australian Industrial Commission and an Industrial Appeal Court consisting of three Supreme Court Judges who are nominated by the Chief Justice of Western Australia. A Commissioner may, in relation to any dispute or other matter, refer such matters to the Commission in Court Session. Similarly, appeals from decisions of a single Commissioner are heard by the other three Commissioners acting as the Commission in Court Session, but such hearings are restricted to the evidence and matters raised in the proceedings before the single Commissioner. Up to December 1966 the Commission in Court Session fixed and adjusted the basic wage. In December 1966, however, legislation provided that the Western Australian basic wage rates should be the same as the Commonwealth Six Capitals rates as soon as these exceeded the State rates. Appeals from the Commission to the Industrial Appeal Court are limited to matters which are erroneous in law or in excess of jurisdiction. The Court has the power to impose penalties for disobedience of orders made by the Commission.

The Western Australian Coal Industry Tribunal, established under the *Mining Act, 1904-1965*, has power to determine any industrial matter in the coal mining industry. It consists of a chairman and four other members (two representatives each of employers and employees). Boards of reference may be appointed by the Tribunal, and decisions of the Tribunal may be reviewed by the Court of Arbitration on the application of a party subject to the decision.

### Tasmania

The authority consists of Wages Boards for separate industries, comprising a Chairman (who is common to all Wages Boards) appointed by the Governor, and equal numbers of representatives of employers and employees appointed by the Minister administering the Act. The system was instituted in 1910.

## Incidence of industrial awards, determinations and agreements

In May 1963 a survey was conducted to ascertain the approximate proportions of employees affected by awards, determinations and registered industrial agreements under the jurisdiction of Commonwealth and State industrial authorities. The proportions of employees not so affected by awards, etc. (including those affected by unregistered industrial agreements) were also obtained. The scope, results, etc. of this survey were published in *Labour Report* No. 51, 1964, and in a mimeographed statement (S.B. 383 of 11 February 1964).

## Rates of wage and hours of work

This section contains indexes (with base: year 1954 = 100) of minimum weekly and hourly rates of wage and standard hours of work for adult males and adult females for Australia and each State. In the indexes there are fifteen industry groups for adult males and eight industry groups for adult females. For relevant periods these indexes replace cognate indexes (base: year 1911 = 1,000 for males and April 1914 = 1,000 for females) published in Year Books before No. 46, 1960. The current indexes are based on the occupation structure existing in 1954. Weights for each industry and each occupation were derived from two sample surveys made in that year. The first was the Survey of Awards in April 1954 which showed the number of employees covered by individual awards, determinations and agreements. This provided employee weights for each industry as well as a basis for the Survey of Award Occupations made in November 1954. This second survey showed the number of employees in each occupation within selected awards, etc. thereby providing occupation weights.

The industrial classification used in the current indexes, shown in the table on page 281, does not differ basically from the previous classification, the alterations being largely in the arrangement of classes. The former Pastoral, agricultural, etc. group and the domestic part of the Amusement, hotels, personal service, etc. group are excluded from the current indexes because of coverage difficulties.

The minimum wage rates and standard hours of work used in the current indexes are for representative occupations within each industry. They have been derived entirely from representative awards, determinations and agreements in force at the end of each month or quarter, commencing with March 1939 for adult males and March 1951 for adult females. Particulars have been available as at the end of each month for adult males from January 1957 and for adult females from July 1967. The index for adult males includes rates and hours for 3,415 award designations. However, as some of these designations are operative within more than one industry, or in more than one State, the total number of individual award occupations is 2,313. For adult females the corresponding numbers are 1,100 and 515. Using the industry and occupation weights derived from the surveys described above, these rates and hours were combined to give weighted averages for each industry group for each State and Australia.

Because the indexes are designed to measure movements in prescribed minimum rates of 'wages' as distinct from 'salaries', those awards, etc. which relate solely or mainly to salary earners are excluded.

A more detailed description of the current indexes of minimum rates of wage and standard hours of work is given in the *Labour Report*, which also contains an extensive tabular presentation of the minimum rates of wage for adult males and females in the principal occupations in the capital city of each State. Further particulars of wage rates and index numbers will be found in a mimeographed statement *Minimum Wage Rates, March 1939 to June 1965*. Current figures are published in the monthly bulletin *Wage Rates and Earnings*.

#### Weekly wage rates—adult males

The following table shows, for each State and Australia, the weighted average minimum weekly rates of wage payable to adult male workers for a full week's work and index numbers at the dates specified.

#### WEEKLY WAGE RATES: ADULT MALES, ALL GROUPS(a), STATES DECEMBER 1950 TO 1967

WEIGHTED AVERAGE MINIMUM WEEKLY RATES(b) PAYABLE FOR A FULL WEEK'S WORK  
(EXCLUDING OVERTIME) AND INDEX NUMBERS OF WAGE RATES

End of December—	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	Aust.
RATES OF WAGES(c) (\$)							
1950 . . .	20.62	20.18	19.52	19.79	20.06	19.80	20.20
1960 . . .	36.28	34.99	35.07	34.22	35.81	35.15	35.50
1965 . . .	41.08	40.34	41.66	39.48	40.49	40.73	40.76
1966 . . .	43.27	42.78	43.56	41.75	43.37	43.23	43.04
1967 . . .	45.21	44.59	45.54	43.78	45.04	45.26	44.94

#### INDEX NUMBERS

(Base: Weighted Average Weekly Wage Rate for Australia, 1954 = 100)

1950 . . .	73.0	71.4	69.1	70.1	71.0	70.1	71.5
1960 . . .	128.5	123.9	124.2	121.2	126.8	124.5	125.7
1965 . . .	145.5	142.8	147.5	139.8	143.4	144.2	144.3
1966 . . .	153.2	151.5	154.2	147.8	153.6	153.1	152.4
1967 . . .	160.1	157.9	161.3	155.0	159.5	160.3	159.1

(a) Excludes rural. (b) As prescribed in awards, determinations and agreements. (c) The amounts shown should not be regarded as actual current averages, but as an index expressed in money terms, indicative of trends.

The following table shows for Australia the weighted average minimum weekly rates of wage and index numbers in each industry group and for all groups (excluding rural) at the dates specified.

**WEEKLY WAGE RATES: ADULT MALES, INDUSTRY GROUPS, AUSTRALIA  
DECEMBER 1950 TO 1967**

WEIGHTED AVERAGE MINIMUM WEEKLY RATES(a) PAYABLE FOR A FULL WEEK'S WORK  
(EXCLUDING OVERTIME) AND INDEX NUMBERS OF WAGE RATES

Industry group	End of December—				
	1950	1960	1965	1966	1967
<b>RATES OF WAGE(b)</b>					
(\$)					
Mining and quarrying . . . . .	25.96	41.47	48.54	50.30	52.21
Manufacturing—					
Engineering, metals, vehicles, etc. . . . .	20.17	35.02	39.71	41.89	43.71
Textiles, clothing and footwear . . . . .	19.74	34.04	38.62	40.66	42.40
Food, drink and tobacco . . . . .	20.14	35.22	40.53	42.56	44.38
Sawmilling, furniture, etc. . . . .	19.60	34.62	39.55	41.64	43.35
Paper, printing, etc. . . . .	21.42	37.92	43.09	45.76	47.83
Other manufacturing . . . . .	19.76	34.72	39.71	41.98	43.84
<i>All manufacturing groups</i> . . . . .	20.08	35.05	39.92	42.11	43.94
Building and construction . . . . .	19.86	35.75	41.42	44.44	46.16
Railway services . . . . .	19.58	34.65	39.91	41.84	43.49
Road and air transport . . . . .	19.79	35.25	40.69	42.97	45.12
Shipping and stevedoring(c) . . . . .	19.66	34.46	39.79	41.89	43.83
Communication . . . . .	21.33	38.49	47.45	49.69	52.69
Wholesale and retail trade . . . . .	20.08	35.71	40.54	42.86	44.78
Public authority (n.e.i.) and community and business services . . . . .	19.21	34.81	40.27	42.68	45.49
Amusement, hotels, personal service, etc. . . . .	19.23	33.73	38.55	40.54	42.32
<i>All industry groups(d)</i> . . . . .	20.20	35.50	40.76	43.04	44.94

**INDEX NUMBERS**

(Base: Weighted Average Weekly Wage Rate for Australia, 1954 = 100)

Mining and quarrying . . . . .	91.9	146.8	171.9	178.1	184.9
Manufacturing—					
Engineering, metals, vehicles, etc. . . . .	71.4	124.0	140.6	148.3	154.8
Textiles, clothing and footwear . . . . .	69.9	120.5	136.7	144.0	150.1
Food, drink and tobacco . . . . .	71.3	124.7	143.5	150.7	157.1
Sawmilling, furniture, etc. . . . .	69.4	122.6	140.0	147.4	153.5
Paper, printing, etc. . . . .	75.9	134.3	152.6	162.0	169.4
Other manufacturing . . . . .	70.0	122.9	140.6	148.6	155.2
<i>All manufacturing groups</i> . . . . .	71.1	124.1	141.4	149.1	155.6
Building and construction . . . . .	70.3	126.6	146.6	157.3	163.4
Railway services . . . . .	69.3	122.7	141.3	148.2	154.0
Road and air transport . . . . .	70.1	124.8	144.1	152.2	159.8
Shipping and stevedoring(c) . . . . .	69.6	122.0	140.9	148.3	155.2
Communication . . . . .	75.5	136.3	168.0	176.0	186.6
Wholesale and retail trade . . . . .	71.1	126.4	143.5	151.8	158.5
Public authority (n.e.i.) and community and business services . . . . .	68.0	123.2	142.6	151.1	161.1
Amusement, hotels, personal service, etc. . . . .	68.1	119.4	136.5	143.5	149.8
<i>All industry groups(d)</i> . . . . .	71.5	125.7	144.3	152.4	159.1

(a) As prescribed in awards, determinations and agreements. (b) The amounts shown should not be regarded as actual current averages, but as an index expressed in money terms, indicative of trends. (c) Includes the value of keep, where supplied. (d) Excludes rural.

*Adult males—components of total wage rate.* A dissection of weighted average minimum weekly wage rates for adult males into three components of the total wage, i.e. basic wage, margin, and loading, with separate particulars for employees covered by awards etc. within Commonwealth and State jurisdictions, has been calculated for months to June 1967. Compilation of averages of components for months subsequent to June 1967 was not possible because of the decision of the Commonwealth Conciliation and Arbitration Commission to eliminate basic wages and margins from its awards (see page 308). For figures of components to December 1966 see previous issues of this Year Book. A detailed description of this dissection of weekly wage rates into components, and tables for each State and Australia according to jurisdiction, extending back to 1939, have been published in the mimeographed statement *Minimum Wage Rates, March 1939 to June 1965* and in *Wage Rates and Earnings* bulletins up to the October 1967 issue.

*Adult males—jurisdiction.* Weighted average minimum weekly wage rates for adult males covered by *Commonwealth Awards etc.* and for those covered by *State awards etc.* (as defined below) are shown separately in the following table. The averages shown in these tables were previously published in the relevant parts of the tables of components of wage rates which have been discontinued (see above). For the purposes of the index, *Commonwealth awards etc.* include awards of, or agreements registered with, the Commonwealth Conciliation and Arbitration Commission, and determinations of the Commonwealth Public Service Arbitrator. *State awards etc.* include awards or determinations of, or agreements registered with, State industrial tribunals, together with certain unregistered agreements when these are dominant in the particular industries to which they refer.

#### WEEKLY WAGE RATES(a): ALL GROUPS—ADULT MALES

(£)

WEIGHTED AVERAGE MINIMUM WEEKLY RATES PAYABLE FOR A FULL WEEK'S WORK (EXCLUDING OVERTIME)  
AS PRESCRIBED IN AWARDS, DETERMINATIONS AND AGREEMENTS

	Jurisdiction		
	Commonwealth awards etc.	State awards etc.	All awards etc.
AUSTRALIA, DECEMBER 1950 TO 1967			
December—			
1950 . . . . .	20.18	20.23	20.20
1960 . . . . .	35.14	35.88	35.50
1965 . . . . .	40.44	41.10	40.76
1966 . . . . .	42.77	43.34	43.04
1967 . . . . .	44.70	45.21	44.94

#### STATES, DECEMBER 1967

New South Wales . . . . .	45.16	45.26	45.21
Victoria . . . . .	44.18	45.53	44.59
Queensland . . . . .	45.23	45.63	45.54
South Australia . . . . .	44.15	42.92	43.78
Western Australia . . . . .	47.84	44.67	45.04
Tasmania . . . . .	44.57	46.33	45.26

(a) Excludes rural. The amounts should not be regarded as actual current averages, but as an index expressed in money terms, indicative of trends. For definitions see text above.

#### Weekly wage rates—adult females

The following table shows, for each State and Australia, the weighted average minimum weekly rates of wage payable to adult female workers for a full week's work and index numbers at the dates specified. This series has not been compiled for years prior to 1951.

**WEEKLY WAGE RATES: ADULT FEMALES, STATES, DECEMBER 1951 TO 1967**WEIGHTED AVERAGE MINIMUM WEEKLY RATES<sup>(a)</sup> PAYABLE FOR A FULL WEEK'S WORK  
(EXCLUDING OVERTIME) AND INDEX NUMBERS OF WAGE RATES

<i>End of December—</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>Aust.</i>
<b>RATES OF WAGE<sup>(b)</sup> (\$)</b>							
1951 . . .	17.23	17.22	16.12	17.02	16.25	16.56	17.03
1960 . . .	26.12	24.66	23.93	24.29	25.12	23.88	25.17
1965 . . .	29.93	28.46	29.17	27.75	28.70	27.94	29.10
1966 . . .	31.52	30.06	30.53	29.42	30.72	29.80	30.70
1967 . . .	33.19	32.04	32.71	31.30	31.99	31.62	32.52

**INDEX NUMBERS***(Base: Weighted Average Weekly Wage Rate for Australia, 1954 = 100)*

1951 . . .	86.6	86.5	81.0	85.5	81.6	83.2	85.6
1960 . . .	131.2	123.9	120.2	122.0	126.2	120.0	126.4
1965 . . .	150.4	143.0	146.5	139.4	144.1	140.4	146.2
1966 . . .	158.3	151.0	153.4	147.8	154.3	149.7	154.2
1967 . . .	166.7	160.9	164.3	157.2	160.7	158.8	163.4

<sup>(a)</sup> As prescribed in awards, determinations and agreements. <sup>(b)</sup> The amounts shown should not be regarded as actual current averages, but as an index expressed in money terms, indicative of trends.

The following table shows for Australia weighted average minimum weekly rates of wage and index numbers in each of the industry groups in which the number of females employed is important, and the weighted average for all groups combined, at the dates specified.

**WEEKLY WAGE RATES: ADULT FEMALES, INDUSTRY GROUPS, AUSTRALIA  
DECEMBER, 1951 TO 1967**WEIGHTED AVERAGE MINIMUM WEEKLY RATES<sup>(a)</sup> PAYABLE FOR A FULL WEEK'S WORK  
(EXCLUDING OVERTIME) AND INDEX NUMBERS OF WAGE RATES

<i>Industry group</i>	<i>End of December—</i>				
	<i>1951</i>	<i>1960</i>	<i>1965</i>	<i>1966</i>	<i>1967</i>
<b>RATES OF WAGE<sup>(b)</sup> (\$)</b>					
<b>Manufacturing—</b>					
Engineering, metals, vehicles, etc. . .	17.09	24.98	28.56	30.09	31.82
Textiles, clothing and footwear . . .	17.12	24.07	27.25	28.75	30.60
Food, drink and tobacco . . .	16.58	24.63	28.29	29.87	31.47
Other manufacturing . . .	16.88	24.80	28.44	30.03	31.64
<i>All manufacturing groups</i> . . .	<i>16.99</i>	<i>24.46</i>	<i>27.88</i>	<i>29.41</i>	<i>31.15</i>
<b>Transport and communication</b> . . .	<b>17.75</b>	<b>26.02</b>	<b>31.43</b>	<b>33.07</b>	<b>35.29</b>
<b>Wholesale and retail trade</b> . . .	<b>17.11</b>	<b>26.36</b>	<b>30.59</b>	<b>32.26</b>	<b>34.13</b>
<b>Public authority (n.e.i.) and community and business services</b> . . .	<b>17.01</b>	<b>25.78</b>	<b>30.64</b>	<b>32.40</b>	<b>34.60</b>
<b>Amusement, hotels, personal service, etc.</b> . .	<b>16.68</b>	<b>24.50</b>	<b>28.23</b>	<b>29.74</b>	<b>31.28</b>
<b>All industry groups</b> . . .	<b>17.03</b>	<b>25.17</b>	<b>29.10</b>	<b>30.70</b>	<b>32.52</b>

For footnotes see next page.

**WEEKLY WAGE RATES: ADULT FEMALES, INDUSTRY GROUPS, AUSTRALIA**  
**DECEMBER 1951 TO 1967—continued**

<i>Industry group</i>	<i>End of December—</i>				
	<i>1951</i>	<i>1960</i>	<i>1965</i>	<i>1966</i>	<i>1967</i>
<b>INDEX NUMBERS</b>					
<i>(Base: Weighted Average Weekly Wage Rate for Australia, 1954 = 100)</i>					
<b>Manufacturing—</b>					
Engineering, metals, vehicles, etc. . . . .	85.9	125.5	143.5	151.2	159.8
Textiles, clothing and footwear . . . . .	86.0	120.9	136.9	144.4	153.7
Food, drink and tobacco . . . . .	83.3	123.7	142.1	150.0	158.1
Other manufacturing . . . . .	84.8	124.6	142.9	150.9	158.9
<i>All manufacturing groups . . . . .</i>	<i>85.4</i>	<i>122.9</i>	<i>140.0</i>	<i>147.7</i>	<i>156.5</i>
Transport and communication . . . . .	89.2	130.7	157.9	166.1	177.3
Wholesale and retail trade . . . . .	85.9	132.4	153.6	162.1	171.4
Public authority (n.e.i.) and community and business services . . . . .	85.4	129.5	153.9	162.8	173.8
Amusement, hotels, personal service, etc. . . . .	83.8	123.1	141.8	149.4	157.1
<i>All industry groups . . . . .</i>	<i>85.6</i>	<i>126.4</i>	<i>146.2</i>	<i>154.2</i>	<i>163.4</i>

(a) As prescribed in awards, determinations and agreements. (b) The amounts shown should not be regarded as actual current averages, but as an index expressed in money terms, indicative of trends.

### Standard hours of work

In the fixation of weekly wage rates most industrial tribunals prescribe the number of hours constituting a full week's work for the wage rates specified. The hours of work so prescribed form the basis of the compilation of the weighted averages and index numbers on page 286. The main features of the reduction of hours to forty-four and later to forty per week are summarised on pages 284-5. In considering such changes, it must be remembered that even within individual States the authority to alter conditions of work is divided between Commonwealth and State industrial tribunals and the various legislatures, and that the State legislation usually does not apply to employees covered by awards of the Commonwealth Conciliation and Arbitration Commission. However, it may do so in respect of matters not treated in Commonwealth awards.

### The 44-hour week

No permanent reduction to a 44-hour week was effected until 1925, although temporary reductions had been achieved earlier. In 1920 the New South Wales legislature granted a 44-hour week to most industries, but in the following year this provision was withdrawn. Also in 1920 the President of the Commonwealth Court of Conciliation and Arbitration (Higgins J.), after inquiry, granted a 44-hour week to the Timber Workers' Union, and in the following year he extended the same privilege to the Amalgamated Society of Engineers. In 1921, however, a reconstituted Commonwealth Court of Conciliation and Arbitration unanimously rejected applications by five trade unions for the shorter standard week and re-introduced the 48-hour week in the case of the above-mentioned two unions then working forty-four hours. During 1924 the Queensland Parliament passed legislation to operate from 1 July 1925 granting the 44-hour standard week to employees whose conditions of work were regulated by awards and agreements of the Queensland State industrial authority. Similar legislative action in New South Wales led to the re-introduction of the 44-hour week in that State as from 4 January 1926.

In 1927, after an exhaustive inquiry, the Commonwealth Court of Conciliation and Arbitration granted a 44-hour week to the Amalgamated Engineering Union and intimated that this reduction in standard hours of work would be extended to industries operating under conditions similar to those in the engineering industry. Applications for the shorter hours by other unions were, however, treated

individually, the nature of the industry, the problem of production, the financial status, and the amount of foreign competition being fully investigated. The economic depression delayed the extension of the standard 44-hour week until the subsequent improvement in economic conditions made possible its general extension to employees under Commonwealth awards.

In States other than New South Wales and Queensland no legislation was passed to reduce the standard hours of work, so that, for employees not covered by Commonwealth awards, the change had to be effected by decisions of the appropriate industrial tribunals. In these cases the date on which the reduction to forty-four hours was implemented depended on the decision of the tribunals in particular industries, employees in some industries receiving the benefit of the reduced hours years ahead of those in others. In these States the change to the shorter week extended over the years from 1926 to 1941.

#### The 40-hour week

*Standard Hours Inquiry, 1947.* Soon after the end of the 1939-45 War applications were made to the Commonwealth Court of Conciliation and Arbitration for the introduction of a 40-hour week, and the hearing by the Court commenced in October 1945. Before the Court gave its decision the New South Wales Parliament passed legislation granting a 40-hour week, operative from 1 July 1947, to industries and trades regulated by State awards and agreements, and in Queensland similar legislation was introduced in Parliament providing for the 40-hour week to operate from 1 January 1948.

The Commonwealth Court of Conciliation and Arbitration, in its judgment of 8 September 1947, granted the reduction to the 40-hour week from the beginning of the first pay-period commencing in January 1948. The Queensland Act was passed, and was proclaimed on 10 October 1947. On 27 October 1947 the South Australian Industrial Court, after hearing applications by unions, approved the incorporation of the 40-hour standard week in awards of that State. The Court of Arbitration of Western Australia, on 6 November 1947, approved that, on application, provision for a 40-hour week could be incorporated in awards of the Court, commencing from 1 January 1948.

In Victoria and Tasmania the Wages Boards met and also incorporated the shorter working week in their determinations, so that from the beginning of 1948 practically all employees in Australia whose conditions of labour were regulated by industrial authorities had the advantages of a standard working week of forty hours or, in certain cases, less.

*Basic Wage and Standard Hours Inquiry, 1952-53.* In the 1952-53 Basic Wage and Standard Hours Inquiry the employers sought an increase in the standard hours of work per week, claiming that one of the chief causes of the high costs and inflation had been the loss of production due to the introduction of the 40-hour week. This claim was rejected by the Court, as it considered that the employers had not proved that the existing economic situation called for a reduction of general standards in the matter of the ordinary working week.

*Basic Wage and Standard Hours Inquiry, 1961.* The Commonwealth Conciliation and Arbitration Commission rejected an employers' claim for an increase in the number of ordinary working hours from 40 to 42 per week, with a concomitant increase in weekly wages by an amount equal to two hours' pay at ordinary rates. This was to be a temporary measure to have effect for four years, after which time hours would revert to 40 and the increased wage would remain.

#### Hourly wage rates

The average rates of wage in the preceding tables are based on the minimum rates prescribed for selected occupations in awards, etc. for a full week's work, excluding overtime. However, the number of hours constituting a full week's work differs in some instances between various occupations in each State, and between the same occupations in the several States. For some purposes a better comparison may be obtained by reducing the results in the preceding paragraphs to a common basis, namely the rate of wage per hour. The particulars of weighted average minimum hourly rates of wage given in the following tables relate to all industry groups except Rural, and Shipping and stevedoring. The Rural industry is not included in the index, and Shipping and stevedoring has been excluded because, for some of the occupations in this group, definite particulars for the computation of average working hours and hourly rates of wage are not available.

The following table shows the weighted average minimum hourly rates of wage payable to adult male workers and index numbers of hourly rates in each State.



**HOURLY WAGE RATES(a): ADULT MALES  
STATES, DECEMBER 1950 TO 1967**

**WEIGHTED AVERAGE MINIMUM HOURLY RATES PAYABLE AND INDEX NUMBERS OF HOURLY RATES**

<i>End of December—</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>Aust.</i>
<b>RATES OF WAGE(b)</b> (cents)							
1950 . . .	51.63	50.48	48.83	49.53	50.29	49.52	50.58
1960 . . .	90.91	87.57	87.79	85.61	89.89	88.08	88.92
1965 . . .	102.91	100.95	104.35	98.78	101.56	102.11	102.07
1966 . . .	108.40	107.08	109.09	104.47	108.84	108.42	107.80
1967 . . .	113.24	111.60	114.06	109.54	113.01	113.52	112.56

**INDEX NUMBERS**

*(Base: Weighted Average Hourly Wage Rates for Australia, 1954 = 100)*

1950 . . .	73.0	71.4	69.0	70.0	71.1	70.0	71.5
1960 . . .	128.5	123.8	124.1	121.0	127.1	124.5	125.7
1965 . . .	145.5	142.7	147.5	139.6	143.5	144.3	144.3
1966 . . .	153.2	151.3	154.2	147.7	153.8	153.2	152.4
1967 . . .	160.1	157.7	161.2	154.8	159.7	160.5	159.1

(a) Weighted average hourly rates of wage for all industry groups except rural, and shipping and stevedoring. See page 285. (b) The amounts shown should not be regarded as actual current averages, but as an index expressed in money terms, indicative of trends.

The following table shows the weighted average minimum hourly rates of wage payable to adult female workers and index numbers of hourly rates in each State.

**HOURLY WAGE RATES: ADULT FEMALES  
STATES, DECEMBER 1951 TO 1967**

**WEIGHTED AVERAGE MINIMUM HOURLY RATES PAYABLE AND INDEX NUMBERS OF HOURLY RATES**

<i>End of December—</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>Aust.</i>
<b>RATES OF WAGE(a)</b> (cents)							
1951 . . .	43.58	43.25	40.60	42.81	40.85	41.86	42.92
1960 . . .	66.09	61.94	60.28	61.08	63.14	60.37	63.44
1965 . . .	75.74	71.50	73.48	69.77	72.13	70.52	73.36
1966 . . .	79.74	75.50	76.91	73.98	77.21	75.20	77.39
1967 . . .	83.98	80.48	82.40	78.70	80.41	79.79	81.99

**INDEX NUMBERS**

*(Base: Weighted Average Hourly Wage Rate for Australia, 1954 = 100)*

1951 . . .	86.9	86.2	80.9	85.3	81.4	83.4	85.6
1960 . . .	131.7	123.5	120.1	121.7	125.8	120.3	126.4
1965 . . .	151.0	142.5	146.5	139.1	143.8	140.6	146.2
1966 . . .	158.9	150.5	153.3	147.5	153.9	149.9	154.2
1967 . . .	167.4	160.4	164.3	156.9	160.3	159.0	163.4

(a) The amounts shown should not be regarded as actual current averages, but as an index expressed in money terms, indicative of trends.

**Weighted average standard weekly hours of work**

The 40-hour week has operated in Australia generally from 1 January 1948, and in New South Wales from 1 July 1947 (*see* page 285.) However, as stated on page 285, the number of hours constituting a full week's work (excluding overtime) differs between occupations and or between States. The weighted average standard hours of work (excluding overtime) prescribed in awards, determinations and agreements for a full working week, in respect of adult male workers in all industry groups except Rural, and Shipping and stevedoring, at 31 December 1967, were: New South Wales, 39.95; Victoria, 39.97; Queensland, 39.98; South Australia, 39.96; Western Australia, 39.89; Tasmania, 39.97; Australia, 39.96. Corresponding figures for adult female workers at 31 December 1967 were: New South Wales, 39.53; Victoria, 39.81; Queensland, 39.70; South Australia, 39.77; Western Australia, 39.78; Tasmania, 39.63; Australia, 39.67.

**Average weekly earnings**

The figures in this section are derived from particulars of employment and of wages and salaries recorded on pay-roll tax returns, from other direct collections, and from estimates of the unrecorded balance. The figures relate to civilians only.

Particulars of wages and salaries paid are not available for males and females separately from these sources; average weekly earnings have therefore been calculated in terms of male units, i.e. total male employees plus fifty-five per cent of female employees. This proportion is derived from the estimated ratio of female to male earnings in Australia. As it was not possible to estimate the ratio of female to male earnings in the several States the same ratio has been used in each State. Because the actual ratio may vary between States precise comparisons between average earnings in different States cannot be made on the basis of the figures shown in the following table. Quarterly figures corresponding to those shown in the table are published in the monthly bulletin *Wage Rates and Earnings* and in the *Monthly Review of Business Statistics*.

Particulars of average weekly earnings per employed male unit are shown in the following table for each of the years 1957-58 to 1966-67.

**AVERAGE WEEKLY EARNINGS PER EMPLOYED MALE UNIT(a)**  
**STATES, 1957-58 TO 1966-67**  
 (\$)

Year	N.S.W. (b)	Vic.	Qld	S.A. (c)	W.A.	Tas.	Aust.
1957-58 . . .	41.00	40.70	35.70	37.70	36.20	38.30	39.50
1958-59 . . .	42.30	42.00	37.20	38.60	36.60	39.20	40.70
1959-60 . . .	45.70	45.50	39.40	41.80	39.20	41.90	43.90
1960-61 . . .	48.10	47.20	41.60	43.40	41.60	43.30	46.00
1961-62 . . .	49.10	48.50	43.20	44.70	43.00	45.30	47.20
1962-63 . . .	50.20	50.10	44.40	45.80	44.20	45.90	48.40
1963-64 . . .	52.60	52.50	46.90	48.20	47.20	48.40	50.90
1964-65 . . .	56.50	56.40	50.40	52.00	49.50	51.00	54.60
1965-66 . . .	58.60	59.20	52.50	53.80	54.10	53.80	57.00
1966-67 . . .	62.40	63.00	55.60	56.90	58.30	57.40	60.70

(a) Includes, in addition to wages at award rates, earnings of salaried employees, overtime earnings, over-award and bonus payments, payments made in advance or retrospectively during the periods specified, etc. *See* explanatory notes above. (b) Includes Australian Capital Territory. (c) Includes Northern Territory.

The following table shows, for 'All industries' and for 'Manufacturing', the movement in average weekly earnings from 1957-58 to December quarter 1967. The 'All industries' index is based on pay-roll tax returns and other data. It relates to average weekly earnings per employed male unit. The index for manufacturing industries for the years to 1966-67 is based on the average earnings of male wage and salary earners employed in factories as disclosed by annual factory censuses (*see* the chapter *Manufacturing Industry*); figures for quarters subsequent to June quarter 1967 are preliminary estimates based on pay-roll tax returns.

The index numbers for 'All industries' and 'Manufacturing' show the movement in average earnings for each group over a period of time. However, they do not give, at any point of time, a comparison of actual earnings in the two groups. The base of each series is: year 1953-54 = 100, and both series have been seasonally adjusted.

**INDEXES OF AVERAGE WEEKLY EARNINGS(a): AUSTRALIA  
YEARS 1957-58 TO 1966-67 AND QUARTERS SEPTEMBER 1965 TO DECEMBER 1967**

SEASONALLY ADJUSTED

(Base of each index: year 1953-54 = 100)

Year	All industries (b)	Manu- facturing	Quarter	All industries (b)	Manu- facturing
1953-54 . . . . .	100.0	100.0	1965-66—September . . .	172.4	171.8
1957-58 . . . . .	120.8	122.0	December . . . . .	173.6	172.3
1958-59 . . . . .	124.5	125.6	March . . . . .	175.9	173.0
1959-60 . . . . .	134.3	135.4	June . . . . .	176.4	175.4
1960-61 . . . . .	140.6	141.1			
1961-62 . . . . .	144.7	143.4	1966-67—September . . .	182.0	181.1
1962-63 . . . . .	148.3	147.7	December . . . . .	183.8	182.5
1963-64 . . . . .	155.9	154.8	March . . . . .	187.0	185.3
1964-65 . . . . .	167.3	167.1	June . . . . .	190.4	188.1
1965-66 . . . . .	174.6	173.1			
1966-67 . . . . .	186.0	184.3	1967-68—September . . .	193.9	192.2
			December . . . . .	195.4	193.7

(a) See footnote (a) to table on page 287.

(b) Average earnings per employed male unit.

### Surveys of wage rates, earnings and hours, 1960 to 1967

Since 1960 a number of statistical surveys of wages and hours of work in Australia have been undertaken by this Bureau. The object of these surveys has been to obtain information on wage rates, actual weekly earnings and hours of work on a more comprehensive scale than previously available in Australia. A summary of the scope and coverage of each of these surveys is shown on the following pages.

#### Survey of Wage Rates and Earnings, September 1960

This survey, relating to the last pay-period in September 1960, obtained information about marginal rates of wage and the dissection and distribution of actual weekly earnings of adult male employees (excluding part-time and casual employees). In addition to the exclusion of government and semi-government employees, and private employees in rural industry and in private domestic service, the survey did not cover the following—shipping and stevedoring industries; the motion picture industry; certain businesses such as those of accountants, consultant engineers, etc.; and trade associations, etc. The survey was based on a stratified random sample of private employers in other industries who were subject to pay-roll tax (that is, employers paying more than \$400 a week in wages and salaries). For information on the results of the survey see Year Book No. 51, pages 439 to 442.

#### Survey of Weekly Earnings, October 1961

This survey was conducted for the last pay-period in October 1961 and provided information about the distribution of actual weekly earnings for adult male employees (excluding part-time and casual employees). The survey did not cover government or semi-government employees, private employees in rural industry and in private domestic service, or employees not covered by pay-roll tax returns. The survey was based on a stratified random sample of private employers in other industries who were subject to pay-roll tax (that is, employers paying more than \$400 a week in wages and salaries). The results of the survey were published in Year Book No. 51, pages 442-4.

#### Surveys of Weekly Earnings and Hours, October 1962, 1963 and 1964

For details of these surveys see pages 296 to 305.

## Survey of Weekly Earnings, October 1965

A survey of weekly earnings of male employees was conducted for the last pay-period in October 1965. The survey was conducted by means of: (i) a sample of private employers subject to pay-roll tax (that is those paying more than \$400 a week in wages and salaries); (ii) a complete coverage of Commonwealth and State government departments and semi-government authorities; and (iii) a sample of local government authorities. It related to certain specified industry groups only.

The industry groups excluded from this survey were: primary production; finance and property; public authority activities, n.e.i. (e.g. Commonwealth, State and local government administration); community and business services; amusement, hotels, cafés, personal service, etc. The survey also excluded waterside workers employed on a casual basis, and all employees in the Northern Territory and the Australian Capital Territory. The industry classification adopted was that used for the 1961 population census.

The object of the survey was to obtain estimates of the numbers and proportions of full-time adult male employees in various weekly earnings groups and a dissection of total weekly earnings paid to full-time adult males into: (i) overtime earnings; (ii) ordinary time earnings at 'award, etc. rates'; and (iii) ordinary time earnings in excess of those at 'award, etc. rates' (divided into (a) payment by measured result and (b) other) as defined on page 291. The survey also provided figures of average weekly earnings for full-time adult male and junior male employees. Separate details were obtained for (i) managerial, executive, professional and higher supervisory staff, and (ii) other full-time male employees. The results of the survey are shown in broad detail only. Averages for each State were published in the previous issue of the Year Book. For further details see *Labour Report* No. 52, 1965 and 1966.

Information of a similar type was obtained in respect of September 1960 from a sample survey of private employers only. However, the 1965 survey, as well as adopting the standard industry classification used for the 1961 population census, differs from the 1960 survey also in the range of industries included. In addition, the 1965 survey was on a more comprehensive basis than that in 1960. For these reasons, and also because of the possible effects of sampling variability, no comparison has been attempted.

### Coverage

The 1965 survey related to private and government employees in the specified industry groups.

Private employers were surveyed by means of a stratified random sample of those employers subject to pay-roll tax. Approximately 3,000 private employers were included in the survey, and completed returns were received from over 99.9 per cent of them. The results of the survey of private employers were representative of the experience of an estimated 1,181,000 full-time adult male employees. In the government (i.e. Commonwealth, State and local) sector the survey covered 409,000 full-time male employees.

The sample of private employers had to be restricted to those subject to pay-roll tax. The industry classification of these employers was generally according to major activity. Mainly for these reasons, the survey estimates of total numbers of private and government employees do not correspond to totals of employment of all adult males in the specified industries.

### Results of the survey

As the private employer part of the survey was based on a sample, the resultant estimates are subject to sampling variability, that is, variations which might occur by chance because only a sample of employers was surveyed.

The estimates are shown for adult males classified by industry group, by State, and by government or private employment. Therefore, reflected in these estimates will be the effects of differences in amounts paid for the various occupations; of differences in amounts paid for the same occupations; of differences in occupational structure within industries; and of differences in industry structure, both as between States and as between government and private employment.

Employers (private and government) were asked to comment on any full-time adult male employees shown as earning *less than \$30*, or *\$30 and less than \$32* in the survey week. From these comments it was possible to omit from these two weekly earnings groups those adult males who were not paid for a full week. Those who were confirmed as full-time adult males being paid for a full week and earning less than \$32 represented a total of approximately 300. They were reported by respondents as being 'persons on the basic wage', 'adult messengers', 'elderly persons', 'persons on training rate', 'salesmen earning retainer only in the specified week', etc. Similarly it is probable that in completed

returns there were a number of employees who earned \$32 and over in the specified pay-period even though they were not paid for a full week. It has not been possible to ensure that all such employees have been omitted from these estimates for 'full-time' adult males.

On the return forms the categories *managerial, executive, professional and higher supervisory staff, and all other full-time employees* were defined. However, the allocation of employees between these categories depended on the judgment of the individual employers (both private and government) completing the returns.

The tables on pages 293-5 show estimates of the average amounts and of the relative importance of the components of total weekly earnings (i.e. overtime earnings, ordinary time earnings at 'award, etc. rates', and ordinary time earnings in excess of those at 'award, etc. rates'). These details were obtained from each employer in the form of totals for each component part in respect of all his full-time adult male employees. Details were not sought of the number of employees receiving various amounts of these components, and thus no information is available about the distribution of employees about the averages. The averages shown for these components relate to the total of all employees in the survey, not just to the numbers of employees who received payment in these categories.

In the tables showing estimates of average earnings (or dissections of average earnings) the estimates have been rounded to the nearest 10 cents.

When using the estimates of *ordinary time earnings at award, etc. rates* it should be borne in mind that, in addition to minimum award rates specified for particular occupations, this category was defined to include all loadings, allowances, etc. prescribed in the awards, etc. In addition, for employees not covered by an award, etc. the normal (or agreed) rates of pay for normal hours of work were defined as coming within the scope of *ordinary time earnings at award, etc. rates*.

### Definitions

The following definitions refer to terms used in the survey and in the following tables.

*Adult males* includes all male employees over twenty-one years of age and those males who, although under twenty-one years of age, are paid at the adult rate for their occupation. *Junior males* includes all other males under twenty-one years of age.

*Full-time male employees* was defined as those who ordinarily work thirty hours or more a week. Employees on 'short-time' or those who began or ceased work during the specified week and part-time employees were excluded from this survey. Instructions were also given that employees who were not paid for a full week's work because of absenteeism, sickness, accident, etc. were to be excluded.

*Other than managerial, etc. staff* includes minor supervisory staff, leading hands, clerical and office staff as well as ordinary wages employees. It excludes *managerial, executive, professional, and higher supervisory staff* which were not further defined.

*Private employees* represents employees of private employers.

*Government employees* represents employees of Commonwealth and State government departments and semi-government authorities and of local government bodies.

*Total weekly earnings* refers to gross earnings of male employees for the last pay-period in October 1965 before taxation and other deductions. It includes payments directly attributable to work performed during the week for which payment was made (or to sick leave taken), e.g. ordinary time, overtime, shift allowances, penalty rates, commission (if paid weekly), and similar payments. For payments made other than on a weekly basis only one week's proportion is included, for example, salaries paid fortnightly or monthly; payment for those on annual leave; periodical payments under incentive, piecework, commission, profit sharing schemes, etc.; annual or other periodical bonuses, etc. Retrospective payments are excluded.

*Overtime earnings* represents that part of total weekly earnings of full-time adult male employees for the last pay-period in October 1965 for time worked in excess of award hours, or, in the case of those employees not affected by awards, etc. in excess of standard, or agreed, hours of work.

*Awards or registered agreements* refers to awards or determinations of, or agreements registered with, Commonwealth or State industrial tribunals.

*Ordinary time earnings at award, etc. rates* comprises:

- (i) where there was an appropriate award or registered agreement operating, the rates specified in the award for the hours of work paid for (up to the award hours) plus any other payments (excepting overtime), e.g. dirt money; height money; penalty rates; shift work, confined spaces, tool, leading hand, camping, etc., allowances; lead bonus and other loadings provided for in the award or registered agreement and at the rates specified in the award or registered agreement;

- (ii) where there was no appropriate award or registered agreement operating (including the case of managerial, executive, professional and higher supervisory staff not covered by awards), the rates of pay for hours of work covered by an unregistered agreement (if one existed) plus other payments (excepting overtime) similar to those specified in (i) above, if provided for in the agreement; otherwise the terms of employment as agreed for each person for wages, salaries, retainers, hours of work, etc. (excluding commission, and annual or half-yearly, etc. bonuses) relating to a normal working week were used;
- (iii) for employees under incentive, piecework, etc. schemes, only that part of their ordinary time earnings such as retainers, base rates or award minima.

*Ordinary time earnings in excess of those at award, etc. rates:*

- (i) *Based on payment by measured result* includes that part of earnings in excess of award or agreed base rate earnings, which is variable from one period to another depending on measured performance of the employees, e.g. incentive payment schemes, piecework, task bonus, commission, etc;
- (ii) *Other* includes all ordinary time earnings in excess of those at 'award, etc. rates' not described in (i) above; included were special attendance or good time-keeping bonuses, proportion of annual or other periodical bonuses, profit sharing scheme earnings and any other forms of over-award payments.

**AVERAGE WEEKLY EARNINGS, FULL-TIME ADULT AND JUNIOR MALES  
(OTHER THAN MANAGERIAL, ETC. STAFF)(a): INDUSTRY GROUPS  
AUSTRALIA(b), OCTOBER 1965(c)  
(\$)**

Industry group	Adult males		Junior males			Total
	Private employees	Government employees	Total	Private employees	Government employees	
<b>Manufacturing—</b>						
Extracting, refining and founding of metals . . . . .	61.80	54.90	61.80	28.80	(d)	28.80
Engineering and metalworking . . . . .	60.20	57.60	60.10	27.10	31.10	27.20
Ships, vehicles, parts and accessories . . . . .	57.60	54.10	56.50	26.30	24.20	25.60
Founding, engineering, vehicles, etc. . . . .	59.90	54.80	59.30	27.10	25.50	26.90
Textiles, clothing and footwear . . . . .	53.90	50.50	53.80	26.10	(d)	26.10
Food, drink and tobacco . . . . .	55.70	54.60	55.60	28.00	29.10	28.10
Paper, printing, bookbinding and photography . . . . .	64.00	58.70	63.80	27.60	24.10	27.50
Chemicals, dyes, explosives, paints, non-mineral oils . . . . .	58.20	54.30	58.10	30.10	27.30	30.00
Other . . . . .	56.40	54.90	56.40	26.10	25.20	26.10
<i>Manufacturing groups</i> . . . . .	58.50	54.90	58.20	27.10	25.90	27.00
<b>Non-manufacturing—</b>						
Mining and quarrying . . . . .	71.90	73.20	72.00	31.90	31.70	31.90
Electricity, gas, water and sanitary services . . . . .	55.20	57.10	56.90	30.20	29.50	29.60
Building and construction . . . . .	66.00	51.20	57.60	27.00	27.60	27.20
Transport, storage and communication . . . . .	64.20	59.10	60.30	26.90	25.90	26.00
Wholesale trade, primary produce dealing, etc. . . . .	54.20	53.60	54.20	25.70	(d)	25.80
Retail trade . . . . .	50.50	53.00	50.60	24.50	29.90	24.50
<i>Non-manufacturing groups</i> . . . . .	58.90	56.00	57.60	25.60	26.90	26.00
<i>All industries(e)</i> . . . . .	58.70	55.80	57.90	26.40	26.70	26.50

(a) Excludes managerial, executive, professional and higher supervisory staff. For definitions and particulars of coverage of the survey, etc. see pages 289-91. (b) Excludes Northern Territory and Australian Capital Territory. (c) Last pay-period in October 1965. (d) Less than 50 employees. (e) Excludes primary production; finance and property; public authority activities (n.e.i.); community and business services; and amusement, hotels, cafés, personal service, etc.

**TOTAL (PRIVATE AND GOVERNMENT) EMPLOYEES—FULL-TIME ADULT MALE  
EMPLOYEES (OTHER THAN MANAGERIAL, ETC. STAFF)(a): TOTAL WEEKLY  
EARNINGS AND INDUSTRY GROUPS, AUSTRALIA(b), OCTOBER 1965(c)**  
(<sup>'000</sup>)

<i>Industry group</i>	<i>Less than \$36(d)</i>	<i>\$36 and less than \$40</i>	<i>\$40 and less than \$44</i>	<i>\$44 and less than \$48</i>	<i>\$48 and less than \$52</i>	<i>\$52 and less than \$56</i>
<b>Manufacturing—</b>						
Extracting, refining and founding of metals	0.7	2.2	3.2	4.5	5.6	6.2
Engineering and metalworking	4.6	11.3	16.9	19.7	21.4	19.8
Ships, vehicles, parts and accessories	1.9	5.1	11.0	18.5	15.9	14.0
Founding, engineering, vehicles, etc.	7.2	18.6	31.1	42.7	43.0	40.0
Textiles, clothing and footwear	1.0	2.9	5.5	6.4	5.5	4.6
Food, drink and tobacco	2.0	7.6	13.1	11.5	12.6	10.6
Paper, printing, bookbinding and photo- graphy	0.7	1.6	2.8	3.9	5.1	5.5
Chemicals, dyes, explosives, paints, non- mineral oils	0.5	2.1	3.0	3.5	3.8	4.0
Other	4.2	10.6	13.8	14.7	14.7	14.1
<i>Manufacturing groups</i>	15.6	43.4	69.1	82.7	84.7	78.8
<b>Non-manufacturing—</b>						
Mining and quarrying	0.7	1.1	1.6	1.8	2.0	2.4
Electricity, gas, water and sanitary services	0.9	3.8	9.9	8.4	11.7	8.4
Building and construction	6.5	15.5	28.8	24.8	26.0	23.7
Transport, storage and communication	2.4	9.4	17.4	21.7	22.0	21.0
Wholesale trade, primary produce dealing, etc.	2.4	11.8	21.6	19.6	20.3	16.4
Retail trade	1.6	8.8	15.8	14.7	13.4	9.2
<i>Non-manufacturing groups</i>	14.6	50.5	95.0	91.0	95.4	81.2
<i>All industries(e)</i>	30.2	93.9	164.1	173.7	180.1	160.0

<i>Industry group</i>	<i>\$56 and less than \$60</i>	<i>\$60 and less than \$70</i>	<i>\$70 and less than \$80</i>	<i>\$80 and over</i>	<i>Total</i>
<b>Manufacturing—</b>					
Extracting, refining and founding of metals	6.1	12.3	7.4	7.0	55.3
Engineering and metalworking	20.5	37.8	23.9	21.2	197.1
Ships, vehicles, parts and accessories	9.5	16.5	8.0	7.6	107.9
Founding, engineering, vehicles, etc.	36.2	66.6	39.2	35.7	360.3
Textiles, clothing and footwear	3.7	5.5	2.6	1.8	39.4
Food, drink and tobacco	9.4	13.6	7.2	6.3	93.9
Paper, printing, bookbinding and photo- graphy	5.2	10.0	6.2	7.3	48.2
Chemicals, dyes, explosives, paints, non- mineral oils	3.3	5.7	3.0	2.3	31.2
Other	11.3	18.3	10.4	9.2	121.3
<i>Manufacturing groups</i>	69.0	119.8	68.7	62.6	694.3
<b>Non-manufacturing—</b>					
Mining and quarrying	2.8	7.9	7.1	11.9	39.3
Electricity, gas, water and sanitary services	6.6	10.1	5.9	5.9	71.7
Building and construction	18.8	27.6	16.4	22.4	210.6
Transport, storage and communication	19.2	34.5	20.8	22.0	190.5
Wholesale trade, primary produce dealing, etc.	12.0	17.4	9.0	7.6	138.1
Retail trade	5.7	7.5	2.3	2.5	81.4
<i>Non-manufacturing groups</i>	65.2	105.0	61.6	72.3	731.6
<i>All industries(e)</i>	134.2	224.7	130.3	134.9	1,426.0

(a) Excludes managerial, executive, professional and higher supervisory staff. For definitions and particulars of coverage of the survey, etc. see pages 289-91. (b) Excludes Northern Territory and Australian Capital Territory. (c) Last pay-period in October 1965. (d) Includes some employees who received less than \$32; see page 289. (e) Excludes primary production; finance and property; public authority activities (n.e.i.); community and business services; and amusement, hotels, cafés, personal service, etc.

**DISSECTION OF TOTAL WEEKLY EARNINGS AND AVERAGE EARNINGS PER  
EMPLOYEE, FULL-TIME ADULT MALES (OTHER THAN MANAGERIAL, ETC.  
STAFF)(a): INDUSTRY GROUPS, AUSTRALIA(b), OCTOBER 1965(c)**

**TOTAL (PRIVATE AND GOVERNMENT) EMPLOYEES**

	Percentage of total earnings(d)					
		Ordinary time earnings				
		In excess of 'award, etc. rates'				
Industry group	Overtime earnings	At 'award, etc. rates'	Payment by measured result	Other	Total	
	%	%	%	%	%	%
<b>Manufacturing—</b>						
Extracting, refining and founding of metals . . . . .	16.6	73.7	6.6	3.1	100.0	
Engineering and metal working . . . . .	18.2	71.2	10.6		100.0	
Ships, vehicles, parts and accessories . . . . .	11.5	80.8	1.2	6.5	100.0	
Founding, engineering, vehicles, . . . . .	16.0	74.3	3.1	6.6	100.0	
Textiles, clothing and footwear . . . . .	12.4	76.0	5.9	5.7	100.0	
Food, drink and tobacco . . . . .	16.1	78.2	5.7		100.0	
Paper, printing, bookbinding and photography . . . . .	11.7	77.0	3.6	7.7	100.0	
Chemicals, dyes, explosives, paints, non- mineral oils . . . . .	11.1	78.9	4.0	6.0	100.0	
Other . . . . .	15.5	75.7	8.8		100.0	
<b>Manufacturing groups . . . . .</b>	<b>15.2</b>	<b>75.5</b>	<b>3.3</b>	<b>6.0</b>	<b>100.0</b>	
<b>Non-manufacturing—</b>						
Mining and quarrying . . . . .	13.2	72.6	11.9	2.3	100.0	
Electricity, gas, water and sanitary services . . . . .	8.3	90.5	0.1	1.1	100.0	
Building and construction . . . . .	14.5	81.9	3.6		100.0	
Transport, storage and communication . . . . .	14.3	83.9	1.8		100.0	
Wholesale trade, primary produce dealing, etc. . . . .	8.1	82.1	2.9	6.9	100.0	
Retail trade . . . . .	6.4	82.8	10.8		100.0	
<b>Non-manufacturing groups . . . . .</b>	<b>11.8</b>	<b>82.8</b>	<b>2.0</b>	<b>3.4</b>	<b>100.0</b>	
<b>All industries(e) . . . . .</b>	<b>13.5</b>	<b>79.2</b>	<b>2.6</b>	<b>4.7</b>	<b>100.0</b>	

(a) Excludes managerial, executive, professional and higher supervisory staff. For definitions and particulars of coverage of the survey, etc. see pages 289-91. (b) Excludes Northern Territory and Australian Capital Territory. (c) Last pay-period in October 1965. (d) See page 290. (e) Excludes primary production; finance and property; public authority activities (n.e.i.); community and business services; and amusement, hotels, cafés, personal service, etc.



DISSECTION OF TOTAL WEEKLY EARNINGS AND AVERAGE EARNINGS PER  
EMPLOYEE, FULL-TIME ADULT MALES (OTHER THAN MANAGERIAL, ETC.  
STAFF)(a): INDUSTRY GROUPS, AUSTRALIA(b), OCTOBER 1965(c)—continued

TOTAL (PRIVATE AND GOVERNMENT) EMPLOYEES—continued

Industry group	Average earnings per employee(d)				
	Ordinary time earnings				
	In excess of 'award, etc. rates'				
	Overtime earnings	At 'award, etc. rates'	Payment by measured result	Other	Total
<b>Manufacturing—</b>	\$	\$	\$	\$	\$
Extracting, refining and founding of metals . . . . .	10.30	45.50	4.10	1.90	61.80
Engineering and metal working . . . . .	10.90	42.80	6.40		60.10
Ships, vehicles, parts and accessories . . . . .	6.50	45.60	0.70	3.70	56.50
Founding, engineering, vehicles, etc. . . . .	9.50	44.10	1.80	3.90	59.30
Textiles, clothing and footwear . . . . .	6.70	40.90	3.20	3.10	53.80
Food, drink and tobacco . . . . .	8.90	43.50	3.20		55.60
Paper, printing, bookbinding and photography . . . . .	7.50	49.10	2.30	4.90	63.80
Chemicals, dyes, explosives, paints, non- mineral oils . . . . .	6.40	45.80	2.30	3.50	58.10
Other . . . . .	8.70	42.70	5.00		56.40
<b>Manufacturing groups . . . . .</b>	<b>8.80</b>	<b>44.00</b>	<b>1.90</b>	<b>3.50</b>	<b>58.20</b>
<b>Non-manufacturing—</b>					
Mining and quarrying . . . . .	9.50	52.30	8.60	1.60	72.00
Electricity, gas, water and sanitary services . . . . .	4.70	51.50	*	0.60	56.90
Building and construction . . . . .	8.30	47.20	2.10		57.60
Transport, storage and communication . . . . .	8.60	50.60	1.10		60.30
Wholesale trade, primary produce dealing, etc. . . . .	4.40	44.50	1.60	3.70	54.20
Retail trade . . . . .	3.30	41.90	5.40		50.60
<b>Non-manufacturing groups . . . . .</b>	<b>6.80</b>	<b>47.70</b>	<b>1.10</b>	<b>2.00</b>	<b>57.60</b>
<b>All industries(e) . . . . .</b>	<b>7.80</b>	<b>45.90</b>	<b>1.50</b>	<b>2.70</b>	<b>57.90</b>

(a) Excludes managerial, executive, professional and higher supervisory staff. For definitions and particulars of coverage of the survey, etc. see pages 289-91. (b) Excludes Northern Territory and Australian Capital Territory. (c) Last pay-period in October 1965. (d) See page 290. (e) Excludes primary production; finance and property; public authority activities (n.e.i.); community and business services; and amusement, hotels, cafés, personal service, etc.

\* Less than five cents.

**FULL-TIME ADULT MALE MANAGERIAL, EXECUTIVE, ETC. STAFF(a)**  
**AVERAGE WEEKLY EARNINGS**  
**INDUSTRY GROUPS, AUSTRALIA(b), OCTOBER 1965(c)**  
 (\$)

<i>Industry group</i>	<i>Private</i>	<i>Government</i>	<i>Total</i>
Manufacturing groups . . . .	93.30	105.10	93.60
Non-manufacturing groups . . . .	89.50	107.10	92.50
<b>All industry groups(d) . . . .</b>	<b>91.50</b>	<b>106.80</b>	<b>93.00</b>

**FULL-TIME ADULT MALE MANAGERIAL, EXECUTIVE, ETC. STAFF(a)**  
**DISSECTION OF AVERAGE WEEKLY EARNINGS**  
**AUSTRALIA(b), OCTOBER 1965(c)**

	<i>Private employees</i>		<i>Government employees</i>		<i>Total</i>	
	<i>Average earnings per employee</i>	<i>Proportion of total</i>	<i>Average earnings per employee</i>	<i>Proportion of total</i>	<i>Average earnings per employee</i>	<i>Proportion of total</i>
	\$	%	\$	%	\$	%
Overtime . . . . .	0.90	1.0	3.00	2.8	1.10	1.2
Ordinary time earnings—						
At 'award, etc. rates' . . . .	87.80	96.0	103.60	97.0	89.40	96.2
In excess of 'award, etc. rates'—						
(i) Payment by measured result . . . .	1.10	1.2	0.30	0.2	1.00	1.0
(ii) Other . . . . .	1.70	1.8			1.50	1.6
<b>Total(d) . . . . .</b>	<b>91.50</b>	<b>100.0</b>	<b>106.80</b>	<b>100.0</b>	<b>93.00</b>	<b>100.0</b>

**FULL-TIME ADULT MALE MANAGERIAL, EXECUTIVE, ETC. STAFF(a)**  
**NUMBERS AND PERCENTAGES, TOTAL WEEKLY EARNINGS GROUPS**  
**AUSTRALIA(b), OCTOBER 1965(c)**

<i>Total weekly earnings groups</i>	<i>Number ('000)</i>			<i>Percentage</i>		
	<i>Private</i>	<i>Government</i>	<i>Total</i>	<i>Private</i>	<i>Government</i>	<i>Total</i>
				%	%	%
Less than \$52 . . . . .	4.9	0.2	5.0	3.3	1.0	3.1
\$52 and less than \$56 . . . . .	6.0	0.2	6.2	4.1	1.3	3.8
\$56 " " " \$60 . . . . .	8.6	0.4	9.0	5.8	2.2	5.5
\$60 " " " \$70 . . . . .	26.7	1.5	28.2	18.1	9.2	17.2
\$70 " " " \$80 . . . . .	25.4	1.9	27.3	17.2	11.5	16.6
\$80 and over . . . . .	75.8	12.4	88.3	51.5	74.8	53.8
<b>Total(d) . . . . .</b>	<b>147.4</b>	<b>16.6</b>	<b>164.1</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

(a) Includes managerial, executive, professional and higher supervisory staff. For definitions and particulars of coverage of the survey, etc., see pages 289-91. (b) Excludes Northern Territory and Australian Capital Territory. (c) Last pay-period in October 1965. (d) Excludes primary production; finance and property; public authority activities (n.e.i.); community and business services; and amusement, hotels, cafés, personal services, etc.

## Surveys of weekly earnings and hours, October 1962, 1963, 1964, and 1966

Sample surveys in respect of most private employers subject to pay-roll tax (i.e. those paying more than \$400 per week in wages and salaries) have been conducted as at the last pay-period in October during recent years. Some results of the 1966 survey and comparisons with earlier surveys are contained in the following tables. Further particulars including averages for each State were published in *Labour Report* No. 52, 1965 and 1966.

In addition to obtaining data for the calculation of average weekly earnings, average weekly hours paid for, and average hourly earnings, the October 1966 survey obtained information on overtime and ordinary time earnings and hours for full-time employees (other than managerial, etc. staff). The figures of average overtime earnings and average overtime hours are the averages for *all* employees (in the specified category) represented in the survey whether or not they worked overtime. The survey figures do not show the average overtime earnings or hours of only those employees who worked overtime.

Figures for average weekly earnings, average weekly hours paid for, and average hourly earnings as at the selected pay-periods are presented for males and females (adult and junior) separately by industry groups and by States. They reflect the effects of differences (and of changes between points of time) in amounts paid for the various occupations; in amounts paid for the same occupations; in occupational structures within industries; in industry structure; in degrees of business activity (incidence of overtime, etc.); and in the incidence of incentive schemes, piece-work and profit-sharing scheme payments, etc.

The figures of average weekly earnings and hours shown in the following tables have been rounded to the first decimal place.

In general, where an establishment was closed down for part or whole of the last pay-period in October, or operations were seriously curtailed by an industrial dispute, breakdown, fire, etc., the employer was asked to supply particulars of wages and hours for the nearest normal pay-period.

### Coverage

The results of the surveys are based on returns from stratified random samples of private employers subject to pay-roll tax. Employees in rural industry and in private domestic service are excluded because most employers in these two industries are not subject to pay-roll tax. Also excluded from the surveys are: employees of government and semi-government authorities; employees of religious, benevolent and other similar organisations exempt from pay-roll tax; and all employees in the Northern Territory and the Australian Capital Territory. The earnings and hours of waterside workers employed on a casual basis are excluded because they are subject to wide fluctuations for short periods such as those covered by these surveys.

Approximately 3,950 employers were included in the October 1966 survey and the sample represented 1,519,000 male and 663,000 female wage and salary earners.

As the survey was based on a sample, the resultant estimates are subject to sampling variability, that is, variations which might occur by chance because only a sample of employers was surveyed. The extent of the detail published has been determined after considering estimated measures of sampling variability.

### Comparability of results

In addition to affecting the results of each sample survey, sampling variability also affects comparison between each year's results.

The industry classification adopted for the 1966 and previous earnings and hours surveys from 1963 onwards (including the 1965 survey) is that used for the 1961 population census. Because the October 1962 survey was based on a different industry classification only broad comparison with more recent surveys is possible (*see* tables on pages 302 and 305). Some comparison of the results of the surveys of 1963, 1964 and 1966 are shown in the tables on pages 299 to 301 and 304.

The October 1965 Survey of Weekly Earnings was a special purpose survey on a different basis from the surveys compared in this section and, therefore, its results are not shown herein, but appear on pages 291-5. Results of the 1965 survey were published in detail in *Labour Report* No. 52, 1965 and 1966.

In the surveys of October 1962, 1963 and 1964 employees 'whose hours of work were not known' were reported with managerial, etc. staff. In the October 1966 survey employers were asked to report these employees in their correct classification, and if necessary estimate their hours of work. It is considered that any reporting differences will have had only a slight effect on comparability of the surveys.

The allocation of employees between 'Managerial, executive, professional and higher supervisory staff' and 'All other full-time employees' (as defined) depends upon the employers' interpretation of the definitions (see below).

### Definitions

The following definitions refer to terms used in the surveys and in the tables in this section.

*Employees* refers to male and female employees on the pay-roll and who received pay for the last pay-period in October.

*Adults* includes all employees 21 years of age and over and those employees who, although under 21 years of age, are paid at the adult rate for their occupation.

*Juniors* refers to those employees under 21 years of age who are not paid at the adult rate for their occupation.

*Full-time employees* refers to those employees who ordinarily work 30 hours or more a week and who received pay for the last pay-period in October. Included are 'full-time' employees on short-time; 'full-time' employees who began or ceased work during the pay-period; and 'full-time' employees on paid annual leave, paid sick leave, long service leave and paid holidays taken during the pay-period.

*Part-time employees* refers to employees who ordinarily work less than 30 hours a week. Employees on short-time who normally work 30 hours or more a week are classified as full-time employees.

*Other than managerial, etc. staff* includes minor supervisory employees, leading hands, clerical and office staff as well as ordinary wages employees. It excludes *managerial, executive, professional and higher supervisory staff* who were not further defined.

*Weekly earnings* refers to gross earnings for the last pay-period in October before taxation and other deductions have been made. It includes ordinary time earnings, overtime earnings, shift allowances, penalty rates, commission and similar payments; and that part of paid annual leave, paid sick leave, long service leave and paid holidays taken during the pay-period. It includes one week's proportion of payments made other than on a weekly basis, e.g. salary paid fortnightly or monthly; paid annual or other leave taken during the pay-period; periodical payments under incentive, piecework, profit sharing schemes, etc.; commissions; annual or periodical bonuses, etc. Retrospective payments are excluded.

*Overtime earnings* refers to that part of gross earnings for hours paid for in excess of award, standard or agreed hours of work. Overtime earnings were not reported for managerial, etc. staff.

*Ordinary time earnings* refers to that part of gross earnings for award, standard or agreed hours of work.

*Weekly man-hours paid for* refers to the sum of man-hours for which payment was made. It includes ordinary time hours, overtime hours, paid stand-by or reporting time; and paid annual leave, paid sick leave, long service leave and paid holidays taken during the specified pay-period. For employees paid other than weekly, hours are converted to a weekly basis. Hours of work were not reported for managerial, etc. staff.

*Overtime hours* refers to hours in excess of award, standard or agreed hours of work.

*Ordinary time hours* refers to award, standard or agreed hours of work.

**AVERAGE WEEKLY EARNINGS AND HOURS (OVERTIME AND ORDINARY TIME)(a), FULL-TIME EMPLOYEES (OTHER THAN MANAGERIAL, ETC. STAFF)(b): INDUSTRY GROUPS AUSTRALIA(c), OCTOBER 1966(d)**

Industry group	Average weekly earnings (\$)			Average weekly hours (g)			Average weekly earnings (\$)			Average weekly hours (g)		
	Over-time earnings	Ordinary time earnings	Total	Over-time hours	Ordinary time hours	Total	Over-time earnings	Ordinary time earnings	Total	Over-time hours	Ordinary time hours	Total
	ADULT MALES						JUNIOR MALES					
Manufacturing—												
Extracting, refining and founding of metals	9.50	53.30	62.80	5.2	39.1	44.3	3.00	32.80	35.80	2.4	39.1	41.5
Engineering and metal-working	10.60	51.00	61.60	5.6	38.5	44.2	2.90	26.70	29.60	2.7	38.7	41.5
Ships, vehicles, parts and accessories	7.60	53.00	60.50	3.8	38.8	42.6	2.20	26.30	28.40	2.1	39.1	41.1
Founding, engineering, vehicles, etc.	9.70	51.90	61.50	5.1	38.7	43.8	2.80	27.40	30.20	2.5	38.9	41.4
Textiles, clothing and footwear	7.40	50.10	57.50	4.0	38.9	42.9	2.90	26.40	29.30	2.8	38.7	41.5
Food, drink and tobacco	9.40	48.70	58.00	4.8	38.7	43.5	3.30	26.70	30.10	2.9	38.5	41.4
Paper, printing, book-binding and photography	7.70	58.90	66.60	3.4	38.9	42.3	2.20	27.10	29.30	1.9	39.1	41.0
Chemicals, dyes, explosives, paints, non-mineral oils	7.90	55.10	63.00	3.5	38.8	42.3	1.80	31.50	33.30	1.5	38.4	39.9
Other	8.80	49.70	58.50	4.6	38.9	43.5	2.20	25.70	27.80	2.1	38.7	40.8
Manufacturing groups	9.10	51.60	60.70	4.7	38.8	43.5	2.60	27.00	29.70	2.4	38.8	41.2
Non-manufacturing—												
Mining and quarrying	10.20	66.00	76.10	5.1	37.8	42.9	3.40	32.00	35.50	2.8	38.1	41.0
Building and construction	12.70	55.20	67.90	5.8	38.7	44.5	2.10	27.90	29.90	1.9	39.6	41.5
Transport and storage	14.30	53.40	67.60	7.2	39.1	46.4	3.20	28.20	31.40	2.8	39.3	42.0
Finance and property	1.50	62.80	64.30	0.7	38.0	38.7	0.60	31.30	31.90	0.5	37.8	38.2
Wholesale trade, primary produce dealing, etc.	4.30	53.00	57.30	2.3	39.0	41.3	1.20	27.10	28.30	1.1	39.1	40.2
Retail trade	3.00	51.30	54.30	1.7	39.6	41.3	1.20	25.40	26.50	1.1	39.5	40.7
Other industries(e)	5.00	53.50	58.50	2.7	38.9	41.6	1.50	29.00	30.50	1.2	38.0	39.2
Non-manufacturing groups	7.00	55.00	61.90	3.5	38.9	42.4	1.30	27.80	29.10	1.2	38.9	40.1
All industry groups(f)	8.20	53.00	61.20	4.2	38.8	43.0	2.00	27.40	29.40	1.8	38.9	40.7
	ADULT FEMALES						JUNIOR FEMALES					
Manufacturing groups	1.80	32.50	34.30	1.5	38.0	39.4	0.80	22.00	22.80	0.9	38.4	39.3
Non-manufacturing groups	0.90	35.90	36.80	0.7	38.3	39.0	0.40	23.60	23.90	0.4	38.6	39.0
All industry groups(f)	1.40	34.00	35.40	1.1	38.1	39.2	0.50	23.10	23.60	0.6	38.5	39.1

(a) Average weekly overtime and ordinary time earnings and hours are averages for all employees represented in the survey (see page 297). (b) Private employees only. Excludes managerial, executive, professional and higher supervisory staff. (c) Excludes Northern Territory and Australian Capital Territory. (d) Last pay-period in October. For definitions and particulars of coverage of the survey, etc. see pages 296-7. (e) Includes community and business services; amusement, hotels, cafés, personal service, etc.; electricity, gas, water supply and sanitary services; and forestry, fishing and trapping. (f) Excludes rural industry, and private domestic service. (g) Average weekly hours paid for.

## AVERAGE WEEKLY EARNINGS, FULL-TIME EMPLOYEES (OTHER THAN MANAGERIAL, ETC. STAFF)(a): INDUSTRY GROUPS, AUSTRALIA(b), OCTOBER 1963, 1964, AND 1966(c)

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Industry group	Adult males			Junior males			Adult females			Junior females		
	Oct. 1963	Oct. 1964	Oct. 1966	Oct. 1963	Oct. 1964	Oct. 1966	Oct. 1963	Oct. 1964	Oct. 1966	Oct. 1963	Oct. 1964	Oct. 1966
Manufacturing—												
Extracting, refining and founding of metals . . .	53.20	58.70	62.80	27.40	31.10	35.80	30.00	32.20	36.40	23.00	25.00	27.70
Engineering and metal-working . . .	51.40	55.60	61.60	22.70	26.50	29.60	29.70	31.50	34.00	19.70	21.40	23.80
Ships, vehicles, parts and accessories . .	52.40	55.70	60.50	23.20	25.50	28.40	30.10	31.80	35.90	21.60	23.60	25.20
Founding, engineering, vehicles, etc. . .	52.00	56.10	61.50	23.60	27.00	30.20	29.80	31.60	34.40	20.30	22.10	24.40
Textiles, clothing and footwear . . .	47.60	51.60	57.50	23.00	25.70	29.30	29.00	31.30	33.70	17.40	19.30	21.10
Food, drink and tobacco . . .	48.40	52.00	58.00	25.20	26.10	30.10	29.90	32.30	33.90	19.50	20.50	22.70
Paper, printing, book-binding and photography . .	57.00	60.70	66.60	25.40	26.90	29.30	31.50	33.50	36.50	18.70	20.00	24.10
Chemicals, dyes, explosives, paints, non-mineral oils . .	51.80	55.60	63.00	25.90	28.70	33.30	31.50	33.40	36.30	21.20	23.00	25.70
Other . . .	49.30	53.20	58.50	22.10	24.60	27.80	29.40	30.80	34.10	18.40	19.60	23.60
Manufacturing groups . .	51.00	55.00	60.70	23.60	26.40	29.70	29.60	31.70	34.30	18.60	20.30	22.80
Non-manufacturing—												
Mining and quarrying . . .	60.60	65.50	76.10	28.10	31.90	35.50	35.30	35.90	42.60	23.20	25.50	28.30
Building and construction . . .	55.70	59.90	67.90	25.50	26.80	29.90	33.60	34.50	39.70	20.20	22.10	25.30
Transport and storage . . .	55.30	59.60	67.60	23.70	26.70	31.40	33.60	35.20	38.30	21.90	23.10	26.40
Finance and property . . .	52.60	57.40	64.30	24.50	27.40	31.90	33.40	35.70	38.90	22.00	23.60	26.30
Wholesale trade, primary produce dealing, etc. . .	48.70	52.50	57.30	22.60	24.40	28.30	32.20	34.00	37.30	20.30	21.70	24.10
Retail trade . . .	46.60	49.70	54.30	22.10	24.00	26.50	30.60	33.00	35.20	18.20	19.50	22.00
Other industries(d) . .	50.00	53.30	58.50	24.80	27.20	30.50	31.60	33.40	36.70	20.70	22.10	24.40
Non-manufacturing groups . .	51.50	55.40	61.90	23.30	25.40	29.10	31.70	33.70	36.80	19.80	21.30	23.90
All industry groups(e) . .	51.20	55.20	61.20	23.50	25.90	29.40	30.50	32.60	35.40	19.40	20.90	23.60

(a) Private employees only. Excludes managerial, executive, professional and higher supervisory staff. (b) Excludes Northern Territory and Australian Capital Territory. (c) Last pay-period in October. For definitions and particulars of coverage of the surveys, etc. see pages 296-7.

(d) Includes community and business services; amusement, hotels, cafés, personal service, etc.; electricity, gas, water and sanitary services; and forestry, fishing and trapping. (e) Excludes rural industry, and private domestic service. (f) Affected by industrial disputes.

**AVERAGE WEEKLY HOURS PAID FOR, FULL-TIME EMPLOYEES (OTHER THAN  
MANAGERIAL, ETC. STAFF)(a): INDUSTRY GROUPS, AUSTRALIA(b)  
OCTOBER 1963, 1964, AND 1966(c)**

Industry group	Adult males			Junior males			Adult females			Junior females		
	Oct. 1963	Oct. 1964	Oct. 1966	Oct. 1963	Oct. 1964	Oct. 1966	Oct. 1963	Oct. 1964	Oct. 1966	Oct. 1963	Oct. 1964	Oct. 1966
Manufacturing—												
Extracting, refining and founding of metals . . .	43.4	44.2	44.3	41.8	41.2	41.5	40.5	40.0	39.8	40.7	39.7	39.8
Engineering and metal-working . . .	42.8	44.3	44.2	41.1	42.3	41.5	39.7	39.7	39.7	39.5	39.6	39.7
Ships, vehicles, parts and accessories . .	43.5	42.9	42.6	41.5	40.8	41.1	39.7	39.4	39.2	39.6	39.3	38.7
Founding, engineering, vehicles, etc. . . . .	43.1	43.9	43.8	41.3	41.8	41.4	39.8	39.7	39.6	39.6	39.6	39.6
Textiles, clothing and footwear . . . . .	41.9	42.7	42.9	40.7	41.1	41.5	39.4	39.7	39.3	39.1	39.6	39.3
Food, drink and tobacco . . . . .	42.7	43.1	43.5	41.3	41.1	41.4	39.5	39.4	39.5	38.9	39.5	39.2
Paper, printing, book-binding and photography . .	41.8	42.2	42.3	41.0	41.1	41.0	39.6	39.9	39.7	39.7	39.9	39.7
Chemicals, dyes, explosives, paints, non-mineral oils . .	41.8	42.9	42.3	40.4	41.2	39.9	39.6	39.5	39.0	38.8	38.8	39.0
Other . . . . .	43.1	43.2	43.5	40.5	41.4	40.8	39.6	39.9	39.4	39.3	39.3	38.9
Manufacturing groups . . . . .	42.8	43.4	43.5	41.1	41.5	41.2	39.5	39.7	39.4	39.2	39.5	39.3
Non-manufacturing—												
Mining and quarrying . . . . .	41.6	42.7	42.9	41.0	41.2	41.0	39.3	38.9	38.1	39.3	39.2	39.5
Building and construction . . . . .	43.0	43.7	44.5	40.4	40.8	41.5	39.4	38.5	38.6	38.6	38.0	38.4
Transport and storage . . . . .	44.6	45.2	46.4	40.5	40.7	42.0	39.1	39.5	39.2	39.2	39.3	39.0
Finance and property . . . . .	38.9	38.9	38.7	38.4	38.6	38.2	37.6	37.5	37.8	37.8	38.0	38.1
Wholesale trade, primary produce dealing, etc. . . . .	40.9	41.2	41.3	39.8	40.1	40.2	38.8	38.8	38.7	38.7	39.2	38.9
Retail trade . . . . .	41.2	41.2	41.3	41.0	40.7	40.7	39.5	39.8	39.4	39.7	40.0	39.9
Other industries(d) . . . . .	41.2	41.2	41.6	38.9	39.3	39.2	39.0	39.0	39.1	38.3	38.5	38.2
Non-manufacturing groups . . . . .	41.6	42.0	42.4	40.0	40.1	40.1	39.0	39.0	39.0	38.9	39.2	39.0
All industry groups(e) . . . . .	42.3	42.8	43.0	40.5	40.8	40.7	39.3	39.4	39.2	39.0	39.3	39.1

(a) Private employees only. Excludes managerial, executive, professional and higher supervisory staff. (b) Excludes Northern Territory and Australian Capital Territory. (c) Last pay-period in October. For definitions and particulars of coverage of the surveys, etc. see pages 296-7. (d) Includes community and business services; amusement, hotels, cafés, personal service, etc.; electricity, gas, water and sanitary services; and forestry, fishing and trapping. (e) Excludes rural industry, and private domestic service.

## AVERAGE HOURLY EARNINGS, FULL-TIME EMPLOYEES (OTHER THAN MANAGERIAL, ETC. STAFF)(a): INDUSTRY GROUPS, AUSTRALIA(b), OCTOBER 1963, 1964, AND 1966(c)

(\$)

Industry group	Adult males			Junior males			Adult females			Junior females		
	Oct. 1963	Oct. 1964	Oct. 1966	Oct. 1963	Oct. 1964	Oct. 1966	Oct. 1963	Oct. 1964	Oct. 1966	Oct. 1963	Oct. 1964	Oct. 1966
Manufacturing—												
Extracting, refining and founding of metals . . .	1.22	1.33	1.42	0.66	0.76	0.86	0.74	0.80	0.92	0.56	0.63	0.70
Engineering and metal-working . . .	1.20	1.25	1.39	0.55	0.63	0.71	0.75	0.79	0.86	0.50	0.54	0.60
Ships, vehicles, parts and accessories . .	1.20	1.30	1.42	0.56	0.63	0.69	0.76	0.81	0.92	0.55	0.60	0.65
Founding, engineering, vehicles, etc. . . . .	1.21	1.28	1.41	0.57	0.65	0.73	0.75	0.80	0.87	0.51	0.56	0.62
Textiles, clothing and footwear . . . . .	1.14	1.21	1.34	0.57	0.62	0.71	0.74	0.79	0.86	0.44	0.49	0.54
Food, drink and tobacco . . . . .	1.13	1.21	1.34	0.61	0.64	0.73	0.76	0.82	0.86	0.50	0.52	0.58
Paper, printing, book-binding and photography . . .	1.36	1.44	1.57	0.62	0.65	0.71	0.80	0.84	0.92	0.47	0.50	0.61
Chemicals, dyes, explosives, paints, non-mineral oils . .	1.24	1.30	1.49	0.64	0.70	0.84	0.80	0.84	0.93	0.55	0.59	0.66
Other . . . . .	1.14	1.23	1.34	0.54	0.59	0.68	0.74	0.77	0.87	0.47	0.50	0.61
Manufacturing groups . . . . .	1.19	1.27	1.40	0.58	0.64	0.72	0.75	0.80	0.87	0.47	0.51	0.58
Non-manufacturing—												
Mining and quarrying . . . . .	1.46	1.53	1.77	0.69	0.77	0.87	0.90	0.92	1.12	0.59	0.65	0.71
Building and construction . . . . .	1.29	1.37	1.52	0.63	0.66	0.72	0.85	0.90	1.03	0.52	0.58	0.66
Transport and storage . . . . .	1.24	1.32	1.46	0.59	0.65	0.75	0.86	0.89	0.98	0.56	0.59	0.68
Finance and property . . . . .	1.35	1.48	1.66	0.64	0.71	0.83	0.89	0.95	1.03	0.58	0.62	0.69
Wholesale trade, primary produce dealing, etc. . . . .	1.19	1.27	1.39	0.57	0.61	0.70	0.83	0.88	0.96	0.53	0.55	0.62
Retail trade . . . . .	1.13	1.21	1.31	0.54	0.59	0.65	0.78	0.83	0.89	0.46	0.49	0.55
Other industries(d) . . . . .	1.21	1.29	1.40	0.64	0.69	0.78	0.81	0.86	0.94	0.54	0.57	0.64
Non-manufacturing groups . . . . .	1.24	1.32	1.46	0.58	0.63	0.72	0.81	0.86	0.94	0.51	0.54	0.61
All industry groups(e) . . . . .	1.21	1.29	1.42	0.58	0.64	0.72	0.78	0.83	0.90	0.50	0.53	0.60

(a) Private employees only. Excludes managerial, executive, professional and higher supervisory staff. (b) Excludes Northern Territory and Australian Capital Territory. (c) Last pay-period in October. For definitions and particulars of coverage of the surveys, etc. see pages 296-7.

(d) Includes community and business services; amusement, hotels, cafés, personal service, etc.; electricity, gas, water and sanitary services; and forestry, fishing and trapping.

(e) Excludes rural industry, and private domestic service.



In the following table the average weekly earnings, average weekly hours paid for, and average hourly earnings at the last pay-period in October for the years 1962, 1963, 1964 and 1966 are shown for males and females (adult and junior), other than part-time, by State.

**AVERAGE EARNINGS AND HOURS FOR FULL TIME EMPLOYEES (OTHER THAN  
MANAGERIAL, ETC. STAFF)(a): ALL INDUSTRY GROUPS, STATES  
OCTOBER 1962, 1963, 1964, AND 1966(b)**

State	Average weekly earnings (\$)				Average weekly hours paid for				Average hourly earnings (\$)			
	Oct. 1962	Oct. 1963	Oct. 1964	Oct. 1966	Oct. 1962	Oct. 1963	Oct. 1964	Oct. 1966	Oct. 1962	Oct. 1963	Oct. 1964	Oct. 1966
<b>ADULT MALES</b>												
New South Wales . . . . .	51.00	52.70	56.70	61.90	42.1	42.1	42.8	42.7	1.21	1.25	1.32	1.45
Victoria . . . . .	49.70	51.70	55.80	62.10	42.4	42.8	42.9	43.3	1.17	1.21	1.30	1.43
Queensland . . . . .	46.20	48.50	52.30	59.50	42.1	42.2	43.1	42.8	1.10	1.13	1.21	1.39
South Australia . . . . .	47.00	49.30	53.60	58.00	42.3	42.7	43.2	42.9	1.11	1.15	1.24	1.35
Western Australia . . . . .	47.70	47.20	49.90	60.40	41.7	41.4	42.2	43.5	1.14	1.14	1.18	1.39
Tasmania . . . . .	47.50	48.90	52.40	60.10	40.6	41.4	41.7	42.6	1.17	1.18	1.26	1.41
Australia(c) . . . . .	49.40	51.20	55.20	61.20	42.1	42.3	42.8	43.0	1.17	1.21	1.29	1.42
<b>JUNIOR MALES</b>												
New South Wales . . . . .	24.20	24.60	27.20	30.30	40.2	40.4	40.8	40.4	0.60	0.61	0.67	0.75
Victoria . . . . .	23.00	23.70	26.80	29.70	40.3	40.6	40.8	40.7	0.57	0.58	0.66	0.73
Queensland . . . . .	21.80	22.50	24.40	28.70	40.2	40.7	40.9	41.1	0.54	0.55	0.60	0.70
South Australia . . . . .	21.20	22.50	24.80	27.70	40.5	41.2	40.9	40.8	0.52	0.55	0.61	0.68
Western Australia . . . . .	19.80	20.70	21.40	27.10	40.3	40.4	40.8	41.0	0.49	0.51	0.53	0.66
Tasmania . . . . .	22.60	22.70	24.40	27.80	39.8	40.2	40.1	40.7	0.57	0.56	0.61	0.68
Australia(c) . . . . .	22.90	23.50	25.90	29.40	40.2	40.5	40.8	40.7	0.57	0.58	0.64	0.72
<b>ADULT FEMALES</b>												
New South Wales . . . . .	30.80	31.50	33.40	36.20	38.9	39.0	39.2	39.0	0.79	0.81	0.85	0.93
Victoria . . . . .	29.70	30.20	32.60	35.10	39.1	39.4	39.4	39.3	0.76	0.77	0.83	0.89
Queensland . . . . .	28.60	29.30	30.90	33.90	39.6	39.5	39.7	39.6	0.72	0.74	0.78	0.86
South Australia . . . . .	28.60	28.50	31.10	33.70	39.4	40.0	40.0	39.7	0.73	0.71	0.78	0.85
Western Australia . . . . .	28.60	29.50	30.50	35.10	39.4	39.6	39.7	39.3	0.72	0.75	0.77	0.89
Tasmania . . . . .	28.70	29.10	30.60	33.70	39.5	39.2	39.0	39.1	0.73	0.74	0.78	0.86
Australia(c) . . . . .	30.00	30.50	32.60	35.40	39.1	39.3	39.4	39.2	0.77	0.78	0.83	0.90
<b>JUNIOR FEMALES</b>												
New South Wales . . . . .	20.00	20.60	22.00	24.20	39.2	38.9	39.2	39.0	0.51	0.53	0.56	0.62
Victoria . . . . .	19.80	19.50	21.70	24.90	39.2	38.8	39.1	38.9	0.50	0.50	0.55	0.64
Queensland . . . . .	17.80	17.90	19.10	21.70	39.6	39.2	39.8	39.3	0.45	0.46	0.48	0.55
South Australia . . . . .	18.00	18.20	20.10	22.30	39.2	39.3	39.4	39.5	0.46	0.46	0.51	0.57
Western Australia . . . . .	16.90	17.20	17.40	21.10	39.4	39.9	39.5	39.3	0.43	0.43	0.44	0.54
Tasmania . . . . .	17.80	18.40	19.40	22.00	39.4	39.1	39.7	39.5	0.45	0.47	0.49	0.56
Australia(c) . . . . .	19.20	19.40	20.90	23.60	39.3	39.0	39.3	39.1	0.49	0.50	0.53	0.60

(a) Private employees only. Excludes managerial, executive, professional, and higher supervisory staff. (b) Last pay-period in October. For definitions and particulars of the coverage of the surveys, etc. see pages 296-7. (c) Excludes Northern Territory and Australian Capital Territory.

**AVERAGE WEEKLY EARNINGS, FULL-TIME MALE  
MANAGERIAL, EXECUTIVE, ETC. STAFF<sup>(a)</sup>  
INDUSTRY GROUPS, AUSTRALIA<sup>(b)</sup>, OCTOBER 1966<sup>(c)</sup>**

<i>Industry group</i>	<i>Average weekly earnings</i>
	\$
<b>Manufacturing—</b>	
Extracting, refining and founding of metals . . . . .	114.60
Engineering and metalworking . . . . .	99.00
Ships, vehicles, parts and accessories . . . . .	100.30
Founding, engineering, vehicles, etc. . . . .	100.60
Textiles, clothing and footwear . . . . .	95.00
Food, drink and tobacco . . . . .	97.40
Paper, printing, bookbinding and photography . . . . .	99.50
Chemicals, dyes, explosives, paints, non-mineral oils . . . . .	109.10
Other . . . . .	96.50
<i>Manufacturing groups</i> . . . . .	99.40
<b>Non-manufacturing—</b>	
Mining and quarrying . . . . .	123.50
Building and construction . . . . .	103.30
Transport and storage . . . . .	97.70
Finance and property . . . . .	106.50
Wholesale trade, primary produce dealing, etc. . . . .	97.10
Retail trade . . . . .	80.70
Other industries <sup>(d)</sup> . . . . .	95.40
<i>Non-manufacturing groups</i> . . . . .	96.00
<b>All industry groups<sup>(e)</sup></b> . . . . .	<b>97.40</b>

(a) Private employees only. Includes managerial, executive, professional and higher supervisory staff. For definitions and particulars of coverage of the surveys, etc. see pages 296-7. (b) Excludes Northern Territory and Australian Capital Territory. (c) Last pay-period in October. (d) Includes community and business services; amusement, hotels, cafés, personal service, etc.; electricity, gas, water and sanitary services; and forestry, fishing and trapping. (e) Excludes rural industry, and private domestic service.

**AVERAGE WEEKLY EARNINGS, FULL-TIME MALE MANAGERIAL, EXECUTIVE, ETC.  
STAFF(a): INDUSTRY GROUPS, STATES, OCTOBER 1963, 1964, AND 1966(b)**  
(\\$)

<i>Survey</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>Aust.(c)</i>
<b>MANUFACTURING GROUPS</b>							
October(b)—							
1963 . . . .	83.00	82.90	74.50	77.90	68.00	76.00	81.20
1964 . . . .	88.80	87.30	79.50	82.90	74.40	84.80	86.50
1966 . . . .	101.00	101.40	86.50	98.40	88.90	99.40	99.40
<b>NON-MANUFACTURING GROUPS</b>							
October(b)—							
1963 . . . .	82.50	83.00	76.50	70.80	69.70	67.90	79.30
1964 . . . .	88.00	85.30	79.90	77.20	74.30	71.10	83.70
1966 . . . .	98.90	99.10	88.30	84.50	93.40	87.90	96.00
<b>ALL INDUSTRY GROUPS(d)</b>							
October(b)—							
1963 . . . .	82.90	82.90	75.90	73.60	69.20	71.30	80.20
1964 . . . .	88.40	86.40	79.70	79.10	74.30	76.80	85.00
1966 . . . .	99.80	100.20	87.70	89.90	92.10	92.90	97.40

(a) Private employees only. Includes managerial, executive, professional, and higher supervisory staff. For definitions and particulars of coverage of the surveys, etc. see pages 296-7. (b) Last pay-period in October. (c) Excludes Northern Territory and Australian Capital Territory. (d) Excludes rural industry, and private domestic service.

**AVERAGE WEEKLY EARNINGS, FULL-TIME FEMALE  
MANAGERIAL, EXECUTIVE, ETC. STAFF(a): INDUSTRY  
GROUPS, AUSTRALIA(c), OCTOBER 1963, 1964, AND 1966(b)**  
(\\$)

<i>Survey</i>	<i>Manu- facturing groups</i>	<i>Non- manu- facturing groups</i>	<i>All industry groups(d)</i>
October(b)—			
1963 . . . .	35.80	40.20	37.80
1964 . . . .	38.70	44.20	41.40
1966 . . . .	54.10	55.20	54.80

For footnotes see table above.

**AVERAGE EARNINGS AND HOURS, PART-TIME EMPLOYEES(a): INDUSTRY GROUPS  
AUSTRALIA(b), OCTOBER 1962, 1963, 1964, AND 1966(c)**

Survey	Adult males				Junior males		Adult females		Junior females					
	All industry groups(d)				All industry groups(d)		Manu- facturing groups		Non-manu- facturing groups		All industry groups(d)		All industry groups(d)	
AVERAGE WEEKLY EARNINGS (\$)														
October(c)—														
1962	.	.	.	.	15.50	3.40	(e)	(e)		14.00		3.30		
1963	.	.	.	.	16.20	4.90	15.10	14.90		14.90		6.10		
1964	.	.	.	.	16.60	4.70	16.90	15.20		15.50		4.40		
1966	.	.	.	.	19.70	4.50	18.70	17.40		17.70		4.50		
AVERAGE WEEKLY HOURS PAID FOR														
October(c)—														
1962	.	.	.	.	13.7	5.2	(e)	(e)		16.6		5.9		
1963	.	.	.	.	13.6	7.7	16.9	17.2		17.2		9.7		
1964	.	.	.	.	13.4	6.7	19.8	16.8		17.3		6.4		
1966	.	.	.	.	14.1	6.1	19.4	16.6		17.1		7.0		
AVERAGE HOURLY EARNINGS (\$)														
October(c)—														
1962	.	.	.	.	1.13	0.65	(e)	(e)		0.84		0.56		
1963	.	.	.	.	1.18	0.64	0.89	0.86		0.87		0.62		
1964	.	.	.	.	1.24	0.70	0.85	0.91		0.90		0.69		
1966	.	.	.	.	1.40	0.73	0.97	1.05		1.03		0.65		

(a) Private employees only. Part-time employees are those who normally work less than 30 hours a week. For definitions and particulars of coverage of the surveys, etc. see pages 296-7. (b) Excludes Northern Territory and Australian Capital Territory. (c) Last pay-period in October. (d) Excludes rural industry, and private domestic service. (e) Comparable figures not available—see page 296.

### Survey of weekly earnings and hours, October 1967

The results of this survey were first published in a mimeographed statement *Survey of Weekly Earnings and Hours, October 1967* (dated 12 June 1968) which also contains comparisons with the surveys of October 1962, 1963, 1964, and 1966.

### Determination of wage rates in Australia

Before June 1967, when the Commonwealth Conciliation and Arbitration Commission decided to eliminate basic wages and margins from Commonwealth awards and to introduce total wages (see page 306), the concept of a basic or living wage was common to wage rates determined by industrial authorities in Australia. Initially, the concept of a basic wage (for adult males) was interpreted as the wage necessary to maintain an average employee and his family in a reasonable state of comfort. However, it was later generally accepted that the basic wage should be fixed at the highest amount which the economy could sustain and that the dominant factor was the capacity of the community to carry the resultant wage levels. Basic wages were determined for adult females as well as for adult males.

In addition to the basic wage, secondary wage payments, including margins for skill, etc. and various kinds of loadings peculiar to the occupation or industry, were determined by industrial authorities. The basic wage and the secondary wage made up the minimum wage rate for a particular occupation.

In the following paragraphs is set out a brief history of the determination of wage rates in Australia by Commonwealth and State industrial authorities. For more detailed information including the history of basic wage determination in Australia *see* previous issues of the Year Book and the annual *Labour Report*.

### Commonwealth Basic Wage

Basic wages were a feature of awards of the Commonwealth Conciliation and Arbitration Commission (and the Commonwealth Court of Conciliation and Arbitration) over the period 1907 to 1967.

In 1907 the first declaration of a basic wage (\$4.20 a week for Melbourne) was made by Mr Justice Higgins, President of the Commonwealth Court of Conciliation and Arbitration. The wage was known as the 'Harvester' wage and the amount was considered reasonable 'for a family of about five'. From this date onwards basic wages became incorporated into Commonwealth awards.

In 1913 the Commonwealth Court of Conciliation and Arbitration took cognisance of the 'A' Series retail price index numbers for the thirty more important towns of Australia published by the Commonwealth Statistician, and as awards came up for review the Court usually revised the basic wage rate of the award in proportion to variations in the retail price index. In 1921 the system of making automatic quarterly adjustments to the basic wage in direct ratio to variations in 'A' Series retail price index numbers was first introduced. The practice of making automatic quarterly adjustments to the basic wage in proportion to variations in retail price index numbers continued until September 1953.

In addition to the automatic adjustments to the basic wage described in the previous paragraph, basic wage rates in Commonwealth awards were varied as a result of basic wage or national wage inquiries. The last time basic wages were varied in this way was in July 1966, when, as a result of the Basic Wage, Margins and Total Wage Cases of 1966, rates were increased by \$2 a week for adult males and \$1.50 a week for adult females. At that time Commonwealth basic wage rates for capital cities ranged from \$31 to \$33.50 a week for adult males and from \$23.25 to \$25.10 a week for adult females. These rates continued to operate until the decision of the Commonwealth Conciliation and Arbitration Commission in the National Wage Cases of 1967 to eliminate basic wages and margins from Commonwealth awards and introduce total wages to operate from the beginning of the first pay-period to commence on or after 1 July 1967 (*see* page 308).

For tables showing Commonwealth basic wage rates for adult males and adult females *see* previous issues of the Year Book and the Appendix to *Labour Report* No. 52, 1965 and 1966.

### Basic wage rates for females

As a result of the 1949-50 Basic Wage Inquiry the Commonwealth Court of Conciliation and Arbitration fixed the basic weekly wage for adult females at 75 per cent of the corresponding male rate from the beginning of the first pay-period commencing in December 1950. This percentage continued to be prescribed in subsequent inquiries and operated until the basic wage was eliminated from Commonwealth Awards in July 1967 (*see* above). Prior to December 1950 the relationship of female basic wages to male basic wages varied from award to award, but was generally between 54 and 56 per cent.

For further particulars regarding female basic wage rates *see* *Labour Report* No. 46, pages 75-81. Tables of rates are published in the Appendix to *Labour Report* No. 52, 1965 and 1966.

### Basic wage rates, Australian Territories

The determination of basic wage rates in the Northern Territory and the Australian Capital Territory came within the jurisdiction of the Commonwealth Conciliation and Arbitration Commission. Basic wage rates were eliminated from awards operating in these Territories in July 1967 (*see* above), and total wages were introduced. For tables of basic wages in the Northern Territory and the Australian Capital Territory *see* Appendix to *Labour Report* No. 52, 1965 and 1966. For further information on the determination of basic wages in the Territories *see* previous issues of the Year Book and the annual *Labour Report*.

### Commonwealth wage margins

In addition to basic wage rates, awards of Commonwealth and State industrial tribunals specified secondary wage payments consisting of margins and loadings. Margins have been defined as 'minimum amounts awarded above the basic wage to particular classifications of employees for the features attaching to their work which justify payments above the basic wage, whether those features are skill or experience required for the performance of that work, its particularly laborious nature, or the disabilities attached to its performance.'

In the Commonwealth jurisdiction prior to 1954 the Commonwealth Court of Conciliation and Arbitration had not made any general determination in respect of wage margins, but general principles of marginal rate fixation had been enunciated by the Court in the Engineers Case of 1924, the Merchant Service Guild Case in 1942, and the Printing Trades Case of 1947. Major decisions of the Commonwealth Court of Conciliation and Arbitration, and later the Commonwealth Conciliation and Arbitration Commission, affecting margins in Commonwealth awards were made in 1954, 1959, 1963, 1965, and 1966. Details of these decisions can be found in earlier issues of the Year Book and the annual *Labour Report*.

As a result of a decision of the Commonwealth Conciliation and Arbitration Commission in the National Wage Cases of 1967, basic wages and margins were eliminated from Commonwealth awards and total wages were introduced with effect from the beginning of the first pay-period to commence on or after 1 July 1967.

#### Commonwealth work value inquiries

In addition to variations of wage margins in Commonwealth awards as a result of the general inquiries in 1954 to 1966 (*see above*), variations of margins for various occupations were made by the Commission as individual awards came up for review or upon application by trade unions. Similar procedures existed in regard to awards of State industrial tribunals.

As a result of its decision in the Basic Wage, Margins and Total Wage Cases of 1966, the Commonwealth Conciliation and Arbitration Commission undertook a work value inquiry concerning classifications appearing in the Metal Trades award. The inquiry proceeded by way of detailed inspections of the work in factories performed by various classifications specified in the award, visits to training schools, and a formal hearing at which there were taken the sworn evidence and submissions called or made on behalf of the respective parties and interveners. The inspections and visits to training schools took place over the period September 1966 to September 1967. Formal hearing commenced on 21 September 1967 and concluded on 17 November 1967. On 11 December 1967 the Commission issued a majority decision (Gallagher *J.* and Commissioner Winter, with Moore *J.* dissenting).

On behalf of the majority Gallagher *J.* made an announcement which included the following:

'In this Inquiry the Commissioner and I would determine that:—

- (1) 'Wage increases were granted for adult male employees working under clause 4 of the Metal Trades Award 1952 (as varied) should be awarded on a work value basis, not otherwise, and should be those as set out in the schedule marked A which is now handed down.
- (2) 'Wage increases were granted for adult female employees should be 75 per cent of the appropriate increase for adult males with a flat rate for employees at the third class machinist level or below.
- (3) 'The claim for retrospectivity should be refused.
- (4) 'The appropriate variation should come into operation from the beginning of the first pay period to commence on or after 22 January 1968 and should remain in force for three years thereafter with liberty to apply to the Commissioner in the metal trades industry reserved to the parties.

'Upon reference to the schedule marked A, it will be seen that it has been found practicable to determine rates for classifications generally, that is to say for 320 classifications. Of these it will be seen that for 18 classifications there would be no increase in wage rates, that for 178 classifications there would be an increase of \$1.00 per week, that for 9 classifications there would be an increase of \$1.30 per week, that for 27 classifications there would be an increase of \$2.75 per week, that for 16 classifications there would be an increase of \$3.75 per week, that for 47 tradesmen classifications there would be an increase of \$7.40 per week and that for the remaining 25 classifications there would be increases of varying amounts ranging between 10 cents and \$10.05 per week.' . . .

'We explain that the rates shown in schedule A are those appropriate for Victoria—elsewhere. The equivalent award rates for the principal localities named below are to be ascertained by adjusting the Victoria—elsewhere rates as follows: Sydney add \$0.80, Brisbane deduct \$1.70, Adelaide deduct \$0.40, Hobart add \$0.70.

'With regard to over award payments we direct particular attention to the reasons of Mr Commissioner Winter commencing at page 63 and to [the reasons of Gallagher *J.*] commencing at page 151. We emphasise that the increases which we would grant would apply to existing award wages and it should not be assumed by employees that over award payments cannot or will not be offset against them. We also emphasise that this is not a case in which increases in wage rates for the metal trades set a pattern for wages in other industries. The increases which we would grant reached as they have been on a work value basis relate solely to employees working under clause 4 of the Metal Trades Award and do not constitute a reason for awarding wage increases to employees covered by other awards or working in other industries.'

Following applications by employers concerning the question of absorption in over-award payments of the increases granted to the metal trades in December 1967, the Commonwealth Conciliation and Arbitration Commission, consisting of Kirby *C.J.*, Gallagher and Moore *JJ.*, Senior Commissioner Taylor and Commissioner Winter, heard submissions by employers and trade unions on 14 to 16 February 1968.

The pronouncement of the majority of the Commission (Gallagher *J.* dissenting) was made on 21 February 1968. The Commission said it appeared that substantial absorption of over-award payments had not been practicable in the existing circumstances and that had this been known at the time of the decision, the burden of the increased rates should not have been imposed without deferment of some portion of the increases. The Commission agreed that this was a changed circumstance since December 1967 and that it required positive action by the bench.

The Commission, in its pronouncement, made the following decisions. The work value decisions of the Commission in December 1967 (*see* page 307) in regard to its amounts should stand. However it was decided that 70 per cent of the prescribed increases should be payable in accordance with the decision of 11 December and that 30 per cent should be deferred. But where the increase was \$1.60 or less per week, the full amount should be paid without deferment, and where the increase was more than \$1.60 the increase payable without deferment should be at least \$1.60. The decision applied to increases granted to adult males and adult females. Adjustments to rates would be in multiples of 5 cents.

The bench of the Commission which would deal with the economic wage case expected to commence on 6 August 1968 should decide when the deferred portion of the increases should be payable. The Commission again stated that the increases in wage rates in the metal trades award did not set a pattern for wages in other awards. Benches dealing with work value cases in other awards were not bound in any way to follow what had happened in the Metal Trades Award. The Commission appealed to all in industry to co-operate with each other and with the Commission to make these decisions work and to end the industrial disputes and stoppages.

#### **Commonwealth total wages**

In the national wage cases of 1964 and 1965 applications by employers that basic wages and margins should be deleted from Commonwealth awards and total wages introduced were rejected by the Commonwealth Conciliation and Arbitration Commission. However, in its decisions in the Basic Wage, Margins and Total Wage Cases of 1966 the Commission decided to defer the conversion of the wage structure to the basis of a single wage pending further consideration of the present structure of marginal rates (*see* page 306) and further argument. As a result of the National Wage Cases of 1967, in which the employers again applied for a total wage, the Commonwealth Conciliation and Arbitration Commission announced the elimination of basic wages and margins from Commonwealth awards and the introduction of total wages. The total wages were arrived at by adding an amount of \$1 a week to the weekly award wages for each adult male and adult female classification to operate from the beginning of the first pay-period to commence on or after 1 July 1967.

Trade unions unsuccessfully challenged in the High Court the abolition of basic wages and the adoption of total wages by the Commonwealth Commission.

#### **Commonwealth minimum wages**

In July 1966 the Commonwealth Conciliation and Arbitration Commission, in its decisions in the Basic Wage, Margins and Total Wage Cases of 1966, inserted in Commonwealth awards provisions for minimum wages for adult males. The Commission said that it had given detailed consideration to lower paid classifications in the Metal Trades award and had decided to grant some immediate relief to low wage earners. The Commission in its judgment said that it intended to insert a new provision in awards by which it would be prescribed that no adult male employee should be paid as a weekly wage for working the standard hours of work an amount less than the minimum wage, i.e. his appropriate basic wage rate plus \$3.75 a week. The minimum wage was prescribed for adult male employees only and was applied for all purposes of the award, for example, in calculation of overtime and other penalty rates, piece-work, casual employment, sick leave and annual leave. The Commission stated that the provision for a minimum wage for adult male employees was designed to meet the circumstances of employees in the lowest classifications who were in receipt of award rates and no more. It was not intended to affect the wage of any employee who was already receiving the prescribed minimum through over-award payment. The provision for minimum wages for adult males operated from the beginning of the first pay-period to commence on or after 11 July 1966. The minimum wages for adult males inserted in Commonwealth awards ranged from \$34.75 to \$37.25 a week for capital cities. These rates were increased by \$1 a week as a result of the decision of the Commonwealth Conciliation and Arbitration Commission in the National Wage Cases of 1967, the increases to operate from the beginning of the first pay-period commencing on or after 1 July 1967.

## Determination of wage rates in State Awards, etc.

### New South Wales

The first determination of a standard living wage for adult male employees under New South Wales State awards operated from 16 February 1914, when the Court of Arbitration fixed the rate at \$4.80 a week for the metropolitan area. The first living wage for adult females (\$3.00 a week) was declared by the Board of Trade to operate from 17 December 1918.

From 1926 to 1937 basic wage rates were determined by the Industrial Commission of New South Wales. From July 1927 a State scheme of child endowment became operative in New South Wales, and this continued until superseded by the Commonwealth Government scheme in July 1941.

From October 1937 to October 1955 the State adult male basic wage for Sydney was the same as the Commonwealth basic wage for Sydney. From the beginning of the first pay-period in November 1955 the State basic wage was automatically adjusted each quarter in accordance with movements in retail price index numbers. (Automatic adjustment of Commonwealth basic wages was discontinued in September 1953.) These automatic adjustments continued until October 1964, when legislation provided that the Commonwealth basic wage for Sydney should apply in State awards and industrial agreements to operate from the beginning of the first pay-period which commenced on or after 19 June 1964.

Between October 1937 and November 1950 the State adult female basic wage for Sydney was 54 per cent of the adult male rate. In December 1950 the adult female rate became 75 per cent of the adult male rate. From January 1963 for male and female employees performing work of the same or like nature and of equal value, the Industrial Commission may prescribe in State awards the same basic wage and secondary wage. In March 1967 the Industrial Commission in Court Session, when considering the adoption of Commonwealth marginal increases for State awards, stated that the general principle in future would be to inject Commonwealth wage increases on economic grounds into the State award structure.

Following the increase of \$1 a week in total wages in Commonwealth awards in July 1967, the Industrial Commission increased award rates of wages and salaries for adult males and adult females by the addition of a fixed loading of \$1 per week, described as 'July 1967 economic loading', to take effect from the beginning of the first pay period to commence on or after 1 July 1967. Subsequently legislation increased the basic wage for adult males from \$33.50 to \$34.50 per week and for adult females from \$25.10 to \$26.10 per week to operate from 1 January 1968. The increase of \$1 per week in each basic wage absorbed the 'July 1967 economic loading', which was omitted from State awards and agreements. The legislation also provided for the adjustment of wage rates in State awards by the Industrial Commission subsequent to a decision of the Commonwealth Conciliation and Arbitration Commission to vary Commonwealth wage rates wholly or partly on economic grounds. Changes in the State basic wage for adult males shall not be more than the amount of increase in Commonwealth minimum wages for adult males, and the increase in the adult female basic wage not less than 75 per cent of the increase in the male basic wage. The Industrial Commission and Conciliation Committees were given power to include provisions for minimum wages for adult males or adult females in State awards.

Further information on New South Wales basic wages is published in previous issues of the Year Book and the annual *Labour Report*. State basic wage rates for Sydney are published in the Appendix to *Labour Report* No. 52, 1965 and 1966.

### Victoria

In Victoria, Wages Boards constituted for each industry group or calling from representatives of employers and employees with an independent chairman determine rates of wage and conditions of work.

Except for the period November 1953 to August 1956, when automatic quarterly adjustments to the basic wage in Wages Board determinations operated, Wages Boards in determining wage rates had adopted Commonwealth basic wage rates. The basic wage rates of August 1956 continued to operate until June or July 1959 when the Commonwealth rates for Melbourne, determined as a result of the 1959 Basic Wage Inquiry, were incorporated into Wages Board determinations.

Subsequently to the decisions of the Commonwealth Conciliation and Arbitration Commission in the National Wage Cases of 1967 (see page 308), the Industrial Appeals Court decided that basic wages and margins for adult males and adult females should be deleted from Wages Board determinations and that wage rates expressed as total wages should operate from the beginning of the first pay-period in July 1967. At the same time total wages for both adult males and females were increased by \$1 a week.



For further information on basic wages in Victorian Wages Board determinations *see* previous issues of the Year Book and the annual *Labour Report*. Rates for adult males and adult females from November 1953 are published in the Appendix to *Labour Report* No. 52, 1965 and 1966.

### Queensland

The first formal declaration of a basic wage in Queensland determined a basic wage of \$8.50 for adult males and \$4.30 for adult females to operate from 1 March 1921. Prior to this declaration the rate of \$7.70 a week for adult males had been generally recognised in awards as the 'basic' or 'living' wage.

Since 1961 the full bench of the Industrial Conciliation and Arbitration Commission, consisting of not less than three Commissioners, has power to make declarations concerning the basic wage for males and females and the standard hours of work. The basic wage for adult males must be sufficient to maintain an employee, his wife, and family of three children in a fair and average standard of comfort. The basic wage for adult females should be not less than is sufficient to enable an employee to support herself in a fair and average standard of comfort. All persons interested must be given an opportunity to be heard before any general declaration regarding the basic wage is made, and the Commission must take into consideration any probable economic effect of such declaration. From 1 May 1961 the basic wage for adult females has been 75 per cent of the male rate.

In March 1965 the Commission stated that it had been decided as a matter of policy, that in the future, it did not propose to deal with an application to vary the basic wage solely because of a change in the Consumer Price Index, unless such a change warranted an alteration of 40 cents or more in the basic wage for adult males.

The basic wage rates payable in the Southern Division (Eastern District) including Brisbane were \$33.20 for adult males and \$24.90 for adult females operative from 10 April 1967. For basic wages in other areas of the State district allowances are added to these rates (*see* previous issues of the Year Book and the annual *Labour Report*).

Following the decision of the Commonwealth Conciliation and Arbitration Commission to increase total wages by \$1 a week in July 1967, the Industrial Commission increased all award rates of pay for both adult males and adult females by \$1 per week to operate from 3 July 1967.

For further particulars of basic wage determination in Queensland *see* previous issues of the Year Book and the annual *Labour Report*. Tables of basic wages are published in the Appendix to *Labour Report* No. 52, 1965 and 1966.

### South Australia

The first declaration of a living wage for adult male employees in the metropolitan area was \$7.95 a week operative from 4 August 1921. The first adult female living wage of \$3.50 a week operated from 1 September 1921.

Before July 1966 the Board of Industry had power to declare after public inquiry living wages to be paid to adult males and adult females. Since that date the power has been vested in the Industrial Commission constituted by the President and two Commissioners. However, the South Australian Industrial Code also provides for the declaration of living wages by proclamation to prevent unjustifiable differences between State and Commonwealth rates of wages. This latter method has been used in recent years to declare living wages.

The State living wage for adult males was the same as the Commonwealth basic wage for Adelaide from February 1950 to July 1967, when basic wages were deleted from Commonwealth awards and total wages introduced. The State living wage for adult females was the same as the Commonwealth basic wage for Adelaide from December 1950 to July 1967 and was 75 per cent of the adult male rate.

Following the increase of \$1 a week in total wages in Commonwealth awards in July 1967 (*see* page 308), by proclamation the State living wages for both adult males and adult females were increased by \$1 a week to operate from 3 July 1967. The rates then became \$33.30 for adult males and \$25.20 for adult females.

For further information on South Australian living wages *see* previous issues of the Year Book and the annual *Labour Report*. Tables of living wages are published in the Appendix to *Labour Report* No. 52, 1965 and 1966.

### Western Australia

The first declaration of the basic wage by the Court of Arbitration operated from 1 July 1926, when rates of \$8.50 for adult males and \$4.59 for adult females were fixed.

Before December 1966 the Western Australian Industrial Commission in Court Session consisting of three Commissioners (previously the Court of Arbitration) could declare a basic wage at any time on its own motion and must do so when requested by a majority of industrial unions or by the Western Australian Employers' Federation, with the limitation that no new determination should be made within twelve months of the preceding inquiry. Legislation also provided that the Commission (or the Court) might make adjustments to the basic wage each quarter after considering retail price index numbers.

From August 1931 to September 1964 separate basic wages were declared for three areas of the State, namely (a) the metropolitan area, (b) south-west land division, and (c) goldfields areas and other parts of the State. In September 1964, when the Commission increased the basic wage after an inquiry, one rate was declared for the whole of the State.

In December 1951 the basic wages for adult females became 65 per cent of the corresponding male rate, and in January 1960 this proportion was increased to 75 per cent. In each case marginal rates of pay for females were reduced or deleted to offset the increase in the female basic wage.

In December 1966 legislation provided that the Western Australian basic wage rates should be the same as the Commonwealth Six Capitals rates as soon as these exceeded the State rates (\$33.50 a week for adult males and \$25.13 a week for adult females) operative from 24 October 1966.

Following the decision of the Commonwealth Conciliation and Arbitration Commission to increase total wages by \$1 a week from July 1967 (*see* page 308), the Industrial Commission made the following decisions. Wage rates for adult males, not in receipt of the minimum weekly wage, and for adult females were increased by 60 cents a week by way of a special loading. The minimum weekly wage for adult males (*see* page 308) payable under certain awards was increased from \$36.55 to \$37.55 a week. These increases operated from the beginning of the first pay-period commencing on or after 1 July 1967.

More detailed information on State basic wages in Western Australia appear in earlier issues of the Year Book and the annual *Labour Report*. Basic wage rates for the metropolitan area are published in the Appendix to *Labour Report* No. 52, 1965 and 1966.

### Tasmania

Wages Boards are constituted for a number of industries from representatives of employers and employees with an independent chairman (common to all Wages Boards) with power to determine rates of wage in each industry.

Except for the period February 1956 to August 1956, when Wages Boards adjusted basic wages in accordance with movements in retail price index numbers, Wages Boards generally adopted Commonwealth basic wage rates. From August 1956 the basic wages in determinations remained unchanged until July 1959, when the rates were made the same as the Commonwealth basic wages.

In January 1961 Wages Boards adopted the basic wage for Hobart as the uniform rate applicable throughout the State. During 1962 a number of Wages Boards provided in their determinations for the automatic adoption of Commonwealth basic wages as and when they varied.

In July and August 1967, subsequently to the increase of \$1 in total wages in Commonwealth awards, Wages Boards varied their determinations by increasing basic wages for adult males and adult females by \$1 a week. The rates then became \$34.40 for adult males and \$26.05 for adult females.

Further details of basic wages in Tasmanian Wages Board determinations are published in earlier issues of the Year Book and the annual *Labour Report*. Hobart basic wage rates adopted by Wages Boards from February 1956 are published in the Appendix to *Labour Report* No. 52, 1965 and 1966.

## Annual leave

At present the majority of employees in Australia receive at least three weeks' paid annual leave. The following paragraphs outline the position under Commonwealth and State awards and industrial legislation.

### Commonwealth

The first statement in the Commonwealth jurisdiction of the principles involved in deciding whether or not annual leave should be awarded was the judgment of the Commonwealth Conciliation and Arbitration Commission in the Commercial Printing Case of 1936, when one week's paid annual leave was granted. Over a period of time annual leave was introduced industry by industry when and if the Judge responsible for the industry considered it proper. In 1945 the Commission set out principles to be applied for the extension of paid annual leave to fourteen calendar days. Alteration of particular awards was left to the discretion of single judges.

Since 1960 three inquiries have been held following union claims to increased paid annual leave from two to three weeks in Commonwealth awards. These were the Three Weeks' Annual Leave Inquiries of 1960, 1962, and 1963, reports of which appear in earlier issues of the Year Book and the annual *Labour Reports*.

In its judgment in the 1963 inquiry (*see above*), the Commonwealth Conciliation and Arbitration Commission said that it would implement its intention of granting three weeks' annual leave generally in secondary industry, subject to special cases. A period of twenty-one consecutive days' leave would be allowed to employees who had completed twelve months' continuous service by or after 20 November 1963.

#### **New South Wales**

Employees in New South Wales in private industry, other than those covered by Federal awards, were granted three weeks' annual leave by an amendment to the Annual Holidays Act passed in 1958. In 1964 the State Government granted its employees four weeks' annual leave effective from 1 January 1964. From 29 September 1964 annual holiday pay for employees covered by provisions of the Annual Holidays Act has been calculated on the basis of the employee's current weekly earnings instead of current award rates.

#### **Victoria**

Following the decision of the Commonwealth Conciliation and Arbitration Commission in 1963 (*see above*) individual Wages Boards commenced to alter provisions of their determinations to grant employees an extra week of leave. By September 1963 the majority of Boards had included three weeks' annual leave in their determinations.

#### **Queensland**

In June 1963 the Full Bench of the Industrial Conciliation and Arbitration Commission granted an extra week of annual leave to employees with twelve months' continuous service on or after 30 November 1963. This move implemented a previous decision of the Commission in which it was decided, as a matter of policy, to grant increased leave to persons already enjoying two weeks' leave.

The decision applied to day workers and non-continuous shift workers receiving two weeks' leave; continuous shift workers receiving three weeks' leave; and day workers and shift workers receiving additional leave in lieu of extra payment for working on statutory holidays. The order became effective as from 1 June 1963.

The terms of the decision of the Commonwealth Conciliation and Arbitration Commission, as handed down in 1963 (*see above*) were to apply to awards of the Industrial Conciliation and Arbitration Commission of Queensland with the exception that, in the State awards, *pro rata* payment for leave not taken at the termination of employment was to be expressed as hours per month. The decision did not apply to employees in primary industry—apart from the sugar industry—or those in western areas. Extra leave for these employees was granted as a result of separate applications.

#### **South Australia**

The Full Bench of the South Australian Industrial Court in May 1963 announced an increased standard of annual leave in the State, adopting three weeks as the standard as fixed by the Commonwealth Conciliation and Arbitration Commission (*see above*).

The Court, as a general indication as to its attitude, expressed the view that annual leave should be taken at a time fixed either by agreement or, if this is not possible, at a time fixed by the employer. The leave should be allowed in two parts and one part must be of at least two weeks' duration. These, however, were factors which could vary from award to award, and their determination would depend on the needs of the particular industry.

#### **Western Australia**

Following a general inquiry concerning Annual Leave and Public Holidays the Court of Arbitration in June 1963 adopted three weeks as the new standard for the normal period of annual leave in State awards, with four weeks for seven-day shift workers. The date of operation was the same as that decided by the Commonwealth Conciliation and Arbitration Commission (*see above*). Existing awards and agreements which already provided annual leave in excess of the Court's standard were to be examined separately to ascertain whether special circumstances existed to justify leave greater than the normal standard. The standard number of public holidays was retained at ten a year.

In November 1963 the Court refused an application by employers for the right to split the annual leave into two parts, since it decided to follow the decision of most other State tribunals and allow the additional leave in conformity with conditions similar to those prescribed by the Commonwealth

Conciliation and Arbitration Commission. The right to split the leave would be allowed by the Court only in exceptional circumstances, unless all the parties concerned agreed to the inclusion of such a provision.

#### Tasmania

Following an amendment to the Wages Board Act in 1961, Wages Boards were permitted to grant employees up to three weeks' paid recreational leave. Between June 1962 and early 1963 determinations of Wages Boards were amended to provide for three weeks annual leave for employees, to operate from 1 January 1963.

Generally, most Wages Boards adopted provisions to enable leave to be taken in one consecutive period within six months from the end of the preceding year of employment or, if the employer and employee agree, in two separate periods, the lesser of which shall be of not less than seven consecutive days.

### Long service leave

Paid long service leave, i.e. leave granted to workers who remain with the one employer over an extended period of time, has been included in the provisions of Commonwealth and State industrial legislation and industrial awards, and a brief summary is given in the following paragraphs. After fifteen years' continuous employment with the one employer, most employees in Australia are now entitled to at least thirteen weeks' paid long service leave. In all cases the transfer of ownership of a business does not constitute a break in continuity of service with the same employer.

#### Commonwealth

Until May 1964 the Commonwealth Conciliation and Arbitration Commission had not included provision for long service leave in its awards, and had refrained from determining disputes relating to this subject except in the case of the Northern Territory and the Australian Capital Territory (*see* below). Consequently, until then, the provisions of the various State Acts relating to long service leave applied to workers covered by awards of the Commonwealth. The applicability of long service leave provisions under State law to workers under Commonwealth awards had been tested before the High Court and the Privy Council, and such provisions had been held to be valid.

The Commission's position was set out in its decision, issued on 16 September 1959, regarding disputes on the inclusion, in the Graphic Arts (Interim) Award, 1957, of provisions for long service leave. It stated that it should refrain until further order from determining the disputes so far as they concerned long service leave and that if in future the Commission decided that long service leave on a national basis was desirable, it was open to proceed to the making of an award on the matter.

Following the hearing of claims for long service leave provisions by employers in the graphic arts and metal trades industries in August 1963, the Full Bench of the Commonwealth Conciliation and Arbitration Commission on 11 May 1964 announced its decision that long service leave entitlement would be calculated on the basis of thirteen weeks for twenty years of unbroken employment, in respect of employment before 11 May 1964 (or, in New South Wales, 1 April 1963), and at the rate of thirteen weeks for fifteen years in respect of service after 11 May 1964 (or, in New South Wales, 1 April 1963). After further periods of ten years, employees would be entitled to an additional *pro rata* period of leave calculated on the same basis. Those employees who completed an unbroken contract of employment of ten years but less than fifteen years, and whose employment was terminated by death or by the employer for any cause other than serious and wilful misconduct, or by the employee on account of illness, incapacity or domestic or other pressing necessity, would be entitled to *pro rata* payment. The rate of payment while on leave would be current award rates which would be subject to basic wage changes and marginal adjustments which occurred during the leave period.

Following applications by employers in the metal trades and printing industries, the Full Bench of the Commission in a judgment delivered on 23 December 1964 extended the provisions of the awards to cover non-unionist employees. The decision rejected the unions' argument that the Commission had no jurisdiction to make long service leave awards binding in respect of non-unionists. The Commission, in a separate decision, varied the provisions of the award so that an employer would not be required to grant an employee long service leave until the entitlement equalled thirteen weeks for the first period of entitlement and eight and two-thirds weeks in respect of any subsequent period of entitlement. These variations would be effective on and from 1 December 1964.

*Australian Territories.* Long service leave codes for employees covered by Northern Territory and Australian Capital Territory awards were originally prescribed on 4 December 1961 by the Commonwealth Conciliation and Arbitration Commission in Presidential Session. The Commission decided that employees should be granted three months' long service leave after twenty years' service with one employer, even if part of this service was outside the Territory. In addition, the Australian

Capital Territory code prescribed that employees presently employed might 'go back for a period of 25 years in regard to the calculation of their present or future entitlement of long service leave'. In December 1964 the Commission amended the majority of awards covering employees in the Northern Territory and the Australian Capital Territory by granting long service leave on the basis of thirteen weeks after fifteen years' service.

*Stevedoring Industry.* The *Stevedoring Industry Act* 1962, which came into force on 19 November 1962, amended the *Stevedoring Industry Act* 1956-1961 by extending the eligibility and qualifying periods of the long service leave provisions of the Act. No changes were made to the entitlement for long service leave, which remained at thirteen weeks after twenty years' qualifying service and six and a half weeks for each subsequent ten years' qualifying service. The *Stevedoring Industry Act* 1966, which operated from 29 October 1966, reduced the qualifying period for thirteen weeks leave from twenty years to fifteen years.

#### New South Wales

Long service leave was first introduced for the majority of workers by the Industrial Arbitration Act, 1951, which provided such leave for workers under State awards. This Act was replaced by the Long Service Leave Act, 1955, which extended the benefits to any worker within the State. An amendment to the Act in April 1963 provided for three months' long service leave for fifteen years' continuous service with the same employer and proportionate amounts on the basis after a minimum of five years' service. The *Long Service Leave (Metalliferous Mining Industry) Act*, 1963 conferred on certain workers in the metalliferous mining industry the right to three months' long service leave after ten years' service. This Act operated from 1 January 1964.

#### Victoria

The *Factories and Shops (Long Service Leave) Act* 1953 first provided for long service leave for workers in Victoria, the provisions of this Act being subsequently incorporated in the Labour and Industry Act. Leave provided for was thirteen weeks for twenty years' continuous service with the same employer. Contributions by employers to retirement schemes were to be taken into consideration in dealing with exemptions from the Act.

An amendment to the Labour and Industry Act in December 1964 granted employees, from 1 January 1965, thirteen weeks' leave after fifteen years' continuous service. Workers who terminated their employment after ten years but less than the qualifying fifteen years would be able to obtain a *pro rata* entitlement subject to the existing special conditions of the Act. Following amendment to the Public Service Act in 1964, public servants became entitled to four and a half months' leave after fifteen years' service instead of six months after twenty years.

#### Queensland

In 1952 the Industrial Conciliation and Arbitration Acts were amended to include long service leave provision for employees within the jurisdiction of the Industrial Court, and the Acts were amended again in 1955 to extend these provisions to any employee in respect of whose employment there was not in force an award or industrial agreement under the Act and to seasonal workers in sugar mills and meat works. Leave provided for was thirteen weeks for twenty years' continuous service with the same employer.

An amendment to The Industrial Conciliation and Arbitration Acts was passed and assented to in December 1964, granting employees long service leave of thirteen weeks after fifteen years' continuous service. The amendment retained *pro rata* leave entitlement after ten years' service and operated on and from 11 May 1964.

#### South Australia

The Long Service Leave Act, 1967 provides for thirteen calendar weeks' leave after fifteen years' service with the same employer and for eight and two-thirds weeks' leave for each subsequent complete period of ten years' service. After seven and before fifteen completed years of service the worker is entitled on termination of employment to proportionate payment in lieu of leave for the period worked, except in certain specified circumstances. Entitlement for qualifying service prior to January 1966 is to be calculated at the rate of thirteen weeks' leave for twenty years' service, and an employer shall not be required to grant leave until the worker's total entitlement is thirteen weeks.

An employer may be exempted by the Industrial Commission from the leave entitlement provisions of the Act provided that the employees are entitled under some other scheme to long service leave benefits no less favourable than those provided by the Act.

#### Western Australia

The Long Service Leave Act was passed in 1958, but it did not apply to employees whose conditions of work were regulated under the Western Australian Industrial Arbitration Act. The Court of Arbitration of Western Australia in an order dated 1 April 1958 incorporated in most of the awards

and agreements within its jurisdiction provisions similar to those in the Long Service Leave Act. Leave provided for was thirteen weeks for twenty years' continuous service with the same employer. Contributions by employers to retirement schemes can be taken into consideration in dealing with exemptions from the Act.

In September 1964 the Industrial Commission began to amend the long service leave provisions of its awards and industrial agreements to provide for thirteen weeks' leave after fifteen years' service on or from 1 October 1964. *Pro rata* entitlement would accrue after ten years' service. The *Long Service Leave Amendment Act (No. 2) 1964*, introduced in October 1964, was in the same terms as the amendments made by the Commission to the various awards and agreements.

### Tasmania

The Long Service Leave Act, which was passed in 1956, provided for thirteen weeks' leave for twenty years' continuous service with the same employer. Contributions by employers to retirement schemes could be taken into consideration in dealing with exemptions from the Act. An amendment to the Long Service Leave Act, assented to on 17 December 1964, granted thirteen weeks' leave after fifteen years' continuous service. The amendment operated on and from 11 May 1964.

## INDUSTRIAL DISPUTES

Detailed information regarding industrial disputes involving stoppage of work is given in the *Labour Report*. A table showing statistics of industrial disputes for each year from 1913 is contained in the Appendix to *Labour Report* No. 52, 1965 and 1966.

Particulars of all disputes in progress during the year are included in the annual figures, whether the dispute commenced in that year or was in progress at the beginning of the year. Consequently, details of 'the number of disputes' and 'workers involved' in disputes which commenced in any year, and were still in progress during the following year, are included in the figures for both years.

The following table gives, for Australia as a whole, particulars of industrial disputes which were in progress during 1967, classified according to industry groups.

INDUSTRIAL DISPUTES(a): INDUSTRY GROUPS, AUSTRALIA, 1967

Industry group	Number	Workers involved			Working days lost	Estimated loss in wages (\$'000)
		Directly	Indirectly (b)	Total		
Agriculture, grazing, etc.	1	180	..	180	900	9.0
Coal mining	192	40,918	..	40,918	48,352	494.9
Other mining and quarrying	32	7,109	60	7,169	10,591	127.8
Engineering, metals, vehicles, etc.	448	233,676	8,389	242,065	259,258	2,585.0
Textiles, clothing and footwear	2	1,670	..	1,670	5,489	51.2
Food, drink and tobacco	84	14,931	1,862	16,793	48,061	511.3
Sawmilling, furniture, etc.	..	..	..	..	..	..
Paper, printing, etc.	28	11,399	..	11,399	62,020	758.1
Other manufacturing	117	19,791	181	19,972	42,147	432.5
Building and construction	185	26,308	338	26,646	84,479	961.8
Railway and tramway services	24	40,382	..	40,382	61,058	551.9
Road and air transport	38	7,617	85	7,702	9,264	99.4
Shipping	9	279	..	279	311	2.7
Stevedoring	103	28,264	..	28,264	17,886	195.3
Amusement, hotels, personal service, etc.	25	20,936	105	21,041	40,224	338.3
Other industries(c)	52	18,709	85	18,794	15,275	143.8
<b>Total</b>	<b>1,340</b>	<b>472,169</b>	<b>11,105</b>	<b>483,274</b>	<b>705,315</b>	<b>7,263.1</b>

(a) Refers only to disputes involving a stoppage of work of ten man-days or more. (b) Persons thrown out of work at the establishments where the stoppages occurred but not themselves parties to the dispute. (c) Includes communication; finance and property; wholesale and retail trade; public authority (n.e.i.); and community and business services.

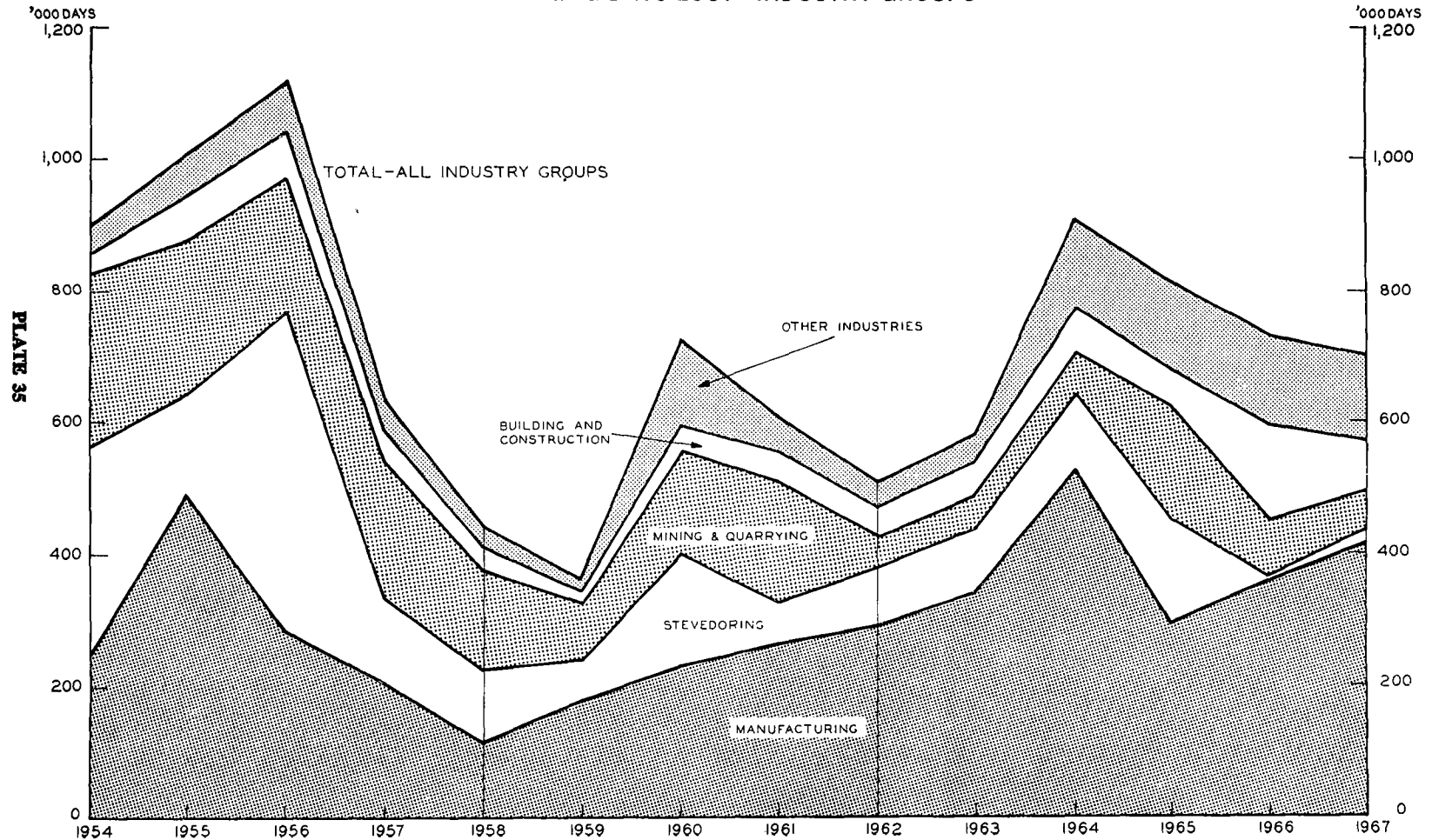
A graph on plate 35, page 316 shows, for the years 1954 to 1967, the working days lost as a result of industrial disputes in the main industry groups.

The following table gives particulars of the number of industrial disputes in each State and Territory, together with the number of workers involved and the losses in working days and wages caused by disputes which were current during each of the years 1963 to 1967.

# INDUSTRIAL DISPUTES: AUSTRALIA

1954 TO 1967

WORKING DAYS LOST—INDUSTRY GROUPS



## INDUSTRIAL DISPUTES(a): STATES AND TERRITORIES, 1963 TO 1967

State or Territory	Year	Number	Workers involved			Working days lost	Estimated loss in wages (\$'000)
			Directly	Indirectly (b)	Total		
New South Wales	1963	817	214,643	4,333	218,976	307,440	2,629.5
	1964	828	221,510	7,566	229,076	320,568	2,996.2
	1965	832	244,900	6,156	251,056	367,942	3,479.1
	1966	835	203,701	6,315	210,016	400,111	4,026.0
	1967	836	311,209	9,032	320,241	468,034	4,804.6
Victoria	1963	180	85,757	2,221	87,978	172,963	1,510.2
	1964	206	188,836	1,239	190,075	359,567	3,428.2
	1965	208	118,534	3,264	121,798	214,300	2,061.6
	1966	179	99,625	1,865	101,490	219,605	2,097.2
	1967	212	83,225	1,296	84,521	107,312	1,106.6
Queensland	1963	160	37,047	7,266	44,313	54,861	468.1
	1964	198	84,951	7,745	92,696	157,571	1,453.3
	1965	186	48,328	5,241	53,569	189,941	2,221.2
	1966	171	67,109	1,622	68,731	80,692	860.8
	1967	159	45,616	635	46,251	88,186	886.7
South Australia	1963	35	11,938	107	12,045	8,957	81.9
	1964	55	22,851	189	23,040	62,785	585.2
	1965	48	28,323	143	28,466	26,379	253.3
	1966	42	8,697	63	8,760	20,903	199.7
	1967	55	17,351	96	17,447	18,691	199.0
Western Australia	1963	28	42,390	194	42,584	31,969	252.5
	1964	26	6,093	72	6,165	7,148	62.6
	1965	33	12,611	..	12,611	10,020	100.8
	1966	25	2,860	16	2,876	6,239	64.5
	1967	26	5,032	39	5,071	5,994	62.6
Tasmania	1963	11	5,019	..	5,019	2,933	26.8
	1964	8	1,898	..	1,898	1,939	18.0
	1965	17	5,131	..	5,131	3,894	41.4
	1966	14	2,541	..	2,541	3,119	34.8
	1967	29	6,200	7	6,207	7,290	82.3
Northern Territory	1963	8	915	..	915	968	9.3
	1964	6	602	..	602	437	4.3
	1965	17	1,742	6	1,748	2,784	35.0
	1966	4	259	..	259	1,211	17.3
	1967	16	2,679	..	2,679	9,055	113.7
Australian Capital Territory	1963	11	858	20	878	1,477	13.1
	1964	7	2,076	..	2,076	1,343	13.1
	1965	5	665	..	665	609	6.2
	1966	3	178	..	178	204	2.2
	1967	7	857	..	857	753	7.5
Australia	1963	1,250	398,567	14,141	412,708	581,568	4,991.5
	1964	1,334	528,817	16,811	545,628	911,358	8,560.9
	1965	1,346	460,234	14,810	475,044	815,869	8,198.5
	1966	1,273	384,970	9,881	394,851	732,084	7,302.5
	1967	1,340	472,169	11,105	483,274	705,315	7,263.1

(a) Refers only to disputes involving a stoppage of work of ten man-days or more. (b) Persons thrown out of work at the establishments where the stoppage occurred but not themselves parties to the dispute.

## Duration of disputes

The duration of each industrial dispute involving a loss of work, i.e. the time between the cessation and resumption of work, has been calculated in working days, exclusive of Saturdays, Sundays and holidays, except where the establishment involved carries on a continuous process (e.g. metal smelting and cement manufacture).

The following table shows, for the year 1967, industrial disputes in coal mining, stevedoring and other industries classified according to duration.



## INDUSTRIAL DISPUTES(a): DURATION, BY INDUSTRY GROUP, AUSTRALIA, 1967

Duration (working days)	Workers involved(b)			Working days lost		
	Number	Number	Proportion of total (per cent)	Number	Proportion of total (per cent)	Estimated loss in wages (\$'000)
COAL MINING						
1 day and less . . . . .	128	31,351	76.6	24,047	49.7	244.4
2 days and more than 1 day . . . . .	38	6,645	16.2	11,668	24.1	117.7
3 days and more than 2 days . . . . .	15	1,224	3.0	3,294	6.8	36.5
Over 3 days and less than 5 days . . . . .	8	1,007	2.5	4,120	8.5	40.8
5 days and less than 10 days . . . . .	3	691	1.7	5,223	10.8	55.4
10 days and less than 20 days . . . . .	..	..	..	..	..	..
20 days and less than 40 days . . . . .	..	..	..	..	..	..
40 days and over . . . . .	..	..	..	..	..	..
<i>Total</i> . . . . .	192	40,918	100.0	48,352	100.0	494.9
STEVEDORING						
1 day and less . . . . .	86	26,960	95.4	14,283	79.9	155.6
2 days and more than 1 day . . . . .	8	536	1.9	888	5.0	9.6
3 days and more than 2 days . . . . .	4	219	0.8	533	3.0	6.0
Over 3 days and less than 5 days . . . . .	3	485	1.7	1,687	9.4	18.2
5 days and less than 10 days . . . . .	1	42	0.1	250	1.4	3.2
10 days and less than 20 days . . . . .	1	22	0.1	245	1.4	2.7
20 days and less than 40 days . . . . .	..	..	..	..	..	..
40 days and over . . . . .	..	..	..	..	..	..
<i>Total</i> . . . . .	103	28,264	100.0	17,886	100.0	195.3
OTHER INDUSTRIES						
1 day and less . . . . .	481	243,138	58.7	157,977	24.7	1,573.0
2 days and more than 1 day . . . . .	222	89,825	21.7	123,527	19.3	1,208.1
3 days and more than 2 days . . . . .	132	48,293	11.7	111,532	17.5	1,055.5
Over 3 days and less than 5 days . . . . .	111	13,573	3.3	54,130	8.5	576.1
5 days and less than 10 days . . . . .	76	11,854	2.9	88,012	13.8	942.9
10 days and less than 20 days . . . . .	15	5,917	1.4	63,989	10.0	773.3
20 days and less than 40 days . . . . .	7	1,202	0.3	26,420	4.1	296.8
40 days and over . . . . .	1	290	0.1	13,490	2.1	147.3
<i>Total</i> . . . . .	1,045	414,092	100.0	639,077	100.0	6,572.9
ALL INDUSTRIES						
1 day and less . . . . .	695	301,449	62.4	196,307	27.8	1,973.0
2 days and more than 1 day . . . . .	268	97,006	20.1	136,083	19.3	1,335.5
3 days and more than 2 days . . . . .	151	49,736	10.3	115,359	16.4	1,097.9
Over 3 days and less than 5 days . . . . .	122	15,065	3.1	59,937	8.5	635.1
5 days and less than 10 days . . . . .	80	12,587	2.6	93,485	13.3	1,001.5
10 days and less than 20 days . . . . .	16	5,939	1.2	64,234	9.1	776.0
20 days and less than 40 days . . . . .	7	1,202	0.2	26,420	3.7	296.8
40 days and over . . . . .	1	290	0.1	13,490	1.9	147.3
<i>Grand total</i> . . . . .	1,340	483,274	100.0	705,315	100.0	7,263.1

(a) Refers only to disputes involving a stoppage of work of ten man-days or more. (b) Includes workers indirectly involved. See footnote (b) to table on page 317.

**Causes of disputes**

Stoppages are analysed in three separate groups, 'Coal mining', 'Stevedoring', and 'Other industries'. Causes have been grouped under four main headings: (1) Wages, hours and leave; (2) Physical working conditions and managerial policy; (3) Trade unionism; (4) Other causes. The first group is restricted to disputes involving general principles relating to wages, hours and leave; minor questions regarding the claims to pay or leave by individual employees are included under managerial policy. The second group comprises disputes regarding physical working conditions and general questions of managerial policy, including disciplinary action, the promotion of employees, the employment of particular individuals, personal disagreements between employees and supervisory staff, and disputes arising from the computation of wages, leave, etc., in individual cases. The third group includes stoppages over employment of non-unionists, inter-union and intra-union disputes, disputes over recognition of union activities, and sympathy stoppages in support of employees in another industry. The last group comprises disputes by way of protest against situations not arising from the usual relationship of employer and employee, e.g. political matters, and cases (occurring mainly in the coal mining industry) where the cause of the stoppage is not officially made known to the management.

The following tables show particulars of industrial disputes classified according to cause, in three industry groups for 1967, and according to cause for the years 1963 to 1967.

**INDUSTRIAL DISPUTES(a): CAUSES, INDUSTRY GROUPS, AUSTRALIA, 1967**

<i>Cause of dispute</i>	<i>Coal mining</i>	<i>Stevedoring</i>	<i>Other industries</i>	<i>All industries</i>
<b>Number of disputes—</b>				
Wages, hours and leave . . . . .	5	4	327	336
Physical working conditions and managerial policy . . . . .	97	85	590	772
Trade unionism . . . . .	28	5	96	129
Other . . . . .	62	9	32	103
<i>Total disputes</i> . . . . .	<i>192</i>	<i>103</i>	<i>1,045</i>	<i>1,340</i>
<b>Workers involved(b)—</b>				
Wages, hours and leave . . . . .	10,331	2,186	163,394	175,911
Physical working conditions and managerial policy . . . . .	16,045	13,070	100,990	130,105
Trade unionism . . . . .	4,071	525	13,244	17,840
Other . . . . .	10,471	12,483	136,464	159,418
<i>Total workers involved</i> . . . . .	<i>40,918</i>	<i>28,264</i>	<i>414,092</i>	<i>483,274</i>
<b>Working days lost—</b>				
Wages, hours and leave . . . . .	10,325	1,119	244,411	255,855
Physical working conditions and managerial policy . . . . .	28,871	9,054	261,664	299,589
Trade unionism . . . . .	4,453	499	21,758	26,710
Other . . . . .	4,703	7,214	111,244	123,161
<i>Total working days lost</i> . . . . .	<i>48,352</i>	<i>17,886</i>	<i>639,077</i>	<i>705,315</i>

(a) Refers only to disputes involving a stoppage of work of ten man-days or more. See footnote (b) to table on page 317.

(b) Includes workers indirectly involved.

## INDUSTRIAL DISPUTES(a): CAUSES, AUSTRALIA, 1963 TO 1967

<i>Cause of dispute</i>	1963	1964	1965	1966	1967
<b>Number of disputes—</b>					
Wages, hours and leave . . . . .	279	320	426	325	336
Physical working conditions and managerial policy . . . . .	748	758	735	714	772
Trade unionism . . . . .	115	136	101	143	129
Other . . . . .	108	120	84	91	103
<i>Total disputes</i> . . . . .	1,250	1,334	1,346	1,273	1,340
<b>Workers involved(b)—</b>					
Wages, hours and leave . . . . .	171,551	235,846	268,105	205,613	175,911
Physical working conditions and managerial policy . . . . .	142,998	191,354	143,111	125,286	130,105
Trade unionism . . . . .	22,251	31,670	17,722	22,393	17,840
Other . . . . .	75,908	86,758	46,106	41,559	159,418
<i>Total workers involved</i> . . . . .	412,708	545,628	475,044	394,851	483,274
<b>Working days lost—</b>					
Wages, hours and leave . . . . .	274,901	556,948	528,722	392,458	255,855
Physical working conditions and managerial policy . . . . .	233,502	257,062	235,542	269,875	299,589
Trade unionism . . . . .	23,268	33,392	18,873	32,885	26,710
Other . . . . .	49,897	63,956	32,732	36,866	123,161
<i>Total working days lost</i> . . . . .	581,568	911,358	815,869	732,084	705,315

(a) Refers only to disputes involving a stoppage of ten man-days or more. (b) Includes workers indirectly involved. See footnote (b) to table on page 317.

## Methods of settlement of disputes

The following table shows particulars of industrial disputes for 1967, classified according to method of settlement, in three industry groups.

INDUSTRIAL DISPUTES(a): METHODS OF SETTLEMENT, INDUSTRY GROUPS  
AUSTRALIA, 1967

<i>Method of settlement</i>	<i>Coal mining</i>	<i>Stevedoring</i>	<i>Other industries</i>	<i>All industries</i>
<b>NUMBER OF DISPUTES</b>				
By private negotiation . . . . .	39	3	261	303
By mediation not based on legislation . . . . .	..	..	..	..
State legislation—				
Under State Conciliation, etc. legislation . . . . .	1	2	149	152
By reference to State Government officials . . . . .	..	..	..	..
Commonwealth and Commonwealth-State legislation—				
Industrial Tribunals under—				
Conciliation and Arbitration Act . . . . .	..	..	159	159
Coal Industry Acts . . . . .	11	..	..	11
Stevedoring Industry Act . . . . .	..	4	..	4
Other Acts . . . . .	..	..	..	..
By reference to Commonwealth Government officials . . . . .	..	56	..	56
By filling places of workers on strike or locked out . . . . .	..	..	..	..
By closing down establishment permanently . . . . .	..	..	..	..
By resumption without negotiation . . . . .	141	38	476	655
By other methods . . . . .	..	..	..	..
<i>Total</i> . . . . .	192	103	1,045	1,340

For footnotes see next page.

**INDUSTRIAL DISPUTES(a): METHODS OF SETTLEMENT, INDUSTRY GROUPS  
AUSTRALIA, 1967—continued**

<i>Method of settlement</i>	<i>Coal mining</i>	<i>Steve- doring</i>	<i>Other industries</i>	<i>All industries</i>
<b>WORKERS INVOLVED(b)</b>				
By private negotiation . . . . .	5,438	239	31,530	37,207
By mediation not based on legislation . . . . .	..	..	..	..
State legislation—				
Under State Conciliation, etc. legislation . . . . .	62	183	19,310	19,555
By reference to State Government officials . . . . .	..	..	..	..
Commonwealth and Commonwealth-State legislation—				
Industrial Tribunals under—				
Conciliation and Arbitration Act . . . . .	..	..	33,244	33,244
Coal Industry Acts . . . . .	969	..	..	969
Stevedoring Industry Act . . . . .	..	248	..	248
Other Acts . . . . .	..	..	..	..
By reference to Commonwealth Government officials . . . . .	..	8,085	..	8,085
By filling places of workers on strike or locked out . . . . .	..	..	..	..
By closing down establishment permanently . . . . .	..	..	..	..
By resumption without negotiation . . . . .	34,449	19,509	330,008	383,966
By other methods . . . . .	..	..	..	..
<b>Total . . . . .</b>	<b>40,918</b>	<b>28,264</b>	<b>414,092</b>	<b>483,274</b>
<b>WORKING DAYS LOST</b>				
By private negotiation . . . . .	9,658	389	61,645	71,692
By mediation not based on legislation . . . . .	..	..	..	..
State legislation—				
Under State Conciliation, etc. legislation . . . . .	62	831	68,770	69,663
By reference to State Government officials . . . . .	..	..	..	..
Commonwealth and Commonwealth-State legislation—				
Industrial Tribunals under—				
Conciliation and Arbitration Act . . . . .	..	..	156,960	156,960
Coal Industry Acts . . . . .	4,234	..	..	4,234
Stevedoring Industry Act . . . . .	..	114	..	114
Other Acts . . . . .	..	..	..	..
By reference to Commonwealth Government officials . . . . .	..	5,432	..	5,432
By filling places of workers on strike or locked out . . . . .	..	..	..	..
By closing down establishment permanently . . . . .	..	..	..	..
By resumption without negotiation . . . . .	34,398	11,120	351,702	397,220
By other methods . . . . .	..	..	..	..
<b>Total . . . . .</b>	<b>48,352</b>	<b>17,886</b>	<b>639,077</b>	<b>705,315</b>

(a) Refers only to disputes involving a stoppage of work of ten man-days or more. (b) Includes workers indirectly involved. See footnote (b) to table on page 317.

### WORKERS' COMPENSATION LEGISLATION

A conspectus of the principal provisions of Workers' Compensation Acts and Ordinances in force in Australia at 31 December 1966 is included in *Labour Report* No. 52, pages 231–43.

## LABOUR ORGANISATIONS

### Labour organisations in Australia

The figures shown in this section are prepared from a special collection of membership of labour organisations at 31 December each year. The affairs of single unions are not disclosed in the published results and this has assisted in securing complete information. The Bureau is indebted to the secretaries of trade unions for their co-operation in supplying information. More detailed statistics appear in the annual *Labour Report*.

**Trade unions**

The trade unions in Australia are very diverse in character, and range from the small independent association to the large interstate organisation, which, in its turn, may be a branch of an international body. Broadly speaking, there are four distinct classes of labour organisations: (a) the local independent, (b) the State, (c) the interstate, and (d) the Australasian or international; but a number of variations occur from each of these classes. The schemes of organisation of interstate or federated unions vary greatly in character. In some unions the State organisations are bound together under a system of unification with centralised control, while in others the State units are practically independent and self-governing, the federal bond being loose and existing only for one or two specified purposes. Statistics relating to interstate or federated trade unions are shown in a table on page 324.

Returns showing membership by States and Territories at 31 December each year are obtained for all trade unions and employee organisations. The following table shows the position at the end of each of the years 1965 to 1967.

**TRADE UNIONS: NUMBER AND MEMBERSHIP, STATES AND TERRITORIES  
1965 TO 1967**

<i>State or Territory</i>	<i>Number of separate unions</i>			<i>Number of members (‘000)</i>			<i>Percentage increase in membership(a)</i>		
	1965	1966	1967	1965	1966	1967	1965	1966	1967
New South Wales . . . . .	222	220	213	825.8	817.3	832.8	3.9	-1.0	1.9
Victoria . . . . .	156	154	152	537.8	539.4	545.5	2.3	0.3	1.1
Queensland . . . . .	140	140	138	353.3	351.6	344.0	0.8	-0.5	-2.2
South Australia . . . . .	137	136	133	174.0	178.5	182.2	4.2	2.6	2.1
Western Australia . . . . .	155	157	155	139.2	146.6	152.3	3.1	5.3	3.9
Tasmania . . . . .	109	110	107	63.4	65.5	68.1	6.0	3.3	4.0
Northern Territory(b) . . . . .	33	38	40	3.5	4.1	4.5	(b)	(b)	(b)
Australian Capital Territory(b)	64	66	65	19.1	20.7	22.0	(b)	(b)	(b)
<b>Australia . . . . .</b>	<b>(c) 334</b>	<b>(c) 330</b>	<b>(c) 324</b>	<b>2,116.2</b>	<b>2,123.5</b>	<b>2,151.3</b>	<b>3.0</b>	<b>0.3</b>	<b>1.3</b>

(a) On preceding year. (b) In some cases union members in the Territories associated with State organisations are reported under the heading of that State. The annual figures reflect, in part, more accurate reporting, and the comparability of totals for the Territories is affected by this aspect. (c) Without interstate duplication. See below.

Minus sign (-) denotes decrease.

In the preceding table, under the heading ‘Number of separate unions’, a union reporting members in a State or Territory is counted as one union within that State or Territory. The figures do not add to the Australian total (shown in the last line) because a union represented in more than one State or Territory is included in the figure for each State or Territory in which it is represented, but is counted only once in the Australian total.

A table showing the number and membership of trade unions in Australia for the years 1912 to 1966 is included in Appendix XII to *Labour Report* No. 52.

The following table shows the number of unions and members thereof in Australia at the end of each of the years 1965 to 1967 classified according to industry group. The table does not supply a precise classification of trade union members by industry, because where the members of a union are employed in a number of industries they have been classified to the predominant industry for the union concerned.

## TRADE UNIONS: INDUSTRY GROUPS, AUSTRALIA, 1965 TO 1967

Industry group	1965		1966		1967	
	No. of unions (a)	No. of members	No. of unions (a)	No. of members	No. of unions (a)	No. of members
		'000		'000		'000
Agriculture, grazing, etc. . . . .	3	63.9	3	61.3	3	60.4
Mining and quarrying . . . . .	12	35.9	12	35.7	12	34.5
Manufacturing—						
Engineering, metals, vehicles, etc. . . . .	11	328.0	10	331.8	9	343.1
Textiles, clothing and footwear . . . . .	6	113.7	6	107.8	6	109.6
Food, drink and tobacco . . . . .	32	130.0	32	134.5	32	133.4
Sawmilling, furniture, etc. . . . .	6	39.5	6	38.9	6	34.9
Paper, printing, etc. . . . .	6	54.7	5	54.8	5	57.5
Other manufacturing . . . . .	28	95.1	27	94.7	25	85.3
<i>All manufacturing groups</i> . . . . .	89	761.1	86	762.4	83	763.7
Building and construction . . . . .	24	150.9	24	143.5	24	142.6
Railway and tramway services . . . . .	24	132.0	24	129.3	24	126.0
Road and air transport . . . . .	11	71.7	11	72.9	11	75.0
Shipping and stevedoring . . . . .	14	35.4	13	33.9	13	32.9
Banking, insurance and clerical . . . . .	15	137.3	15	142.8	15	146.8
Wholesale and retail trade . . . . .	12	86.2	12	86.5	11	84.7
Public administration(b) . . . . .	71	405.9	71	413.5	70	423.0
Amusement, hotels, personal service, etc. . . . .	22	56.3	22	55.8	21	56.5
Other industries(c) . . . . .	37	179.6	37	186.0	37	205.3
<b>Total</b> . . . . .	<b>334</b>	<b>2,116.2</b>	<b>330</b>	<b>2,123.5</b>	<b>324</b>	<b>2,151.3</b>

(a) Without interstate duplication. See page 322.

(b) Includes communication, municipal, etc.

(c) Includes community and business services.

*Number of trade union members and proportion of wage and salary earners.* The following table shows the estimated percentages of wage and salary earners in employment who are members of trade unions. As estimates of wage and salary earners in employment do not include employees engaged in rural industry or in private domestic service, the percentages have been calculated on figures obtained by adding to the end of year estimates the number of employees in rural industry and in private domestic service recorded at the nearest available population census. For this reason, and also because the membership of trade unions includes some persons not in employment, the percentages shown in the table must be regarded as approximations.

## TRADE UNIONS: NUMBER OF MEMBERS AND PROPORTION OF TOTAL WAGE AND SALARY EARNERS, AUSTRALIA, 1954 TO 1967

Year	Number of members ( <sup>'000</sup> )			Proportion of total wage and salary earners(a) (Per cent)		
	Males	Females	Persons	Males	Females	Persons
1954 . . .	1,448.2	339.3	1,787.5	66	45	61
1961 . . .	1,521.9	372.7	1,894.6	63	41	57
1965 . . .	1,663.4	452.8	2,116.2	62	41	56
1966 . . .	1,657.5	466.0	2,123.5	60	40	54
1967 . . .	1,663.7	487.6	2,151.3	59	40	54

(a) See text above.

*Interstate or federated trade unions.* The following table gives particulars of the number and membership of interstate or federated trade unions in 1967.

**INTERSTATE OR FEDERATED TRADE UNIONS(a): AUSTRALIA, 1967**

	Unions operating in—					Total
	2 States	3 States	4 States	5 States	6 States	
Number of unions	11	3	22	27	77	140
„ „ members ('000)	22.2	20.4	184.9	281.8	1,447.7	1,957.0

(a) Certain unions in this group have, in addition to branches in the States, branches in the Northern Territory or the Australian Capital Territory or both.

**Organisations registered under the (Commonwealth) Conciliation and Arbitration Act**

Under Part VIII. of the *Conciliation and Arbitration Act* 1904–1966 any association of employers in an industry who have, or any employer who has, employed, on an average taken per month, not less than 100 employees during the six months preceding application for registration, and any association of not less than 100 employees in any industry, may be registered. However, the Public Service Arbitration Act provides that an association of less than 100 employees may be registered as an organisation under the Conciliation and Arbitration Act if its members comprise at least three-fifths of all persons engaged in that industry in the Public Service. Such organisations are included in the following figures. Registered unions include both interstate associations and associations operating within one State only. Registration under Commonwealth legislation began in 1906. At the end of 1967 the number of employers' organisations registered under the provisions of the Act was 73. The number of unions registered at the end of 1967 was 149, with membership of 1,800,863, representing 84 per cent of the total membership of all trade unions in Australia. Lists of organisations of employees and of employers registered under this Act are contained in the *Industrial Information Bulletin*, Vol. 23, No. 1, January 1968 published by the Department of Labour and National Service.

**Central labour organisations**

*Trades and Labour Councils.* Delegate organisations, usually known as Trades Hall Councils or Labour Councils and consisting of representatives of a number of trade unions, have been established in the capital cities and in a number of other centres in each State. In the centres where these councils exist most unions or local branches operating in the district are affiliated. The district councils obtain their finance by means of a *per capita* tax on members of affiliated unions. In States other than Western Australia the district councils are generally independent bodies, although provision usually exists in the rules of the central council in the capital city for the organisation of district councils, or for their representation on the central council. In Western Australia there was until 1962 a unified system or organisation with a central council and district councils within the framework of the Australian Labor Party. In 1962 this organisation was abolished and a separate Trades and Labour Council, with provincial councils, was to be established outside the political organisation. At the end of 1963 only the central council (the Trades and Labour Council of Western Australia) was operating, but a number of provincial councils were established from 1964.

The following table shows, for each State and Territory, the number of trades and labour councils and the number of affiliated unions or branches of unions at the end of 1967. The figures for the number of unions do not necessarily represent separate unions, since the branches of a large union may be affiliated with the local trades councils in the several towns in which they are represented.

**CENTRAL LABOUR ORGANISATIONS: NUMBER, AND UNIONS AND BRANCH UNIONS AFFILIATED, STATES AND TERRITORIES, 1967**

	N.S.W.	Vic.	Qld	S.A.	W.A. (a)	Tas.	N.T.	A.C.T.	Total
Number of councils	11	9	13	5	3	5	..	1	47
Number of unions and branch unions affiliated	348	279	187	147	137	125	..	27	1,250

(a) See explanation in text above.

As well as trades and labour councils there are councils organised on trade lines and composed of delegates from separate unions whose members' interests are closely connected by reason of their occupations. Delegate councils of bakers, bread carters and mill employees, or of unions connected directly or indirectly with the metal trades, or with the building trades, are examples of such organisations.

*Australian Council of Trade Unions.* A central labour organisation, now called the Australian Council of Trade Unions, came into being during 1927. The Council was created to function on behalf of the trade unions of Australia, and was founded at an All-Australian Trade Union Congress held in Melbourne in May 1927. The A.C.T.U. consists of affiliated unions and affiliated Metropolitan and or State Labour Councils and Provincial Councils. The Metropolitan or State Labour Council in each State is the State Branch of the A.C.T.U. and has the right to appoint one representative to act on the executive of the Council. In addition to the representatives of the State Branches of the A.C.T.U., six delegates are elected by and from Congress, one from each of the following industry groups: Building, Food and distributive services, Manufacturing, Metal, Services, and Transport. To this executive are added the four officers, namely, President, two Vice-Presidents, and Secretary, who are elected by and from the Australian Congress of Trade Unions.

The ordinary meetings of Congress are held in alternate years. The 1965 Biennial Congress was held in September 1965, and was attended by 573 delegates from affiliated organisations, State branches of the A.C.T.U., and provincial councils. Special meetings of Congress are held whenever deemed advisable by decision of the executive, as approved by the majority of its branches, or by resolution of unions representing one-third of the total membership of the A.C.T.U.

The objectives of the A.C.T.U. are the socialisation of industry, i.e. production, distribution and exchange, and the utilisation of the resources of Australia for the benefit of the people—ensuring full employment, with rising standards of living, real security, and full cultural opportunities for all. The methods to be adopted are: the closer organisation of the workers by the transformation of the Australian trade union movement from the craft to an industrial basis, by grouping of unions in their respective industries and by the establishment of one union in each industry; the consolidation of the Australian labour movement with the object of unified control, administration, and action; the centralised control of industrial disputes, educational propaganda among unions; and political action to secure satisfactory working-class legislation.

The A.C.T.U. was the first interstate body in Australia with authority to deal with industrial matters of an interstate character affecting the trade union movement generally. It is also the body responsible for submitting to the Commonwealth Government the names of persons suitable for selection as the Australian workers' delegate to the annual International Labour Conference. All major unions are affiliated with the A.C.T.U.

### International Labour Organisation

The International Labour Organisation (I.L.O.) was established on 11 April 1919 as an autonomous institution associated with the League of Nations. Its original constitution was adopted as Part XIII of the Treaty of Versailles and formed part of other treaties of peace. During the years between its establishment and the outbreak of the 1939–45 War the I.L.O., with headquarters at Geneva, played a leading role in promoting the improvement of labour conditions throughout the world.

In 1940, in order to ensure that the I.L.O. should be able to continue to function freely, a working centre was established at Montreal, Canada. In 1946 the Organisation became the first of the specialised agencies of the United Nations. Under the terms of agreement the United Nations recognises the I.L.O. as a specialised agency having responsibility in the field defined by its constitution, which embraces labour conditions, industrial relations, employment organisations, social security and other aspects of social policy. The Organisation has three basic parts. These are the International Labour Conference, its highest authority, which as a rule meets annually; the Governing Body, its executive council, which usually meets three times each year; and the International Labour Office, which provides the secretariat of the Organisation. The Conference is composed of delegations from the Member States of the Organisation. At the end of 1965 there were 115 Member States, each of which is entitled to be represented by four delegates—two government, one representing employers and one representing workers together with their advisers. Each delegate speaks and votes independently, so that all points of view in each country are fully expressed. The Governing Body consists of the representatives of twenty-four governments and twelve employers' and twelve workers' representatives. Of the twenty-four government representatives, ten are from the ten countries of major industrial importance and fourteen are elected by the remaining governments. These latter fourteen government representatives and the twelve employers' and twelve workers' titular delegates and the deputy members of the three groups are elected by their groups at the Conference every three years. Particulars are given in *Labour Report* No. 52 of the proceedings of International Labour Conferences up to the 50th Session, held in Geneva in June 1966. For details of I.L.O. conventions ratified by Australia, see *Labour Report* No. 52, pages 254–5.





## CHAPTER 11

### OVERSEAS TRANSACTIONS

This chapter includes statistics of overseas trade, balance of payments, and overseas investment by private investors, but through limitations of space the statistics are, in the main, restricted to summarised form. For detailed information see the *Annual Bulletin of Overseas Investment, Australia*; and the other annual bulletins *Overseas Trade* (preliminary and final), *Australian Exports*, *Australian Imports*, *Imports Cleared for Home Consumption*, and the *Supplement to Imports Cleared for Home Consumption—Descriptions of Tariff Items and Statistical Key Codes*; and the half-yearly bulletin *Balance of Payments*. Preliminary information is available in summary form in the statements *Balance of Payments—Quarterly Summary*, *Overseas Investment—Preliminary Bulletin* (annual), *Australian Overseas Trade—Exports and Imports* (monthly), *Overseas Trade—Exports by Commodity Divisions* (monthly), and *Overseas Trade—Imports by Commodity Divisions* (monthly). Current information is included in the *Quarterly Summary of Australian Statistics*, the *Monthly Review of Business Statistics*, the *Digest of Current Economic Statistics*, and in more detail in the *Monthly Bulletin of Overseas Trade Statistics*. There are also the following additional mimeographed statements: *Exports of Wool* (monthly), *Imports of Assembled New Motor Cars* (monthly), *Overseas Trade with Major Groups of Countries* (quarterly), and *Trade of Australia with Eastern Countries* (annually). Additional unpublished details of exports and imports can be supplied on request.

A subscription service is available from this Bureau to provide for the detailed requirements of individual users of overseas trade statistics. These special periodical returns are obtainable monthly or quarterly and show trade according to items of the Australian Export and Import Commodity Classifications or statistical key code dissections of Australian Customs Tariff items.

### OVERSEAS TRADE

#### Constitutional provisions and legislation

##### Constitutional provisions

By the Commonwealth of Australia Constitution Act, section 51 (1), the power to make laws with respect to trade and commerce with other countries was conferred on the Commonwealth Parliament. Under section 86 of the Constitution, the collection and control of duties of customs and excise passed to the Executive Government of the Commonwealth on 1 January 1901. Other references to trade and commerce are contained in sections 87 to 95 of the Constitution (see pages 17–18).

##### Commonwealth legislation

Commonwealth legislation affecting overseas trade includes: the Customs Act, the Customs Tariff and the Customs Tariff (Dumping and Subsidies) Act. The Customs Act is the administrative Act under which the Department of Customs and Excise operates. The Customs Tariff provides the statutory authority for imposing the actual rates of duty operative from time to time, while the Customs Tariff (Dumping and Subsidies) Act provides protection for Australian industry against various forms of unfair trading.

##### The Customs Tariff

The first Commonwealth Customs Tariff was introduced by Resolution on 8 October 1901, from which date uniform duties came into effect throughout Australia. The Australian Customs Tariff has been developed in conformity with the policy of protecting economic and efficient Australian industries and of granting preferential treatment to certain imports from countries of the Commonwealth. Duties are imposed on some goods, generally of a luxury nature, for revenue purposes. Customs collections are a major source of revenue, but in its protective character the tariff has an important influence on the Australian economy.

The present tariff provides for general and preferential rates of duty, and its structure is based on the 'Brussels Nomenclature' which has its origins in the Convention on Nomenclature for the Classification of Goods in Customs Tariffs, signed in Brussels on 15 December 1950. Australia has operated a 'Brussels-type' tariff since 1 July 1965.

*Preferential rates.* Preferential rates apply to goods the produce or manufacture of the United Kingdom, Ireland, Canada, New Zealand, Papua, and New Guinea, and certain goods the produce or manufacture of specified countries, provided that such goods comply with the laws in force at the time affecting the grant of preference.

The following are the rules of origin for preference purposes.

'151.—(1.) For the purposes of this Act and the *Customs Tariff* 1966–1967 (other than section twenty of the last-mentioned Act), goods shall be treated as the produce of a country if they are unmanufactured raw products of the country.

(2.) For the purposes of this Act and the *Customs Tariff* 1966–1967 (other than section twenty or a direction under section twenty-two of the last-mentioned Act), goods shall be treated as the manufacture of a country—

- (a) if the goods were wholly manufactured in the country from materials of one or more of the following classes:—
  - (i) unmanufactured raw products;
  - (ii) materials wholly manufactured in the country or in Australia, or in the country and in Australia; and
  - (iii) imported materials that the Minister has, in relation to the country, determined, by notice published in the *Gazette*, to be manufactured raw materials; or
- (b) if the goods were partly manufactured in the country, the process last performed in the manufacture of the goods was performed in the country and—
  - (i) not less than three-quarters, or, in a case where the country is New Zealand, one-half, of the factory or works cost of the goods is represented by the value of labour or materials, or of labour and materials, of the country or of the country and Australia;
  - (ii) in a case where the goods are goods of a class or kind not commercially manufactured in Australia, not less than one-quarter of the factory or works cost of the goods is represented by the value of labour or materials, or of labour and materials, of the country or of the country and Australia; or
  - (iii) in a case where the country is New Zealand, not less than three-quarters of the factory or works cost of the goods is represented by the value of labour or materials, or of labour and materials, of New Zealand and the United Kingdom or of New Zealand, Australia and the United Kingdom.

(3.) For the purposes of a direction under section twenty-two of the *Customs Tariff* 1966–1967 goods shall be treated as the manufacture of a country if—

- (a) the process last performed in the manufacture of the goods was performed in the country; and
- (b) not less than one-half of the factory or works cost of the goods is represented by the value of labour or materials, or of labour and materials, of the country or of the country and one or more of the following countries, that is to say, Australia and countries that, at the time the goods are entered for home consumption, are less developed countries, other than a country that, by virtue of a direction under sub-section (2) of section eleven of the *Customs Tariff* 1966–1967 is not to be treated as a less developed country in relation to the class of goods in which the goods are included.

'151A.—(1.) For the purposes of this Act and the *Customs Tariff* 1966–1967 (other than section twenty or a direction under section twenty-two of the last-mentioned Act), goods shall not be treated as the produce or manufacture of the United Kingdom, Canada, New Zealand, Ireland, Malawi, Southern Rhodesia, Zambia, the Territory of Papua or the Territory of New Guinea unless they have been shipped from that country to Australia and, except where the Collector is satisfied that the intended destination of the goods when originally shipped from that country was Australia, have not been transhipped.

(2.) The last preceding sub-section does not apply—

- (a) to goods the produce or manufacture of a country other than New Zealand that are imported into Australia from New Zealand; or
- (b) to goods the produce or manufacture of a country other than the Territory of Papua or the Territory of New Guinea that are imported into Australia from the Territory of Papua or the Territory of New Guinea.

(3.) For the purposes of a direction under section twenty-two of the *Customs Tariff* 1966–1967, goods shall not be treated as the produce or manufacture of a country unless they have been shipped from that country to Australia and, except where the collector is satisfied that the intended destination of the goods when originally shipped from that country was Australia, have not been transhipped.

(4.) For the purposes of this section—

- (a) goods may be treated as having been shipped from the Territory of Papua or the Territory of New Guinea if they have been shipped from either of those territories; and
- (b) goods may be treated as having been shipped from Malawi, Rhodesia or Zambia if they have been shipped from any of those countries or from Lourenco Marques or Beira in Mozambique'.

*Declared preference countries.* 10.—(1.) The Minister may, by order published in the *Gazette*, declare that a country specified in the order is a declared preference country for the purposes of this Act.

(2.) An order under the last preceding sub-section has effect, or shall be deemed to have had effect, from and including such date (which may be a date earlier than the date of publication of the order in the *Gazette*) as is specified in the order.

(3.) The Minister may, by order published in the *Gazette*, revoke an order under sub-section (1.) of this section.

(4.) An order under the last preceding sub-section has effect from and including such date (which shall not be a date earlier than the date of publication of the order in the *Gazette*) as is specified in the order.

(5.) Goods shall not be treated as the produce or manufacture of a declared preference country for the purposes of this Act unless, at the time the goods are entered for home consumption, the order under sub-section (1.) of this section in which the declared preference country is specified has effect or is deemed to have had effect.

Declared preference countries comprise:

Bahama Islands	Ghana	Republic of Cyprus
Barbados	Gibraltar	Republic of Singapore
Bermuda	Gilbert and Ellice Islands	St Helena and Ascension
British Honduras	Colony	Seychelles and Dependencies
British Solomon Islands	Guyana	Sierra Leone
Protectorate	Hong Kong	Tanzania
Brunei	Jamaica and Dependencies	Tonga
Ceylon	Kenya	Trinidad and Tobago
Falkland Island and	Leeward Islands	Uganda
Dependencies	Maldiv Islands	Virgin Islands of the United
Federation of Malaysia	Malta	Kingdom
Fiji	Mauritius and Dependencies	Windward Island
Gambia	Nigeria	

*General rates.* General rates apply to goods from all countries which do not qualify for preferential rates of duty under a particular tariff classification.

*By-law provisions.* Customs By-laws and Ministerial Determinations are instruments made by the Minister for Customs and Excise under the authority of sections 271 to 273D of the Customs Act by which goods may be admitted free of duty or at rates of duty lower than those normally applicable. By-laws and determinations may only be made under a by-law classification, which is a tariff classification containing the words 'as prescribed by by-law'. Such a classification sets out the by-law duty rates which will apply to goods only when such goods are included in a by-law or determination made under that classification. By-law admission of goods is in general guided by the use to which the goods are to be put, e.g. the goods must be for a use which will assist economic or industrial development. A prerequisite for by-law admission is that suitably equivalent goods be not reasonably available from Australian production. A by-law covers goods by general description with no limit on quantity and may be used by any importer of the goods. A determination covers a specific quantity of particular goods and may be used only by the importer mentioned in the determination.

*Primage duties.* In addition to the ordinary duties of customs imposed by the Customs Tariff, *ad valorem* primage duties at rates of five per cent or ten per cent are charged on some goods according to the types of goods and origin thereof. Other goods are exempt from primage duty. Goods the produce or manufacture of New Zealand, Norfolk Island, Fiji, Cocos (Keeling) Islands, Christmas Island, Papua, and New Guinea are exempt from primage duty.

*Anti-dumping duties.* The *Customs Tariff (Dumping and Subsidies) Act* 1961–1965 provides protection for Australian industry against various forms of unfair trading. Under this Act dumping duty may be imposed on goods that are sold to Australian importers at a price which is less than the normal value of the goods, where this causes or threatens material injury to an Australian industry. 'Normal value' under the Act means:

- (a) fair market value in the country of export;
- (b) price in the country of export to a third country;
- (c) fair market value in a third country; or
- (d) cost of production, plus f.o.b. charges, plus selling costs and profit.

Countervailing duty may be levied on goods in respect of which any subsidy, bounty, reduction or remission of freight, or other financial assistance has been, or is being, paid or granted directly or indirectly upon the production, manufacture, carriage or export of those goods. The amount of the countervailing duty in respect of any goods is a sum equal to the amount of the subsidy, bounty, reduction or remission of freight or other financial assistance.

#### **Import controls—Customs (Import Licensing) Regulations**

A comprehensive system of import licensing was introduced in Australia at the beginning of the second World War under the authority of the Customs (Import Licensing) Regulations. Following the gradual relaxation of the restrictions from the end of the War, import licensing was reimposed on 8 March 1952 and continued in force until 18 October 1962. From that date restrictions were removed from all commodities with the exception of some goods retained under control for reasons associated with the protection of Australian industry. Further information on import controls is given in Year Book No. 51, page 492.

#### **Export controls and incentives**

*Commodity control.* Section 112 of the Customs Act provides that the Governor-General may, by regulation, prohibit the exportation of goods from Australia and that this power may be exercised by: (a) prohibiting the exportation of goods absolutely; (b) prohibiting the exportation of goods to a specified place; and (c) prohibiting the exportation of goods unless prescribed conditions or restrictions are complied with. Goods subject to this export control are listed in the Customs (Prohibited Exports) Regulations.

*Exchange control—Banking Act 1959–1967.* As an integral part of the framework of exchange control, a control over goods exported from Australia is maintained under the provisions of Part III of the Banking (Foreign Exchange) Regulations, to ensure that the full proceeds of such goods are received into the Australian banking system and that these proceeds are received in the currency and in the manner prescribed by the Reserve Bank of Australia. This action is complementary to that taken under other parts of the Banking (Foreign Exchange) Regulations and under Part IV of the Banking Act to control the movement out of Australia of capital in the form of securities, currency and gold.

Export licences are issued subject to terms and conditions specified in the Banking (Foreign Exchange) Regulations, and may be subject to such further terms and conditions as are determined, or may be free from terms and conditions. On the receipt in Australia by the Reserve Bank, or by a bank acting as agent for that Bank, of advice that the foreign currency has been paid to the Reserve Bank or to an agent of the Bank in payment for goods exported in accordance with a licence granted under the regulations, the Bank, or an agent of the Bank, pays the licensee, or such other person as is entitled to receive it, an amount in Australian currency equivalent to the foreign currency received. In addition to commercial transactions involving exports, movements of personal effects are also controlled. Persons leaving Australia for overseas are required to obtain licences to cover their bona fide baggage, personal effects and household effects in any individual case where the gold content thereof exceeds \$250, or where jewellery and other articles of high intrinsic worth either exceed \$2,000 in value and those goods have not been the personal property of the passenger for at least twelve months.

*Export incentives.* The Commonwealth Government provides taxation concessions as financial incentives to export. A special income tax allowance for export market development expenditure is designed to encourage firms to incur promotion expenditure in advance of export sales and to assist exporters and potential exporters to expand sales in the existing markets and to enter new overseas markets. The allowance is in the form of a special deduction equal and additional to the ordinary deduction allowable in respect of specified expenses allowable in determining taxable income. Rebates of pay-roll tax are also granted to employers whose export sales of goods or property rights have increased above their average annual level in a base period. The rebate is available in the first place to employers who are producers for export, but a producer for export may issue an export certificate to an employer who has supplied components embodied in the final product.

### Trade descriptions

The *Commerce (Trade Descriptions) Act* 1905–1966 gives power to require the application of a proper trade description to certain prescribed goods imported into or exported from Australia. Goods which must bear a prescribed trade description upon importation into Australia are specified in the *Commerce (Imports) Regulations*. As regards exports from Australia, marking requirements are prescribed in regulations issued under the Act and relating to specified export commodities.

## Government authorities

### Tariff Board

The *Tariff Board Act* 1921–1966 provides for the appointment of a Tariff Board consisting of eight members. Of these, two must, and three may, be members of the Commonwealth Public Service at the time of their appointment (or first appointments in the case of re-appointments). Members of the Board are appointed for terms of not less than one year and not more than five years. The purpose of the Tariff Board is to advise the Government on matters relating to the protection and encouragement of Australian industry.

The Minister of State for Trade and Industry is required to refer to the Board for inquiry and report the following matters: the necessity for new, increased, or reduced duties; the necessity for granting bounties and the effect of existing bounties; and any complaint that a manufacturer is taking undue advantage of the protection afforded him by the Tariff or by the restriction of the importation of any goods by charging unnecessarily high prices for his goods or acting in restraint of trade. In addition, the Minister may refer the following matters to the Tariff Board for inquiry and report: the general effect of the working of the Customs Tariff and the Excise Tariff; the fiscal and industrial effects of the Customs laws on the Commonwealth; the incidence between the rates of duty on raw materials and on finished or partly finished products; and other matters affecting the encouragement of primary and secondary industries in relation to the Tariff. The Minister of State for Customs and Excise may refer to the Tariff Board for inquiry and report the following matters: the classification of goods in the Customs Tariff or Excise Tariff and matters in connection with the interpretation of these Tariffs; the question of the value for duty of goods; whether goods not prescribed in departmental by-laws should be so prescribed; and any matters in respect of which action may be taken under the *Customs Tariff (Dumping and Subsidies) Act* 1961–1965.

Where a matter of the necessity for new or increased duties on any goods has been referred to the Board for inquiry and report, the Board may, in its report, recommend the restriction of the importation of those goods for such period as is specified in the report.

Inquiries conducted by the Board relating to a revision of the Tariff, a proposal for a bounty, a question under the Customs Tariff (Dumping and Subsidies) Act, or any complaint that a manufacturer is taking undue advantage of the protection afforded him by the Tariff or by the restriction of the importation of any goods, are held in public, and evidence in such inquiries is taken in public on oath, unless the Board accepts evidence as confidential or in the form of a written statement by a witness on oath. The Board is required to make available to the public the contents of any such written statement except any matter which it accepts as confidential.

### Special Advisory Authority

The Minister for Trade and Industry may also request a Special Advisory Authority to inquire into cases where urgent action appears necessary to protect an Australian industry against import competition pending receipt and consideration of a full report by the Tariff Board. The Special Advisory Authority's report must be submitted to the Minister within thirty days of the making of the request. Temporary protection recommended by a Special Advisory Authority may be imposed, but may only operate for a period of up to three months after the date of receipt of the final report by the Tariff Board on the goods concerned.

## Trade agreements

### Multilateral—General Agreement on Tariffs and Trade

The General Agreement on Tariffs and Trade (G.A.T.T.), which came into force on 1 January 1948, is a multilateral trade treaty designed to facilitate trading relations between participating countries by reducing tariff and other barriers to the free interchange of goods. The Agreement provides a framework within which negotiations can be held to reduce barriers to trade, and a

structure for embodying the results of such negotiations in a legal instrument. Features of the Agreement are the schedules of tariff concessions participating countries have negotiated with each other, the application of most-favoured-nation treatment among the participants, the avoidance of trade discrimination, and a code of agreed commercial policy rules for international trading. Each participating country retains the right (a) to impose new or increased duties for protective purposes, except in respect of particular products where rates of duty have been bound against increase in negotiations under the Agreement; (b) by negotiation to modify or withdraw concessions formerly agreed; (c) to impose import restrictions to protect the balance of payments; and (d) to take emergency action where any industry is endangered by reason of any obligation incurred under the Agreement.

There have been six main tariff negotiations under the provisions of the Agreement, and a number of smaller scale negotiations preceding the accession of individual countries. As a result the tariff rates for a great many items entering into world commerce have been reduced and or bound against increase. Australia has obtained tariff concessions from individual countries on a number of her principal or potential exports to them, as a result both of direct negotiation by Australia and of negotiation by other countries. In the latter case the benefits occurred through the operation under the Agreement of the most-favoured-nation principle. The latest series of trade negotiations, the Kennedy Round, was based on a plan for linear tariff cuts by industrial countries on all industrial products, with a minimum of exceptions, and on the reduction of non-tariff barriers to trade and the creation of acceptable conditions of access to world markets for agricultural products. It concluded in June 1967 after three years of negotiations. Concessions were negotiated on trade valued at over \$36,000 million. The average reductions in tariffs on industrial goods was roughly one-third, while in agriculture the most important item was the agreement reached on the basis for a new world grains arrangement. Overall results were substantial, but were unevenly spread in that efforts to reduce trade barriers were very much more successful for manufactures than for primary products. In the post-Kennedy Round period, therefore, Australia is placing particular emphasis on the work of the Committee on Agriculture, created in November 1967, to examine the problems in the agricultural sector.

Up to the end of 1967 the contracting parties had held twenty-four sessions, nearly all in Geneva, to deal with matters arising from the administration of the Agreement. As a general rule the contracting parties meet once a year, although in a few instances they have met twice. In 1960 a Council of Representatives was established to undertake work, both of an urgent and of a routine character, between the regular sessions of the contracting parties. Some of the provisions of the Agreement were revised in 1954 and 1955. The revised Agreement contains tighter provisions on non-tariff barriers to trade, and allows more freedom for countries to revise individual tariff items which had been bound against an increase in tariff negotiations under the Agreement.

Since G.A.T.T. has not been accepted definitively by any country except Haiti, the Agreement is at present being applied provisionally pursuant to a Protocol of Provisional Application. At the end of January 1968 seventy-five countries, whose foreign trade represents over eighty per cent of the total volume of world trade, were full contracting parties to the Agreement, three had acceded provisionally, eight applied the Agreement on a *de facto* basis, and one participated under special arrangements.

Increasing attention has been focused in G.A.T.T. on specific trade and development problems of developing countries, and in February 1965 a new Part IV of G.A.T.T., aimed at helping developing countries solve these problems, was introduced on a *de facto* basis coming legally into force in June 1966. The new Part IV embodies commitments by individual and joint action by contracting parties, aimed at ensuring that the less developing countries can increasingly find the means to raise standards of living and promote rapid economic development through participating in international trade and achieving sustained growth of their export earnings.

As a means of helping to offset the competitive disadvantages faced by the new industries of the developing countries, and of putting these countries in a better position to compete with major industrial countries in the Australian market, Australia formulated in 1965 a system of tariff preferences on a range of manufactured and semi-manufactured products, all of which had been nominated by developing countries as being of export interest to them. It was recognised that Australia's initiative might well give a lead to other countries which might wish to use preferences to assist developing countries, and so lead to a compounding of the benefits to the developing countries. Before the Australian system could be introduced, it was necessary to obtain a waiver from the G.A.T.T. 'no-new-preference' provisions. Such a waiver was granted at the end of March 1966 and the first preferences for developing countries became effective in April 1966. The Australian system has been extended in scope from time to time and is successfully stimulating imports of the products

concerned from developing countries. Features of the system are that it is non-reciprocal (in that Australia seeks nothing in return), that it contains safeguards for Australian industries and for the interests of third countries, and that it is subject to international supervision through the G.A.T.T.

#### **Bilateral agreements**

*The United Kingdom.* The original United Kingdom and Australia Trade Agreement (Ottawa Agreement) was signed on 20 August 1932. The provisions and history of the agreement were published in Year Book No. 43, page 329. A new Trade Agreement designed to replace the original agreement and correct the imbalance in benefits which had emerged in the twenty-five years of its operation came into effect on 9 November 1956. Briefly, this agreement preserves security for Australian exports in the United Kingdom market, but lowers the obligatory margins of preference which Australia extends to the United Kingdom. The agreement provides for re-negotiation after the initial five-year period, but by arrangement between the two Governments this re-negotiation has been postponed. In the meantime the agreement continues subject to six months notice of termination by either country. Further details of the 1956 Agreement may be obtained from Year Book No. 51, page 495.

*Canada.* The existing agreement between Australia and Canada came into force on 30 June 1960, replacing an agreement signed on 3 August 1931. The agreement provides for Australian goods to receive British Preferential Tariff rates, or better, upon entry into Canada, and for Canada to maintain margins of preference in favour of Australia on a range of commodities. The agreement specifies that Canadian goods, with some exceptions, shall receive the benefit of the British Preferential Tariff upon importation into Australia and that Australia shall maintain margins of preference in favour of Canada on a range of commodities. The agreement continues subject to six months notice.

*New Zealand.* The New Zealand-Australia Free Trade Agreement came into force on 1 January 1966. The agreement provides for free trade in certain scheduled goods. Provision is made for the addition of items to the schedule. The provision of the 1933 Trade Agreement between Australia and New Zealand continues in force as part of the Free Trade Agreement, except as superseded or modified by it.

*Rhodesia.* A trade agreement was negotiated with the Federation of Rhodesia and Nyasaland in June 1955. This agreement consisted mainly of an exchange of preferential tariff treatment over a range of items. The Federation was dissolved on 31 December 1963, but application of the Agreement was continued on a provisional basis between Australia and each of the three constituent territories Zambia (Northern Rhodesia), Rhodesia (Southern Rhodesia) and Malawi (Nyasaland). Zambia terminated the Trade Agreement with Australia on 30 June 1966 and the Agreement between Malawi and Australia lapsed on 1 January 1967. Following the unilateral declaration of independence by the Rhodesian Government in November 1965 tariff preferences between Australia and Rhodesia were suspended by both countries. Hence the trade agreement between Australia and Rhodesia is inoperative at the present time.

*Malaysia.* A trade agreement with the then Federation of Malaya became effective in August 1958. Under the agreement Malaya undertook to protect Australian wheat and flour from dumped or subsidised competition and to extend to Australia any tariff preferences it accords. Australia guaranteed free entry for natural rubber so long as the Papua-New Guinea crop was absorbed, and assured the Federation that natural rubber would not be at a disadvantage compared with synthetic rubber in respect of tariff or import licensing treatment. The Agreement continues to apply between Australia and that portion of Malaysia known previously as the Federation of Malaya.

*Japan.* An Agreement on Commerce between the Commonwealth of Australia and Japan was signed on 6 July 1957, and formally ratified on 4 December 1957. It was provided that the Agreement would remain in force until 5 July 1960, and thereafter unless prior notice of termination should be given by either Government. The agreement provides that each country shall extend most-favoured-nation treatment to the other in respect of customs duties and similar charges, and import and export licensing. Japan is not entitled to claim the benefit of preferences accorded by Australia to Commonwealth countries and dependent territories. Japan also gave certain specific commitments on some important Australian export commodities.

Following a review of the agreement, a Protocol of Amendment was signed on 5 August 1963 and formally ratified on 27 May 1964. Under the Protocol Australia agreed to withdraw action against Japan under Article XXXV of the General Agreement on Tariffs and Trade, and thus a full G.A.T.T. relationship was established between the two countries.

The specific undertakings agreed in 1957 have now lapsed and the following commitments have been entered into.



Japan has:

- (a) undertaken not to accord less favourable import treatment (apart from tariff) for raw wool than for raw cotton,
- (b) stated that it has no present intention of imposing a duty on wool,
- (c) undertaken to continue imports of Australian soft wheat at a stabilised level, and to purchase Australian hard wheat when necessary requirements are met,\*
- (d) stated that it will endeavour to expand opportunities for imports into Japan of Australian sugar, canned meat, leather, motor vehicles, butter, and cheese.

Australia has:

- (a) undertaken to consult Japan on temporary protection cases affecting Japanese products (in such consultations Japan will consider whether the need for temporary protection can be obviated by measures taken in Japan),
- (b) stated that equal opportunities of fair and equal competition are accorded to Japanese products in Australian Government purchases overseas.

The new agreement will be effective for three years from the date of ratification and thereafter subject to three months' notice of termination by either Government. There is provision for consultations to take place at least annually.

*Indonesia.* This agreement came into operation on 1 July 1959. It records the desirability of expanding trade between Australia and Indonesia. It also gives special recognition to the importance of the flour trade from Australia to Indonesia. Australia recognises the importance to Indonesia of its traditional exports to Australia. The agreement is subject to review and renewal annually.

*Philippines.* A trade agreement with the Philippines was signed in Manila on 16 June 1965. The agreement provides for an exchange of non-discriminatory treatment† while recognising existing preferences. The agreement is to operate for one year initially and continue thereafter unless one Government gives ninety days' notice of its intention to terminate it. The Philippines is not a member of G.A.T.T.

*U.S.S.R.* A trade agreement between Australia and the U.S.S.R. was signed in Moscow on 15 October 1965. The agreement provides for the exchange of non-discriminatory treatment between the two countries while recognising existing preferences. It operates initially for a period of four years. There is provision for consultation on request about any matter affecting the operation of the agreement.

*Korea.* On 21 September 1965 a trade agreement was signed in Seoul between Australia and South Korea. Basically the agreement provides for an exchange of non-discriminatory treatment with allowances for existing preferences. The agreement, to run for one year with provision for automatic extension, also provides for non-discrimination by State trading enterprises. Both Governments undertake to use their best endeavours to increase the volume of trade between the two countries.

*Poland.* A trade agreement between Australia and Poland was signed in Warsaw on 20 June 1966. The agreement provides for the exchange of non-discriminatory treatment between the two countries, while recognising existing preferences. It operates initially for a period of four years. There is provision for consultation on request about any matter affecting the operation of the agreement.

*Bulgaria.* A trade agreement between Australia and Bulgaria was signed in Sofia on 22 June 1966. The agreement provides for the exchange of non-discriminatory treatment between the two countries, while recognising existing preferences. It operates initially for a period of four years. There is provision for consultation on request about any matter affecting the operation of the agreement.

*Rumania.* A trade agreement between Australia and Rumania was signed in Bucharest on 18 May 1967. The agreement provides for the exchange of non-discriminatory treatment between the two countries, while recognising existing preferences. It operates initially for a period of four years. There is provision for consultation on request about any matter affecting the operation of the agreement.

*Hungary.* A trade agreement between Australia and Hungary was signed in Budapest on 5 December 1967. The agreement provides for the exchange of non-discriminatory treatment between the two countries, while recognising existing preferences. It operates initially for a period of four years. There is provision for consultation on request about any matter affecting the operation of the agreement.

\* 'Soft' wheat is fair average quality wheat; 'hard' wheat is premium grade wheat similar to that grown in North America. † An agreement, with reservations, not to discriminate against each other with tariff or non-tariff barriers.

## Trade services

### Trade Commissioner Service

The stimulation of interest abroad in Australia's exports is an important government activity in which the Australian Trade Commissioner Service plays a prominent part. A brief account of the establishment and growth of the Trade Commissioner Service before the Second World War is available in Year Book No. 51, page 496. Since the War the service has increased steadily, and by early 1968 there were over 100 Trade Commissioners and Assistant Trade Commissioners in forty-four posts in thirty-four countries. In 1957 Australia's official commercial representation overseas was extended by the introduction of a system of government Trade Correspondents. These correspondents, who as a rule already reside in particular centres overseas, are engaged on a part-time basis to carry out market research, arrange introductions between buyer and seller, and generally promote Australia's trade interests in the same way as Trade Commissioners. Each Trade Correspondent operates under the general direction of the nearest Trade Commissioner.

Trade Commissioners and, to a lesser extent, Trade Correspondents, are responsible for commercial intelligence in their territories. Particular facilities provided for Australian exporters and export organisations include: surveys of market prospects; advice on selling and advertising methods; arranging introductions with buyers and agents; providing reports on the standing of overseas firms; advice and assistance to business visitors; helping to organise and carry through trade missions, trade displays, newspaper supplements, and other promotion and publicity media; providing information on import duties, import licensing, economic conditions, quarantine and sanitary requirements, and other factors affecting the entry and sale of goods; helping to attract desirable investment.

In some countries Trade Commissioners also participate in inter-governmental negotiations in the economic and commercial fields. In certain countries where there is no diplomatic or consular mission he is called upon to act as the Australian representative.

Trade Commissioners usually enter the Service from either private enterprise or the public service, and applications for entry into the Service are called for periodically by public advertisement. In the more important posts the Trade Commissioner is supported by an Assistant Trade Commissioner, who normally qualifies at a later stage for appointment as a Trade Commissioner.

The Trade Commissioner Service is administered by the Commonwealth Department of Trade and Industry (as distinct from the diplomatic and consular services administered by the Department of External Affairs), but in countries where there is an Australian diplomatic or consular mission it is the practice for Trade Commissioners to be attached to the mission and to hold an appropriate diplomatic or consular rank (Commercial Counsellor, Commercial Secretary or Commercial Attaché).

The overseas trade representation is shown in the chapter International Relations.

### Trade Missions

Since 1954 the Australian Government has sent a number of trade missions abroad as part of the campaign to increase exports. The experience acquired has indicated the need for flexibility in techniques to suit particular products or markets. At present the following types of trade missions are in use.

*Survey missions.* These are organised to obtain precise knowledge about the export trade potential for specific products in an overseas market. Such methods are used to explore export prospects in new or developing areas where commercial intelligence is not readily available or where a complex industry is involved and the industry requires special export knowledge.

*Specialised and general trade missions.* Arrangements are made for specific industries or groups of firms representing a number of industries to participate in a planned selling campaign in overseas markets with known sales potential. The mission visits the market, publicises its products and negotiates sales.

Since 1954 Australia has sent overseas thirty-five trade and survey missions and five trade ships. Further details on trade missions are included in Year Book No. 49, page 544.

## Export Payments Insurance Corporation

The *Export Payments Insurance Corporation Act* 1956 established the Corporation with the objective of encouraging Australian manufacturers to export by protecting their exports against risks of loss arising from the non-payment of their overseas accounts. The Corporation is charged to be self-supporting, i.e. over a period its income should be adequate to cover the expenses of operation and any payments of claims which may be incurred.

The main risks of loss against which the Corporation insures are the 'commercial' risks of the insolvency or protracted default of the buyer and 'political' risks. The latter include exchange transfer difficulties; the imposition of government regulations which prevent the import of the goods into the buyer's country; war, revolution or civil disturbance in the buyer's country. For most 'political' risks insurance cover is available to a maximum of 90 per cent of the amount of loss in the pre-shipment period and a maximum of 95 per cent in the post-shipment period. The rate of cover for 'commercial' risks is fixed at 85 per cent.

The Corporation may submit to the Government, for consideration in the national interest, applications for payment insurance which are commercially unacceptable to the Corporation on its normal credit account. In considering such applications the Government takes account of both political and economic factors.

An amendment to the Act in November 1964 gave E.P.I.C. the authority to issue guarantees of payment to banks on money raised at banks for the purpose of financing exports. The existence of E.P.I.C. bank guarantees has considerably facilitated the raising of finance by exporters.

In addition to providing the above facilities, the Corporation insures, on behalf of the Commonwealth Government, eligible Australian investments in overseas countries against the three main 'political' risks, namely expropriation, exchange transfer difficulties, and war damage. For an investment to be eligible it must confer benefits on both Australia and the investment host country.

Since the first policy was issued in September 1957, Australian exporters have made increasing use of the facilities of E.P.I.C. At 31 December 1967 the Corporation had 653 policies current on its commercial account (i.e. not including Government business) with a face value of over \$254 million. The Corporation has issued policies covering exports to 142 countries and has insured a wide range of Australian exports.

A Consultative Council, composed of eight leading figures in the fields of banking, commerce, and industry, and two Government members advises the Corporation on its activities. The council meets two or three times a year and is appointed for a term of three years.

Further information on the Corporation is contained in Year Book No. 49, page 544. For particulars of its operations see Chapter 18, Private Finance.

## Collection and presentation of statistics

### Basic documents

Overseas trade statistics are derived from documents obtained under the Customs Act by the Department of Customs and Excise and compiled by the Commonwealth Bureau of Census and Statistics. These documents are duplicate copies of export and import entries submitted by exporters and importers or their agents to the Department of Customs and Excise. Certain items for which customs entries are not required are excluded from the statistics. Export entries show date and port of shipment, country of consignment and the description, quantity (where required) and value of the goods. Prior to July 1966 the statistical item number was inserted and verified by officers of the Department of Customs and Excise in Canberra. As from July 1966 the statistical item number has been inserted by the exporter or his agent and verified by officers of the Department of Customs and Excise in the local offices of the Collectors of Customs. Import entries show date and port of entry, country of origin, description of goods, quantity (where required), value of the goods, and amount of duty paid thereon. The tariff item number under which the goods are admitted and the statistical key code are inserted by the importer or his agent, and these are verified by officers of the Department of Customs and Excise in the local offices of the Collectors of Customs.

### Scope of the statistics

All goods moving into or out of Australia are recorded in overseas trade statistics (except those exclusions listed on page 337). The statistics are not confined to goods which are the subject of a commercial transaction. The area to which all overseas trade statistics issued by this Bureau apply is the whole of the Commonwealth of Australia, comprising the States of New South Wales, Victoria, Queensland, South Australia, Western Australia and Tasmania, the Northern Territory and the Australian Capital Territory. Non-contiguous territories under Australian administration are treated as outside countries, and trade transactions between Australia and those non-contiguous territories are part of the overseas trade of Australia. Such transactions are shown separately, i.e. the trade of Australia with each particular area is separately recorded and tabulated.

*Inclusions and exclusions*

- (a) Imports and exports on government account including defence equipment are treated as normal transactions and are an integral part of overseas trade statistics.
- (b) Direct transit trade, i.e. goods being transhipped or moved through Australia for purposes of transport only, is not recorded.
- (c) Outside packages (containers, crates, etc.) are included as a separate item in the tabulation of imports, but they have only been fully classified by country of origin since 1950-51. For exports, however, the value recorded for each item includes the value of the outside package.
- (d) Bunkers and stores supplied to vessels and aircraft have been excluded from statistics of exports since 1906. The value of these stores loaded during the years 1964-65 to 1966-67 is shown in the table on page 374.
- (e) Those migrants' and passengers' effects for which a customs entry is not received are excluded from imports and exports.
- (f) Those parcel post imports and exports of small value for which customs entries are not received are excluded from overseas trade statistics.
- (g) Certain materials for inter-governmental defence projects for which customs entries are not required are excluded from imports.
- (h) The value of ores and concentrates imported and exported includes the value of the gold content and the latter is not included in imports and exports of gold.
- (i) Vessels and aircraft engaged in the transport of passengers or goods between Australia and other countries are excluded from imports and exports.
- (j) Vessels and aircraft purchased for use on overseas routes are excluded from imports and any subsequent overseas sales of such vessels and aircraft from exports.
- (k) Fish and other sea products landed abroad directly from the high seas by Australian vessels are excluded from exports.

**Period covered by statistics**

*Exports.* These are recorded statistically in the month in which the export entries are passed by the Department of Customs and Excise. Normally this is within a few days of shipment, although delays sometimes occur in the lodging of entries. Shipments are at times delayed by abnormal factors affecting sales, deliveries for export and the loading of ships. When such delays occur, exports during the affected period are diminished, and when the delays are overtaken, shipments include substantial quantities of accumulated stocks as well as current disposals. Wool shipments in any trade year may be materially affected by the time spread of wool auctions which normally end in July. The carry-over for shipments varies from year to year. New season's wheat normally becomes available for shipment from December onwards, and the quantity shipped in any trade year (ending June) depends on the size of the crop, the time spread on sales for export, and physical factors affecting the scheduling of deliveries.

*Imports.* Imports are recorded statistically in the month in which import entries are passed by the Department of Customs and Excise. Normally this is within a few days of discharge of cargoes.

*Year of compilation.* Since July 1914, detailed trade statistics have been compiled for financial years (July to June). Prior to that details were compiled on a calendar year basis.

**Valuation**

Imports into Australia prior to 15 November 1947 were recorded in British currency values, and full explanatory notes on the methods of recording import values before and since 15 November 1947 were included in Year Book No. 37, page 396.

All values in overseas trade statistics are determined on a 'free on board (f.o.b.) port of shipment' basis. This means that all charges, in particular the cost of freight and insurance, incurred after the goods have been exported from the port of shipment are excluded. Only transport and service charges incurred, or usually incurred, prior to export are included in the determination of trade values.

The procedure adopted to value imports and exports is as follows.

*Exports.* The recorded value of goods exported includes the cost of containers and outside packages and has been determined, since July 1937, as follows.

- (a) Goods sold to overseas buyers before export are valued at the Australian f.o.b. port of shipment equivalent of the actual price at which the goods were sold.
- (b) Goods shipped on consignment are valued at the Australian f.o.b. port of shipment equivalent of the price paid for similar goods of Australian origin in the principal markets of the country to which they are dispatched for sale.

An account of the bases of valuation in operation prior to July 1937 is given on page 469 of Year Book No. 39.

**Imports.** The recorded value of goods imported is the amount on which duty is payable or would be payable if the duty were *ad valorem*. Value for duty is the f.o.b. port of shipment equivalent of either:

- (a) the actual price paid or to be paid by the Australian importer plus any special deduction (transactions value); or
- (b) 'the current domestic value' of the goods; whichever is the higher.  
'Current domestic value' is defined as 'the amount for which the seller of the goods to the purchaser in Australia is selling or would be prepared to sell for cash, at the date of exportation of those goods, the same quantity of identically similar goods to any and every purchaser in the country of export for consumption in that country.'

The cost of containers and outside packages is excluded from the value of individual import items but is included as a separate item in the tabulation of imports.

#### Quantity data

Where quantities are shown they are generally but not invariably expressed in terms of the normal trade unit. Where 'cental' is used, the unit is equivalent to 100 lb avoirdupois. Quantities are not tabulated in respect of statistical items for which there is no appropriate unit of quantity (for example, a statistical item which covers a number of commodities that cannot be recorded under a uniform unit of quantity).

#### Statistical concepts of trade

**Trade systems.** There are two generally accepted systems of recording overseas trade statistics, namely (a) special trade and (b) general trade. The Statistical Office of the United Nations defines the two systems as follows.

**'System of Trade.** Two systems of recording trade are in common use, differing mainly in the way warehoused and re-exported goods are recorded.

- (a) **Special Trade.** Special imports are the combined total of imports directly for domestic consumption (including transformation and repair) and withdrawals from bonded warehouses or free zones for domestic consumption. Special exports comprise exports of national merchandise, namely, goods wholly or partly produced or manufactured in the country, together with exports of nationalised goods. (Nationalised goods are goods which, having been included in special imports, are then exported without transformation.)
- (b) **General Trade.** General imports are the combined total of imports directly for domestic consumption and imports into bonded warehouse or free zone. General exports are the combined total of national exports and re-exports. Re-exports, in the general trade system, consist of the outward movement of nationalised goods plus goods which, after importation, move outward from bonded warehouse or free zone without having been transformed.

**Direct transit trade,** i.e. goods merely being transhipped or moving through the country for purposes of transport only, is excluded from the statistics of both special and general trade.'

Statistics in this volume are compiled on the 'general trade' basis; imports on a 'special trade' basis are published in the bulletin *Imports Cleared for Home Consumption*, issued annually.

Australian produce (national produce) is defined as goods, materials or articles which have been produced, manufactured or partly manufactured in Australia, except goods which were originally imported and have undergone only repair or minor operations which leave them essentially unchanged.

Re-exports are defined as goods, materials or articles originally imported which are exported in the same condition in which they were imported, and goods, materials or articles originally imported which are exported after undergoing repair or minor operations which leave them essentially unchanged. 'Minor operations' include blending, packaging, bottling, cleaning, sorting, husking, and shelling.

**Merchandise and non-merchandise trade.** Total trade is divided into merchandise and non-merchandise trade. Merchandise trade is the equivalent of total exports and imports less certain items specified as non-merchandise. Prior to July 1965 non-merchandise trade consisted of exports and imports of specie and gold and silver. In July 1965 merchandise and non-merchandise trade were redefined in accordance with international standards recommended by the United Nations, and since that date non-merchandise items include commodities such as gold, legal tender, decorations, trophies, samples, passengers' personal effects, military equipment and stores for Australian Forces abroad, goods for the use of diplomatic and consular representatives, goods imported with the

intention of being re-exported, goods exported with the intention of being re-imported, etc. A complete description of these commodities is contained in the Australian Export and Import Commodity Classifications published by the Bureau.

*Balance of payments basis.* Statistics of exports and imports for Balance of Payments purposes are derived by making certain adjustments, relating both to scope and valuation to statistics of merchandise exports and imports. Statistics on the adjusted basis are published in statistical bulletins relating to the Balance of Payments. The adjustments include the following: imports are adjusted for the overall excess of recorded value for duty over the actual selling price to the importer; exports and imports of goods for repair and return and the value of repairs are deducted from merchandise trade; exports and imports of ships and aircraft for use on overseas routes, certain imports of defence equipment, and other trade items for which customs entries are not required are added. Adjustments are also made for timing differences between the change of ownership and the lodgment of import entries in the case of certain large items of equipment (e.g. warships).

The balance of trade is derived by comparing statistics of exports on a balance of payments basis with statistics of imports on that basis.

#### **Balance of payments**

Estimates of the balance of trade do not, however, measure Australia's total balance of payments which includes other transactions such as freight and insurance charges on imports, shipping expenditure in Australian ports, overseas travel, payments of profits and interest, and private and government borrowing overseas.

#### **Country of consignment or origin**

'Country of consignment' referred to in exports tables means the country to which goods were consigned at the time of export. Where the country of consignment is not determined at the time of export the goods are recorded as exported 'For orders'. 'Country of origin' referred to in import tables means the country of production. Classification of imports according to country of shipment was discontinued after the year 1920-21. A brief account of the dual system of import classification by country operating prior to the year 1921-22 is given on page 500 of Year Book No. 51.

Throughout this chapter, countries listed are shown in alphabetical order.

#### **Commodity classifications**

Overseas trade statistics for years up to and including 1964-65 were compiled according to the Statistical Classification of Imports and Exports. From July 1965 imports have been classified according to the new Australian Import Commodity Classification. This classification is based on the Standard International Trade Classification, Revised (S.I.T.C.), which is closely related to the Brussels Tariff Nomenclature used in the new Australian Customs Tariff introduced in July 1965. In accordance with the principles of the S.I.T.C., imports of defence equipment by the Australian Services are normally classified according to the commodity imported, e.g. warships are classified under 'ships and boats'.

Although the basis of the classification of exports remained unchanged for 1965-66, the export section of the Statistical Classification of Imports and Exports was published separately, with some minor revisions, as the Australian Export Commodity Classification, 1965-66. A new Australian Export Commodity Classification based on the S.I.T.C. was introduced in July 1966.

#### **Pre-federation records**

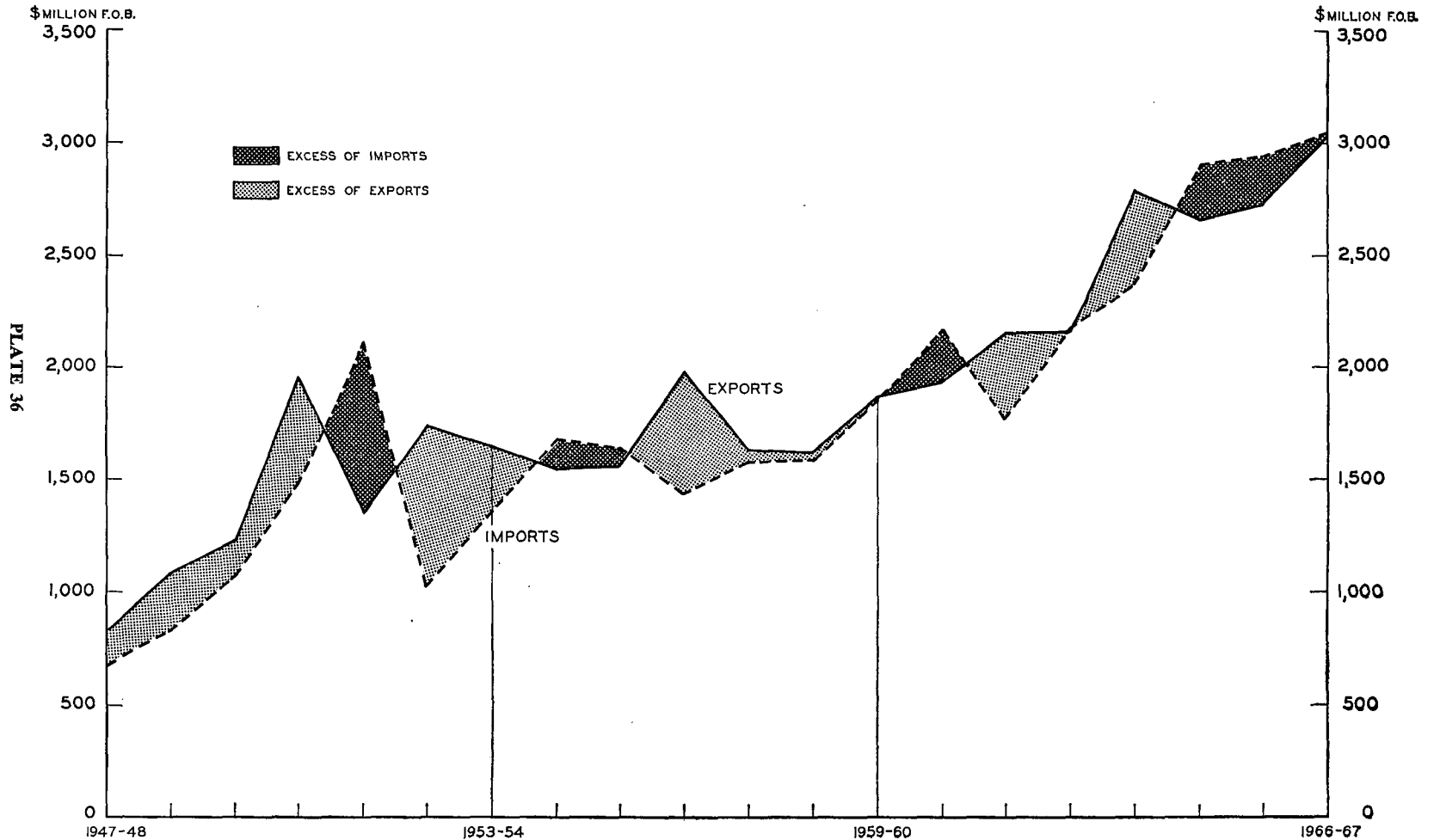
In the years preceding federation each State recorded its trade independently and in so doing did not distinguish other Australian States from external countries. The aggregation of the records of the several States is necessarily the only available means of ascertaining the trade of Australia for comparison with later years, but the results obtained may be subject to error, since past records of values and the direction of exports and imports were not on uniform lines. Exports and imports for years prior to federation may be found in early issues of the Year Book, particularly Year Book No. 2. On the introduction of the *Customs Act* 1901 the methods of recording values were made uniform throughout the States.

### **Total overseas trade**

The following table shows the total trade of Australia with overseas countries from 1901 to 1966-67. The period 1901 to 1960-61 has been divided into five-year periods, and the figures shown represent the annual averages for the periods specified. Figures for the individual years were published in earlier issues, but figures for imports in issues prior to No. 37 were expressed in British currency.

# OVERSEA TRADE: AUSTRALIA

1947-48 TO 1966-67



**OVERSEAS TRADE: AUSTRALIA, 1901 TO 1966-67**  
(f.o.b.)

Period	Exports	Imports	Total	Excess of exports (+) or imports (-)	Value per head of population		
					Exports	Imports	Total
Annual average—	\$m	\$m	\$m	\$m	\$	\$	\$
1901 to 1905 . . . . .	102	71	174	+ 31	26.2	18.2	44.4
1906 to 1910 . . . . .	(a)139	94	232	+ 45	32.6	22.0	54.6
1911 to 1915-16 . . . . .	149	133	282	+ 16	30.8	27.6	58.4
1916-17 to 1920-21 . . . . .	230	183	413	+ 47	43.8	34.8	78.6
1921-22 to 1925-26 . . . . .	269	249	518	+ 20	45.8	42.2	88.0
1926-27 to 1930-31 . . . . .	263	239	501	+ 24	41.0	37.2	78.2
1931-32 to 1935-36 . . . . .	242	148	390	+ 94	36.2	22.2	58.4
1936-37 to 1940-41 . . . . .	315	247	562	+ 68	45.4	35.6	81.0
1941-42 to 1945-46 . . . . .	328	423	751	- 95	44.8	58.2	103.0
1946-47 to 1950-51 . . . . .	1,143	899	2,041	+244	145.4	114.3	259.7
1951-52 to 1955-56 . . . . .	1,572	1,566	3,138	+ 6	176.4	175.6	352.0
1956-57 to 1960-61 . . . . .	1,811	1,729	3,540	+ 82	182.0	173.7	355.7
Year—							
1957-58 . . . . .	1,636	1,584	3,220	+ 52	167.9	162.6	330.5
1958-59 . . . . .	1,623	1,593	3,216	+ 30	163.1	160.1	323.3
1959-60 . . . . .	1,875	1,854	3,730	+ 21	184.4	182.4	367.0
1960-61 . . . . .	1,938	2,175	4,113	-237	186.5	209.3	395.8
1961-62 . . . . .	2,155	1,769	3,924	+385	202.4	166.2	368.6
1962-63 . . . . .	2,152	2,163	4,314	- 11	198.4	199.4	397.7
1963-64 . . . . .	2,782	2,373	5,155	+410	251.6	214.6	466.1
1964-65 . . . . .	2,651	2,905	5,556	-253	235.0	257.6	492.6
1965-66 . . . . .	2,721	2,939	5,660	-218	236.6	255.6	492.1
1966-67 . . . . .	3,024	3,045	6,069	- 21	258.3	260.1	518.3

(a) Prior to 1906, ships' stores were included in exports. For value of such goods loaded on overseas vessels and aircraft during each of the years 1964-65 to 1966-67, see page 374.

Plate 36 opposite shows the overseas trade of Australia from 1947-48 to 1966-67.

The following table shows particulars of merchandise and non-merchandise trade for each of the years 1962-63 to 1966-67.

**MERCHANDISE AND NON-MERCHANDISE TRADE: AUSTRALIA, 1962-63 TO 1966-67**  
(\$'000 f.o.b.)  
**EXPORTS**

Year	Merchandise			Non-merchandise			Total
	Australian produce	Re-exports	Total	Australian produce	Re-exports	Total	
1962-63 . . . . .	2,076,739	25,628	2,102,367	29,080	20,365	49,445	2,151,812
1963-64 . . . . .	2,691,345	34,301	2,725,646	35,569	21,245	56,814	2,782,460
1964-65 . . . . .	2,535,930	43,238	2,579,168	45,983	26,298	72,281	2,651,449
1965-66 . . . . .	2,578,184	55,348	2,633,532	59,913	27,508	87,421	2,720,953
1966-67 . . . . .	2,872,424	62,176	2,934,600	63,827	25,498	89,325	3,023,925

**IMPORTS**

Year	Merchandise	Non-merchandise	Total
1962-63 . . . . .	2,128,311	34,359	2,162,670
1963-64 . . . . .	2,329,576	43,082	2,372,658
1964-65 . . . . .	2,841,326	63,377	2,904,703
1965-66 . . . . .	2,898,280	41,212	2,939,492
1966-67 . . . . .	3,003,973	41,368	3,045,341



## Exports of principal articles of Australian produce

## EXPORTS OF PRINCIPAL ARTICLES OF AUSTRALIAN PRODUCE, 1964-65 TO 1966-67

Article		Quantity			Value (\$'000 f.o.b.)		
		1964-65	1965-66	1966-67	1964-65	1965-66	1966-67
Meat, fresh, chilled or frozen—							
Of bovine animals	'000 lb	708,451	612,949	578,603	200,458	195,533	198,311
Of sheep, lambs and goats	"	219,272	213,474	212,286	40,688	45,665	43,642
Other (incl. poultry, game, rabbits)	"				19,550	21,215	9,828
Meat preserved in airtight containers	'000 lb	60,428	55,633	47,509	15,797	14,587	13,141
Milk and cream	"	167,613	123,340	200,958	23,424	18,193	29,532
Butter	"	213,839	186,366	230,210	67,401	57,673	64,841
Cheese	"	60,929	55,777	57,195	14,197	13,470	15,262
Fish (incl. shell fish) fresh or preserved by cold process	'000 lb	16,051	21,225	18,515	17,745	23,807	23,109
Wheat	tons	5,624,462	5,075,344	6,403,160	297,199	264,062	361,227
Barley, unprepared	"	363,407	223,089	417,814	18,002	11,508	21,569
Oats	"	360,013	246,880	395,243	15,616	11,980	17,450
Flour (wheaten) plain white	'000 lb	1,144,128	781,458	713,306	37,330	24,753	23,074
Fruit, dried—							
Grapes	"	156,191	181,004	152,011	22,292	25,988	21,148
All other	"	9,415	11,907	8,038	1,808	2,450	2,037
Fruit preserved in airtight containers	"	228,486	309,319	324,970	27,584	37,763	39,995
Sugar, the produce of cane	tons	1,269,139	1,252,546	1,638,263	112,683	93,925	99,535
Wine	gallons	1,993,364	1,969,073	1,774,102	3,523	3,556	3,169
Hides and skins—							
Calf, cattle and horse	'000 lb	125,526	116,995	120,178	14,530	20,707	21,099
Sheep and lamb (excl. pieces)	'000	28,703	30,078	27,768	60,382	63,747	62,857
Timber (excl. dunnage, stumps and the like)							
Logs and undressed (incl. shooks and staves)	'000 super ft	20,449	15,229	18,009	2,779	2,303	2,706
Railway sleepers	"	9,703	4,792	26,023	1,052	644	3,279
Wool—							
Greasy	'000 lb	1,334,315	1,322,646	1,366,557	721,252	699,774	726,310
Scoured or washed, carbonised, tops, noils and waste	"	117,838	122,889	112,068	84,597	85,070	80,141
Iron ore concentrates (except roasted iron pyrites)	tons	96,651	337,856	5,468,386	820	2,705	46,013
Copper ores and concentrates	cwt	917,503	839,210	766,195	6,940	7,534	8,902
Lead ores and concentrates	"	2,038,667	2,365,072	2,179,878	19,236	21,337	19,439
Zinc ores and concentrates	"	4,061,189	4,876,882	5,009,983	15,260	16,854	17,421
Titanium and zirconium concentrates	'000 cwt	14,611	16,893	16,919	25,864	29,085	32,141
Sausage casings (natural)	"				5,415	6,541	6,662
Coal	tons	6,051,157	7,654,098	8,819,367	51,120	63,132	71,934
Petroleum and petroleum products	"				22,570	19,286	29,880
Tallow, inedible	cwt	1,846,543	1,243,684	1,612,166	14,705	10,397	11,509
Leather (excl. leather manufactures)	"				6,911	8,199	5,887
Unrefined copper—unworked	cwt	3,330	110,982	154,677	48	7,467	11,974
Refined copper—unworked	"	40,294	356,619	71,149	1,277	19,969	3,574
Zinc and zinc alloys	"	1,693,157	1,983,657	2,280,770	24,414	26,996	28,608
Motor vehicles	No.	10,659	9,390	8,698	13,672	13,070	12,883
All other articles	"				553,772	647,152	746,162
Total, Australian produce					2,581,913	2,638,097	2,936,251

## Classified summary of Australian overseas trade

The following table shows exports and imports according to divisions of the Australian Export and Import Commodity Classifications (based on the Standard International Trade Classification) during each of the years 1964-65 to 1966-67.

EXPORTS AND IMPORTS: DIVISIONS OF THE AUSTRALIAN EXPORT AND  
IMPORT COMMODITY CLASSIFICATIONS, 1964-65 TO 1966-67  
(\$'000 f.o.b.)

Division No.	Description	Exports			Imports		
		1964-65 (a)	1965-66 (a)	1966-67	1964-65 (a)	1965-66	1966-67
00	Live animals	4,088	4,681	6,085	2,352	1,786	2,563
01	Meat and meat preparations	280,836	281,217	278,822	1,260	459	486
02	Dairy products and eggs	110,471	94,679	114,401	2,889	3,340	3,655
03	Fish and fish preparations	18,204	24,532	24,968	24,023	29,488	28,793
04	Cereals and cereal preparations	393,998	340,145	463,203	1,453	2,302	2,875
05	Fruit and vegetables	91,904	110,885	100,349	15,000	17,246	17,538
06	Sugar and sugar preparations and honey	116,345	97,662	105,542	2,032	2,056	2,268
07	Coffee, tea, cocoa, spices and manufactures thereof	1,452	1,981	4,776	46,373	46,718	50,272
08	Feeding stuff for animals (excluding unmilled cereals)	6,569	4,353	7,185	3,110	5,270	7,881
09	Miscellaneous preparations chiefly for food	5,178	8,378	2,831	1,271	1,351	1,937

For footnotes see next page.

EXPORTS AND IMPORTS: DIVISIONS OF THE AUSTRALIAN EXPORT AND  
IMPORT COMMODITY CLASSIFICATIONS, 1964-65 TO 1966-67—continued  
(\$'000 f.o.b.)

Division No.	Description	Exports			Imports		
		1964-65 (a)	1965-66 (a)	1966-67	1964-65 (a)	1965-66	1966-67
11	Beverages . . . . .	6,584	7,019	6,790	10,780	11,279	10,401
12	Tobacco and tobacco manufactures . . . . .	1,925	2,003	2,363	24,866	26,174	27,451
21	Hides, skins and fur skins, undressed . . . . .	80,185	89,254	88,618	3,023	2,924	2,461
22	Oil seeds, oil nuts and oil kernels . . . . .	478	53	548	6,690	10,845	5,500
23	Crude rubber (including synthetic and reclaimed) . . . . .	811	948	565	31,972	26,005	27,695
24	Wood, timber and cork . . . . .	4,352	3,311	6,319	40,143	34,522	34,910
25	Pulp and waste paper . . . . .	3	18	170	28,450	26,249	26,396
26	Textile fibres and their waste . . . . .	809,087	788,274	809,536	50,102	36,816	33,424
27	Crude fertilisers and crude minerals (excluding coal, petroleum and precious stones) . . . . .	4,178	3,708	3,439	39,960	45,519	59,798
28	Metalliferous ores and metal scrap . . . . .	95,515	112,320	163,340	6,128	4,008	4,293
29	Crude animal and vegetable materials, n.e.s. . . . .	10,714	12,032	13,040	13,681	10,462	11,434
32	Coal, coke, and briquettes . . . . .	76,352	84,924	73,201	243,421	487	385
33	Petroleum and petroleum products . . . . .			30,351		251,492	246,150
34	Petroleum gases and other gaseous hydrocarbons . . . . .	283	373	273	62	11	26
41	Animal oils and fats . . . . .			15,458		1,753	1,144
42	Fixed vegetable oils and fats . . . . .			92		12,149	12,179
43	Animal and vegetable oils and fats, processed, and waxes of animal or vegetable origin . . . . .	19,216	13,660	929	14,410		
51	Chemical elements and compounds . . . . .	(b)	(b)	19,592	(b)	1,341	1,453
52	Mineral tar and crude chemicals from coal, petroleum and natural gas . . . . .	(b)	(b)	257	(b)	87,340	103,047
53	Dyeing, tanning and colouring materials . . . . .	2,801	3,107	5,037	13,735	15,039	18,258
54	Medicinal and pharmaceutical products . . . . .	10,299	13,776	14,024	38,922	35,962	35,663
55	Essential oils and perfume materials; toilet, polishing and cleansing preparations . . . . .	3,972	4,266	3,764	12,082	11,903	13,913
56	Fertilisers, manufactured . . . . .	123	91	81	9,220	7,680	10,751
57	Explosives and pyrotechnic products . . . . .	2,676	3,433	2,860	5,680	4,827	5,153
58	Plastic materials, regenerated cellulose and artificial resins . . . . .	(c) 27,636	(c) 35,056	6,750	(c) 175,716	67,546	68,870
59	Chemical materials and products, n.e.s. . . . .			16,794		32,170	38,829
61	Leather, leather manufactures, n.e.s. and dressed fur skins . . . . .	7,094	8,390	6,272	4,699	5,255	6,035
62	Rubber manufactures, n.e.s. . . . .	2,974	3,144	2,200	27,038	28,170	28,357
63	Wood and cork manufactures (excluding furniture) . . . . .	1,361	1,653	2,161	8,922	9,499	10,271
64	Paper, paperboard and manufactures thereof . . . . .	8,634	7,950	10,035	85,699	83,699	88,338
65	Textile yarn, fabrics, made-up articles and related products . . . . .	11,808	12,778	11,290	250,840	232,420	239,966
66	Non-metallic mineral manufactures, n.e.s. . . . .	10,981	13,318	17,418	50,772	53,141	55,166
67	Iron and steel . . . . .	50,833	63,979	111,022	103,054	86,228	65,523
68	Non-ferrous metals . . . . .	111,292	169,307	131,280	63,383	19,516	23,305
69	Manufactures of metal, n.e.s. . . . .			31,983		71,707	69,136
71	Machinery, other than electric . . . . .			57,162		565,998	554,303
72	Electrical machinery, apparatus and appliances . . . . .	135,980	151,505	24,958	1,101,929	180,972	193,784
73	Transport equipment (including warships, and military aircraft) . . . . .			62,490		373,914	395,706
81	Sanitary, plumbing, heating and lighting fixtures and fittings . . . . .	1,036	1,492	1,551	4,749	3,472	3,652
82	Furniture . . . . .	1,075	1,178	883	3,091	3,426	2,865
83	Travel goods, handbags and similar goods . . . . .	135	149	127	4,887	3,470	4,144
84	Clothing and clothing accessories and articles of knitted or crocheted fabric . . . . .	2,477	2,844	4,389	18,308	19,122	20,917
85	Footwear, gaiters and similar articles and parts therefor . . . . .	395	360	480	4,470	4,812	6,526
86	Professional, scientific and controlling instruments; photographic and optical goods, watches and clocks . . . . .	9,129	9,973	11,842	61,276	79,759	84,829
89	Miscellaneous manufactured articles, n.e.s. . . . .	15,687	17,442	19,479	101,635	106,182	120,266
9(A)	Commodities and transactions not classified according to kind . . . . .	22,045	21,931	35,224	77,768	89,708	110,231
	Total merchandise . . . . .	2,579,168	2,633,532	2,934,600	2,841,326	2,898,280	3,003,973
9(B)	Non-merchandise . . . . .	72,281	87,421	89,325	63,377	41,212	41,368
	Total . . . . .	2,651,449	2,720,953	3,023,925	2,904,703	2,939,492	3,045,341

(a) Figures for 1964-65 and 1965-66 for exports and 1964-65 for imports are estimates. Estimates for those divisions which have been grouped are not available. (b) Included with Divisions 58 and 59. (c) Includes Divisions 51 and 52.

## Exports, by industrial group

The following table provides an analysis of Australian exports for the years 1964-65 to 1966-67. This analysis is designed to show fluctuations in exports of Australian produce dissected according to the main industry of their origin, although any such classification is necessarily somewhat conventional.

**EXPORTS OF AUSTRALIAN PRODUCE, BY INDUSTRIAL GROUP**  
1964-65 TO 1966-67

<i>Industrial group</i>	<i>Value (\$'000 f.o.b.)</i>			<i>Proportion of value of exports of Australian produce (excluding gold) (per cent)</i>		
	1964-65	1965-66	1966-67	1964-65	1965-66	1966-67
Agriculture, horticulture and viticulture—						
Unprocessed . . . . .	375,404	339,334	452,580	14.6	13.0	15.5
Processed . . . . .	227,422	210,353	214,890	8.9	8.0	7.4
Total, agriculture, etc. . . . .	602,826	549,687	667,470	23.5	21.0	22.9
Pastoral—						
Unprocessed . . . . .	1,065,265	1,054,084	1,077,917	41.6	40.3	36.9
Processed . . . . .	123,701	133,284	127,172	4.8	5.1	4.4
Total, pastoral . . . . .	1,188,966	1,187,368	1,205,089	46.4	45.4	41.3
Dairy and farmyard—						
Unprocessed . . . . .	3,622	4,045	4,711	0.1	0.2	0.2
Processed . . . . .	114,262	97,165	116,907	4.5	3.7	4.0
Total, dairy, etc. . . . .	117,884	101,210	121,618	4.6	3.9	4.2
Mines and quarries (other than gold)—						
Unprocessed . . . . .	124,358	147,018	207,665	4.9	5.6	7.1
Processed . . . . .	118,673	151,851	134,694	4.6	5.8	4.6
Total, mines, etc. . . . .	243,031	298,869	342,359	9.5	11.4	11.7
Fisheries—						
Unprocessed . . . . .	18,197	25,805	25,616	0.7	1.0	0.9
Processed . . . . .	1,246	1,216	2,264	..	..	0.1
Total, fisheries . . . . .	19,443	27,021	27,880	0.7	1.0	1.0
Forestry—						
Unprocessed . . . . .	968	557	823	..	..	..
Processed . . . . .	4,785	4,182	6,467	0.2	0.2	0.2
Total, forestry . . . . .	5,753	4,739	7,290	0.2	0.2	0.2
Total, primary produce—						
Unprocessed . . . . .	1,587,814	1,570,843	1,769,312	61.9	60.1	60.6
Processed . . . . .	590,089	598,051	602,394	23.0	22.8	20.7
Total, primary produce . . . . .	2,177,903	2,168,894	2,371,706	84.9	82.9	81.3
Manufactures . . . . .	320,911	375,129	455,887	12.5	14.5	15.6
Refined petroleum oils . . . . .	22,315	18,985	29,085	0.9	0.7	1.0
Unclassified . . . . .	42,379	50,671	61,477	1.7	1.9	2.1
<b>Total Australian produce (excluding gold) . . . . .</b>	<b>2,563,509</b>	<b>2,613,679</b>	<b>2,918,155</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Re-exports (excluding gold) . . . . .	69,536	82,856	87,674	..	..	..
Gold exports . . . . .	18,404	24,418	18,096	..	..	..
Total value of recorded exports . . . . .	2,651,449	2,720,953	3,023,925	..	..	..

In the year 1966-67 Australian produce (other than gold) exported amounted to approximately \$2,918 million. Of this, \$2,372 million or 81 per cent was mainly the produce of primary industries, comprising \$1,769 million of unprocessed produce and \$602 million of goods which had been processed to some degree before export. The values of the principal individual items of processed Australian primary produce exported were (\$'000): raw sugar, 98,168; flour, etc., 23,074; canned fruit, 40,760; dried fruit, 23,185; wool (scoured, tops, etc.), 79,648; canned meats, 18,452; butter, 64,841;

milk (condensed, dried, etc.), 29,531; pig lead, 32,943; lead bullion, 20,445; zinc bars, blocks, etc., 28,608; copper ingots, 27,399; and undressed timber, 4,138. The value of manufactures exported as classified on page 344 was \$456 million, approximately 16 per cent of Australian produce (other than gold) exported in 1966-67. The values of principal individual items here included were (\$'000): manufactures of metal, 140,269; implements and machinery, 54,870; drugs and chemicals, 31,421; and paper and stationery, 14,824. Refined petroleum oils exported are shown separately, as they consist largely of imported crude oils refined in Australia and re-exported in the refined form. The values of principal individual items shown as 'unclassified' in 1966-67 were (\$'000): individual consignments of less than \$100 in value, 14,815; and military equipment and stores and supplies for Australian projects overseas, 15,124.

The items enumerated indicate how arbitrary is the line necessarily drawn between primary produce and manufactures in any classification of this kind. The value of processed primary products exported includes some element of value added by the simpler processes of manufacture, while the value shown for manufactures exported necessarily includes the value of raw materials (primary produce) used in those manufactures.

### Imports of merchandise, by economic class

The following table shows imports of merchandise into Australia during the years 1964-65 to 1965-67 classified according to economic classes of (i) purpose and (ii) degree of manufacture.

#### IMPORTS OF MERCHANDISE, BY ECONOMIC CLASS: AUSTRALIA 1964-65 TO 1966-67

	Value (\$'000 f.o.b.)			Proportion of value of imports of merchandise (per cent)		
	1964-65	1965-66	1966-67	1964-65	1965-66	1966-67
<b>PURPOSE</b>						
<b>Producers' materials for use in—</b>						
Building and construction . . . . .	100,102	93,680	86,742	3.5	3.2	2.9
Rural industries . . . . .	41,130	40,360	54,706	1.4	1.4	1.8
<b>Manufacturing—</b>						
Motor vehicle assembly (a) . . . . .	229,384	207,855	182,096	8.1	7.2	6.1
Other(b) . . . . .	1,085,056	1,015,816	1,066,924	38.2	35.0	35.5
<i>Total, producers' materials(b)</i> . . . . .	<i>1,455,672</i>	<i>1,357,711</i>	<i>1,390,468</i>	<i>51.2</i>	<i>46.8</i>	<i>46.3</i>
<b>Capital equipment(c)—</b>						
Producers' equipment . . . . .	596,900	671,586	663,930	21.0	23.1	22.1
<b>Transport equipment—</b>						
Complete road vehicles and as- sembled chassis . . . . .	79,972	74,671	74,921	2.8	2.6	2.5
Railway equipment, vessels and civil aircraft . . . . .	71,004	92,276	110,717	2.5	3.2	3.7
<i>Total, capital equipment</i> . . . . .	<i>747,876</i>	<i>838,533</i>	<i>849,568</i>	<i>26.3</i>	<i>28.9</i>	<i>28.3</i>
<b>Finished consumer goods—</b>						
Food, beverages and tobacco . . . . .	102,868	109,574	109,504	3.6	3.8	3.6
Clothing and accessories . . . . .	19,920	21,150	24,467	0.7	0.7	0.8
All other(d) . . . . .	322,972	344,548	383,938	11.4	11.9	12.8
<i>Total, finished consumer goods(d)</i> . . . . .	<i>445,760</i>	<i>475,272</i>	<i>517,909</i>	<i>15.7</i>	<i>16.4</i>	<i>17.2</i>
<b>Fuels and lubricants(e) . . . . .</b>	<b>54,024</b>	<b>48,385</b>	<b>30,788</b>	<b>1.9</b>	<b>1.7</b>	<b>1.0</b>
<b>Auxiliary aids to production(f) . . . . .</b>	<b>84,244</b>	<b>92,471</b>	<b>96,611</b>	<b>3.0</b>	<b>3.2</b>	<b>3.2</b>
<b>Munitions and war stores . . . . .</b>	<b>53,750</b>	<b>85,907</b>	<b>118,629</b>	<b>1.9</b>	<b>3.0</b>	<b>4.0</b>
<b>Grand total . . . . .</b>	<b>2,841,326</b>	<b>2,898,280</b>	<b>3,003,973</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

For footnotes see next page.

**IMPORTS OF MERCHANDISE, BY ECONOMIC CLASS: AUSTRALIA**  
**1964-65 TO 1966-67—continued**

	Value (\$'000 f.o.b.)			Proportion of value of imports of merchandise (per cent)		
	1964-65	1965-66	1966-67	1964-65	1965-66	1966-67
<b>DEGREE OF MANUFACTURE(g)</b>						
<b>Producers' materials—</b>						
Crude . . . . .	374,632	376,196	405,565	13.2	13.0	13.5
Simply transformed . . . . .	256,470	202,959	212,270	9.0	7.0	7.1
Elaborately transformed . . . . .	824,570	778,555	772,633	29.0	26.9	25.7
<b>Finished consumer goods—</b>						
Crude . . . . .	26,568	29,796	28,444	0.9	1.0	0.9
Simply transformed . . . . .	43,404	43,982	42,469	1.5	1.5	1.4
Elaborately transformed . . . . .	375,788	401,494	446,996	13.3	13.8	14.9
<b>Total imports—</b>						
Crude . . . . .	401,200	405,992	434,009	14.1	14.0	14.4
Simply transformed . . . . .	402,286	343,023	335,716	14.2	11.8	11.2
Elaborately transformed . . . . .	2,037,840	2,149,265	2,234,248	71.7	74.2	74.4
<b>Grand total . . . . .</b>	<b>2,841,326</b>	<b>2,898,280</b>	<b>3,003,973</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

(a) Owing to insufficient information, it is not possible to treat unassembled tractors and other machinery in a similar manner to motor vehicles, and all such machinery and replacement parts therefor are treated as capital equipment whether imported in an assembled or unassembled condition. (b) Excludes a percentage for piece goods to be sold by retail, and paper to be used solely for wrapping, which are recorded in Finished consumer goods, All other, and Auxiliary aids to production, respectively. (c) See footnote (a). (d) Includes a percentage for piece goods to be sold at retail; see footnote (b). (e) Excludes crude petroleum, which is included in Producers' materials, Manufacturing—Other. (f) Includes a percentage for paper to be used solely for wrapping; see footnote (b). (g) The class Fuels and lubricants consists of goods 'simply transformed', and the classes Capital equipment and Munitions and war stores entirely of goods 'more elaborately transformed'. The class Auxiliary aids to production is about equally divided between goods 'simply transformed' and 'elaborately transformed'.

### External trade of Australia and other countries

#### Essentials of comparison

Direct comparison of the external trade statistics of countries is possible only when the general conditions prevailing therein and the system of record are more or less identical. For example, in one country the value of imports may be the value at the port of shipment, while in another the cost of freight, insurance and charges may be added thereto. Again, the values of exports and imports in one may be based on transaction values, whereas in another they may be based on the official prices fixed from time to time by a commission constituted for the purpose. In later years, moreover, a very substantial difference in the value of imports would result from the different methods of converting the moneys of foreign countries, i.e. from the application of current rates of exchange or of the mint par. Finally, the external trade statistics of any country are also affected in varying degree by the extent to which they include transit or re-export trade. This class of trade represents a much greater proportion of the trade of Switzerland and Belgium-Luxembourg than that of other countries. France and the United Kingdom also have substantial re-exports, whereas in Canada, Australia and New Zealand re-exports account for a comparatively small proportion of trade.

### Direction of overseas trade

#### Exports and imports, by country of consignment or of origin

The following two tables show the value of Australian exports and imports during each of the years 1964-65 to 1966-67 according to principal country of consignment or origin respectively, the second table in percentages. The proportions of Australian exports and imports by country of origin or consignment are shown graphically on plate 37 on page 349.

**AUSTRALIAN EXPORTS AND IMPORTS, BY COUNTRY OF CONSIGNMENT  
OR ORIGIN, 1964-65 TO 1966-67**

(\$'000 f.o.b.)

Country	Exports			Imports		
	1964-65	1965-66	1966-67	1964-65	1965-66	1966-67
Austria . . . . .	3,504	3,482	1,910	8,202	8,597	8,049
Belgium-Luxembourg . . . . .	59,514	50,753	55,679	24,880	16,530	20,241
Canada . . . . .	39,914	43,171	51,690	117,006	107,972	117,199
Ceylon . . . . .	18,671	17,408	15,787	17,277	17,563	15,535
China (mainland) . . . . .	135,633	106,541	128,613	22,862	23,460	26,148
China, Republic of (Formosa) . . . . .	8,137	16,227	18,842	4,355	4,270	4,801
Finland . . . . .	657	977	2,166	16,766	14,567	15,929
France . . . . .	111,781	118,125	101,276	66,903	91,670	94,138
Germany, Federal Republic of . . . . .	83,837	100,300	75,734	161,014	168,226	158,539
Hong Kong . . . . .	54,757	58,774	64,260	24,414	25,358	34,193
India . . . . .	55,400	28,001	58,339	40,909	35,012	33,889
Indonesia . . . . .	7,431	5,359	6,938	64,034	61,763	56,629
Iran . . . . .	18,449	14,118	9,331	26,698	34,159	25,901
Italy . . . . .	85,190	110,244	126,757	50,511	49,701	53,178
Japan . . . . .	440,740	470,410	586,437	258,574	280,173	296,044
Kuwait . . . . .	5,242	5,233	9,937	31,819	28,255	34,992
Malaysia . . . . .	(a)82,917	(a)49,770	61,781	(a)52,322	(a)31,924	27,985
Netherlands . . . . .	20,702	38,985	36,970	36,762	40,223	47,056
New Zealand . . . . .	158,302	171,277	177,352	46,541	46,859	47,274
Norway . . . . .	5,801	4,240	10,076	8,882	10,287	9,790
Pakistan . . . . .	9,274	7,383	53,143	13,188	16,390	17,999
Papua and New Guinea . . . . .	58,517	72,722	86,894	19,720	17,633	18,172
Philippines . . . . .	20,920	23,990	32,801	3,242	2,518	2,793
Poland . . . . .	14,380	16,877	18,678	2,476	1,939	1,879
Saudi Arabia . . . . .	5,431	6,321	10,447	49,974	45,839	50,505
Singapore . . . . .	(b)	(b)34,004	56,486	(b)	(b)3,699	8,708
South Africa . . . . .	24,765	22,204	43,074	16,797	17,401	17,090
Sweden . . . . .	8,584	9,135	7,302	53,568	51,787	50,850
Switzerland . . . . .	4,136	4,789	3,733	35,458	43,011	41,777
Thailand . . . . .	13,855	15,573	23,722	1,139	1,150	1,666
United Kingdom . . . . .	516,226	473,358	404,958	761,412	758,751	723,811
United States of America . . . . .	264,193	338,388	359,388	692,246	703,597	781,263
U.S.S.R. . . . .	76,441	47,892	20,330	2,167	1,578	1,678
Yugoslavia . . . . .	11,958	15,095	18,826	495	716	392
Other countries . . . . .	218,730	214,500	277,181	166,015	165,816	183,600
Country unknown . . . . .	7,460	5,327	7,087	6,075	11,098	15,648
<b>Total . . . . .</b>	<b>2,651,449</b>	<b>2,720,953</b>	<b>3,023,925</b>	<b>2,904,703</b>	<b>2,939,492</b>	<b>3,045,341</b>

(a) Includes Singapore from 1 July 1964 to 30 September 1965.

(b) Included with Malaysia from 1 July 1964 to 30 September 1965.

**AUSTRALIAN EXPORTS AND IMPORTS**  
**PROPORTIONS, BY COUNTRY OF CONSIGNMENT OR ORIGIN, 1964-65 TO 1966-67**  
**(Per cent)**

Country	Exports			Imports		
	1964-65	1965-66	1966-67	1964-65	1965-66	1966-67
Austria . . . . .	0.13	0.13	0.06	0.28	0.29	0.26
Belgium-Luxembourg . . . . .	2.24	1.87	1.84	0.86	0.56	0.66
Canada . . . . .	1.51	1.59	1.71	4.03	3.67	3.85
Ceylon . . . . .	0.74	0.64	0.52	0.59	0.60	0.51
China (mainland) . . . . .	5.12	3.91	4.25	0.79	0.80	0.86
China, Republic of (Formosa) . . . . .	0.31	0.60	0.62	0.15	0.15	0.16
Finland . . . . .	0.02	0.04	0.07	0.58	0.50	0.52
France . . . . .	4.22	4.34	3.35	2.30	3.12	3.09
Germany, Federal Republic of . . . . .	3.16	3.69	2.51	5.54	5.72	5.21
Hong Kong . . . . .	2.07	2.16	2.13	0.84	0.86	1.12
India . . . . .	2.09	1.03	1.93	1.41	1.19	1.11
Indonesia . . . . .	0.28	0.20	0.23	2.20	2.10	1.86
Iran . . . . .	0.70	0.52	0.31	0.92	1.16	0.85
Italy . . . . .	3.21	4.05	4.19	1.74	1.69	1.75
Japan . . . . .	16.62	17.29	19.39	8.90	9.53	9.72
Kuwait . . . . .	0.20	0.19	0.33	1.10	0.96	1.15
Malaysia . . . . .	(a)3.13	(a)1.83	2.04	(a)1.80	(a)1.09	0.92
Netherlands . . . . .	0.78	1.43	1.22	1.27	1.37	1.55
New Zealand . . . . .	5.97	6.29	5.87	1.60	1.60	1.55
Norway . . . . .	0.22	0.16	0.33	0.31	0.35	0.32
Pakistan . . . . .	0.35	0.27	1.76	0.45	0.56	0.59
Papua and New Guinea . . . . .	2.21	2.67	2.87	0.68	0.60	0.60
Philippines . . . . .	0.79	0.88	1.09	0.11	0.09	0.09
Poland . . . . .	0.54	0.62	0.62	0.09	0.07	0.06
Saudi Arabia . . . . .	0.20	0.23	0.35	1.72	1.56	1.66
Singapore . . . . .	(b)	(b)1.25	1.87	(b)	(b)0.13	0.29
South Africa . . . . .	0.93	0.82	1.42	0.58	0.59	0.56
Sweden . . . . .	0.32	0.32	0.24	1.84	1.76	1.67
Switzerland . . . . .	0.16	0.18	0.12	1.22	1.46	1.37
Thailand . . . . .	0.52	0.57	0.79	0.04	0.04	0.05
United Kingdom . . . . .	19.47	17.40	13.39	26.21	25.81	23.77
United States of America . . . . .	9.96	12.44	11.88	23.83	23.94	25.65
U.S.S.R. . . . .	2.88	1.76	0.67	0.08	0.05	0.06
Yugoslavia . . . . .	0.45	0.55	0.62	0.02	0.02	0.01
Other countries . . . . .	8.22	7.88	9.18	5.71	5.63	6.04
Country unknown . . . . .	0.28	0.20	0.23	0.21	0.38	0.51
<b>Total . . . . .</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>

(a) Includes Singapore from 1 July 1964 to 30 September 1965.

(b) Included with Malaysia from 1 July 1964 to 30 September 1965.

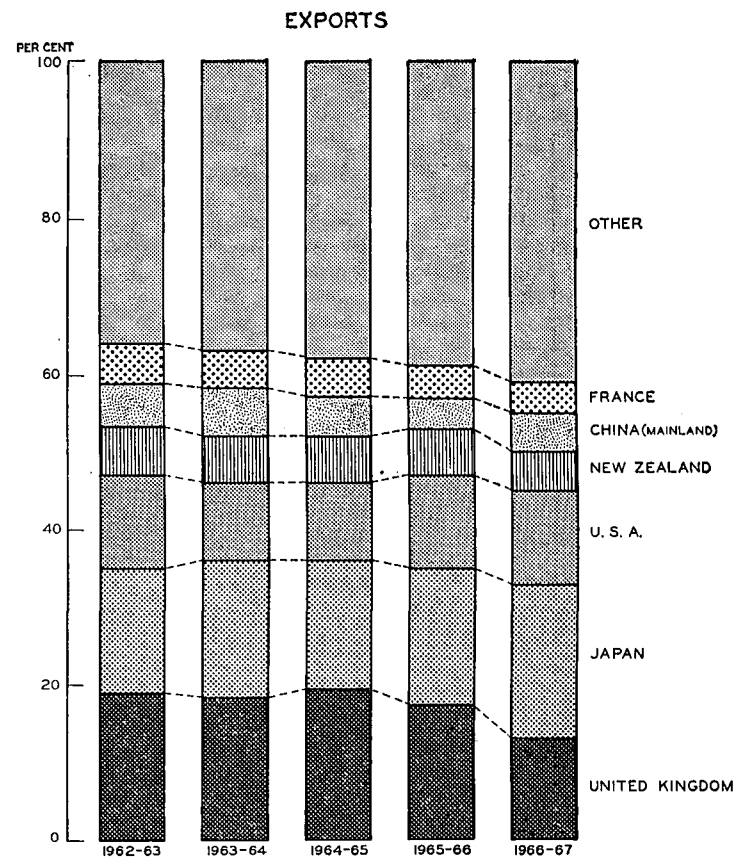
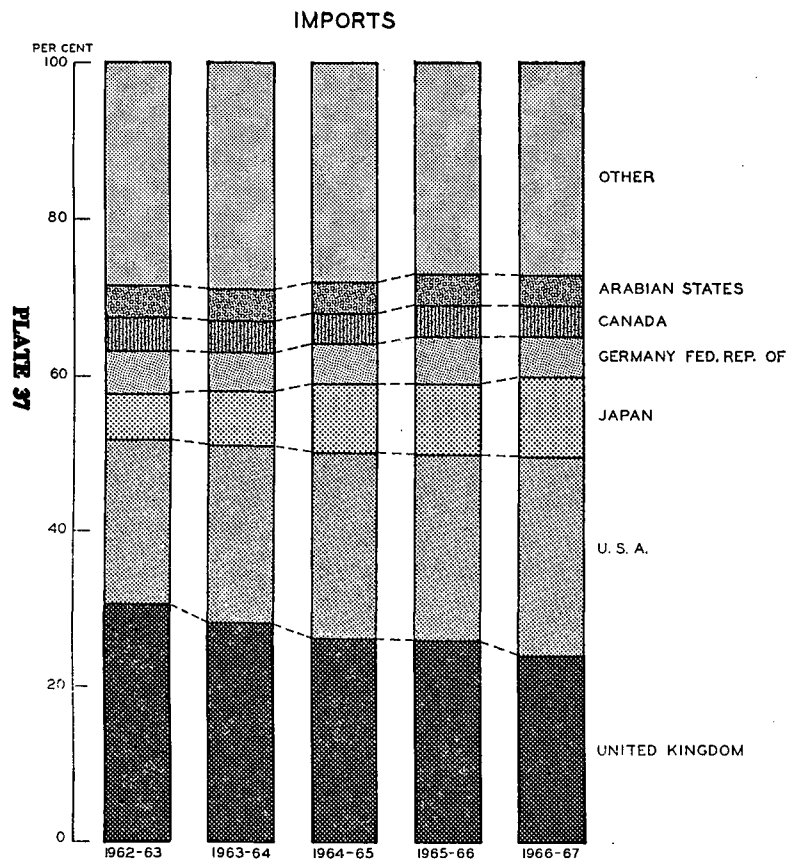
**Exports, by country of consignment and by description**

The following table shows details of exports to principal countries, classified according to divisions of the Australian Export Commodity Classification, for the years 1964-65 to 1966-67 (pages 350-9).

# VALUE OF IMPORTS AND EXPORTS: AUSTRALIA

## PROPORTIONS BY COUNTRY

### 1962-63 TO 1966-67





**EXPORTS, BY COUNTRY OF CONSIGNMENT: DIVISIONS OF THE AUSTRALIAN EXPORT  
COMMODITY CLASSIFICATION, 1964-65 TO 1966-67(a)**

(\$'000)

Division No.	Description	Belgium-Luxembourg			Canada		
		1964-65	1965-66	1966-67	1964-65	1965-66	1966-67
00	Live animals . . . . .					2	1
01	Meat and meat preparations . . . . .	901	333	129	8,577	10,392	14,995
02	Dairy products and eggs . . . . .	60	14	..	9	33	154
03	Fish and fish preparations . . . . .	91	122	134	66	58	129
04	Cereal grains and cereal preparations . . . . .	94	25	157	416	102	256
05	Fruit and vegetables . . . . .	451	700	416	10,103	11,305	11,052
06	Sugar and sugar preparations and honey . . . . .	3	3	7	8,085	6,083	7,542
07	Coffee, tea, cocoa, spices and manufactures thereof . . . . .	..	..	..	3	4	44
08	Feeding-stuff for animals (except unmilled cereals) . . . . .	2	..	..	13	9	14
09	Miscellaneous preparations chiefly for food . . . . .	4	1	5	35	15	3
11	Beverages . . . . .	..	..	1	899	1,148	1,107
12	Tobacco and tobacco manufactures . . . . .	..	..	..	..	1	..
21	Hides, skins and fur skins, undressed . . . . .	2,486	1,870	779	27	24	5
22	Oil-seeds, oil nuts and oil kernels . . . . .	24	10	35	..	..	..
23	Crude rubber (including synthetic and reclaimed) . . . . .	..	..	..	..	..	..
24	Wood, timber and cork . . . . .	8	1	4	24	45	12
25	Pulp and waste paper . . . . .	..	..	..	2	..	..
26	Textile fibres and their waste . . . . .	42,665	34,060	39,837	6,625	5,799	6,603
27	Crude fertilisers and crude minerals (except coal, petroleum and precious stones) . . . . .	25	40	25	1	..	1
28	Metalliferous ores and metal scrap . . . . .	7,709	9,971	10,361	228	413	923
29	Crude animal and vegetable materials, n.e.s. . . . .	18	35	52	849	984	496
32	Coal, coke and briquettes . . . . .	..	..	..	..	..	..
33	Petroleum and petroleum products . . . . .	..	..	..	..	..	..
34	Petroleum gases and other gaseous hydrocarbons . . . . .	..	..	..	..	..	..
41	Animal oils and fats . . . . .	..	..	..	..	..	..
42	Fixed vegetable oils and fats . . . . .	..	..	2	..	..	..
43	Animal and vegetable oils and fats, processed and waxes of animal or vegetable origin . . . . .	3	5	..	..	..	30
51	Chemical elements and compounds . . . . .	(b)	(b)	3	109	76	73
52	Mineral tar and crude chemicals from coal, petroleum and natural gas . . . . .	(b)	(b)	..	(b)	(b)	68
53	Dyeing, tanning and colouring materials . . . . .	27	2	3	10	1	32
54	Medicinal and pharmaceutical products . . . . .	1	46	239	8	44	60
55	Essential oils and perfume materials; toilet, polishing and cleansing preparations . . . . .	1	7	3	5	5	4
56	Fertilisers, manufactured . . . . .	..	..	..	..	2	..
57	Explosives and pyrotechnic products . . . . .	..	..	..	18	..	6
58	Plastic materials, regenerated cellulose and artificial resins . . . . .	..	..	3	..	..	27
59	Chemical materials and products, n.e.s. . . . .	(c)139	(c)10	..	(c)227	(c)331	293
61	Leather, leather manufactures, n.e.s., and dressed fur skins . . . . .	..	..	1	9	21	28
62	Rubber manufactures, n.e.s. . . . .	9	7	..	67	109	1
63	Wood and cork manufactures (except furniture) . . . . .	5	9	5	14	51	35
64	Paper, paperboard and manufactures thereof . . . . .	1	..	..	3	8	6
65	Textile yarn, fabrics, made-up articles and related products . . . . .	1	185	4	127	94	55
66	Non-metallic mineral manufactures, n.e.s. . . . .	208	137	100	70	89	143
67	Iron and steel . . . . .	91	357	1,694	1,030	2,364	1,443
68	Non-ferrous metals . . . . .	4,090	2,499	1,321	5	837	923
69	Manufactures of metal, n.e.s. . . . .	..	..	80	..	..	657
71	Machinery (except electric) . . . . .	..	..	37	..	..	660
72	Electric machinery, apparatus and appliances . . . . .	195	184	106	1,085	1,637	511
73	Transport equipment . . . . .	..	..	18	..	..	573
81	Sanitary, plumbing, heating and lighting fixtures and fittings . . . . .	..	..	..	4	4	3
82	Furniture . . . . .	..	..	..	4	2	7
83	Travel goods, handbags and similar articles . . . . .	..	..	..	1	..	4
84	Clothing and clothing accessories; articles of knitted or crocheted fabric . . . . .	1	2	8	31	25	162
85	Footwear, gaiters, and similar articles and parts therefor . . . . .	..	..	..	1	1	1
86	Professional, scientific and controlling instruments; photo- graphic and optical goods, watches and clocks . . . . .	4	17	16	467	395	600
89	Miscellaneous manufactured articles, n.e.s. . . . .	8	28	15	166	107	390
9A	Commodities and transactions of merchandise trade, not elsewhere classified . . . . .	6	6	22	128	65	244
	<i>Total merchandise(d)</i> . . . . .	59,333	50,690	55,624	39,549	42,686	50,375
9B	Commodities and transactions not included in merchandise trade(a) . . . . .	181	63	55	365	485	1,315
	<b>Grand total</b> . . . . .	<b>59,514</b>	<b>50,753</b>	<b>55,679</b>	<b>39,914</b>	<b>43,171</b>	<b>51,690</b>

(a) Figures for 1964-65 and 1965-66 are estimates. Estimates for those divisions which have been grouped are not available separately. (b) Included with Divisions 58 and 59. (c) Includes Divisions 51 and 52. (d) Definition changed from July 1965.

EXPORTS, BY COUNTRY OF CONSIGNMENT: DIVISIONS OF THE AUSTRALIAN EXPORT  
COMMODITY CLASSIFICATION, 1964-65 TO 1966-67(a)—continued  
(\$'000)

Division No.	Description	China (mainland)			France		
		1964-65	1965-66	1966-67	1964-65	1965-66	1966-67
00	Live animals . . . . .	49	48	254	..	..	..
01	Meat and meat preparations . . . . .	3	11	..	4,424	2,019	1,074
02	Dairy products and eggs . . . . .	5	5	..	728	..	..
03	Fish and fish preparations . . . . .	..	..	4	1,350	2,495	2,725
04	Cereal grains and cereal preparations . . . . .	117,712	100,382	115,947	57	17	36
05	Fruit and vegetables . . . . .	10	..	..	856	1,529	963
06	Sugar and sugar preparations and honey . . . . .	1	..	..	..	..	782
07	Coffee, tea, cocoa, spices and manufactures thereof . . . . .	..	..	..	..	..	..
08	Feeding-stuff for animals (except unmilled cereals) . . . . .	..	..	1	4	18	..
09	Miscellaneous preparations chiefly for food . . . . .	..	..	..	4	12	..
11	Beverages . . . . .	..	..	..	..	..	1
12	Tobacco and tobacco manufactures . . . . .	..	..	..	..	..	..
21	Hides, skins and fur skins, undressed . . . . .	887	501	276	38,969	40,371	36,626
22	Oil-seeds, oil nuts and oil kernels . . . . .	..	..	..	2	1	2
23	Crude rubber (including synthetic and reclaimed) . . . . .	..	..	..	..	..	..
24	Wood, timber and cork . . . . .	..	..	..	6	3	2
25	Pulp and waste paper . . . . .	..	..	..	..	..	..
26	Textile fibres and their waste . . . . .	14,492	3,490	7,786	61,838	65,056	53,595
27	Crude fertilisers and crude minerals (except coal, petroleum and precious stones) . . . . .	..	..	..	25	16	8
28	Metalliferous ores and metal scrap . . . . .	297	61	..	1,866	2,667	2,351
29	Crude animal and vegetable materials, n.e.s. . . . .	..	..	..	50	43	96
32	Coal, coke and briquettes . . . . .	..	..	..	..	..	..
33	Petroleum and petroleum products . . . . .	..	..	..	3	..	..
34	Petroleum gases and other gaseous hydrocarbons . . . . .	..	..	..	..	..	..
41	Animal oils and fats . . . . .	..	..	1	..	..	79
42	Fixed vegetable oils and fats . . . . .	..	..	..	..	..	..
43	Animal and vegetable oils and fats, processed and waxes of animal or vegetable origin . . . . .	1,876	785	11	269	33	..
51	Chemical elements and compounds . . . . .	(b)	(b)	..	(b)	(b)	1
52	Mineral tar and crude chemicals from coal, petroleum and natural gas . . . . .	(b)	(b)	..	(b)	(b)	..
53	Dyeing, tanning and colouring materials . . . . .	..	..	10	..	11	5
54	Medicinal and pharmaceutical products . . . . .	..	..	..	67	285	428
55	Essential oils and perfume materials; toilet, polishing and cleansing preparations . . . . .	2	2	..	5	18	29
56	Fertilisers, manufactured . . . . .	..	..	..	..	..	..
57	Explosives and pyrotechnic products . . . . .	..	..	..	..	..	..
58	Plastic materials, regenerated cellulose and artificial resins . . . . .	..	..	1	..	..	10
59	Chemical materials and products, n.e.s. . . . .	(c)2	(c)149	5	(c)11	(c)16	..
61	Leather, leather manufactures, n.e.s., and dressed fur skins . . . . .	5	49	12	14	22	50
62	Rubber manufactures, n.e.s. . . . .	..	..	..	7	1	26
63	Wood and cork manufactures (except furniture) . . . . .	..	..	..	3	15	7
64	Paper, paperboard and manufactures thereof . . . . .	..	..	2	9	13	6
65	Textile yarn, fabrics, made-up articles and related products . . . . .	..	15	2	103	226	146
66	Non-metallic mineral manufactures, n.e.s. . . . .	5	958	4,111	33	42	18
67	Iron and steel . . . . .	246	15	177	189	1,925	82
68	Non-ferrous metals . . . . .	3	..	..	..	..	..
69	Manufactures of metal, n.e.s. . . . .	..	..	1	..	..	107
71	Machinery (except electric) . . . . .	..	..	1	..	..	124
72	Electric machinery, apparatus and appliances . . . . .	22	62	1	340	235	215
73	Transport equipment . . . . .	..	..	..	..	..	307
81	Sanitary, plumbing, heating and lighting fixtures and fittings . . . . .	..	..	..	..	..	11
82	Furniture . . . . .	..	..	..	..	..	..
83	Travel goods, handbags and similar articles . . . . .	..	..	..	..	..	..
84	Clothing and clothing accessories; articles of knitted or crocheted fabric . . . . .	..	..	2	7	5	20
85	Footwear, gaiters, and similar articles and parts therefor . . . . .	10	..	2	..	..	1
86	Professional, scientific and controlling instruments; photo- graphic and optical goods, watches and clocks . . . . .	1	6	1	38	98	131
89	Miscellaneous manufactured articles, n.e.s. . . . .	..	..	..	79	62	80
9A	Commodities and transactions of merchandise trade, not elsewhere classified . . . . .	..	..	..	38	215	684
	Total merchandise(d) . . . . .	135,626	106,541	128,611	111,396	117,472	100,847
9B	Commodities and transactions not included in merchandise trade(d) . . . . .	7	..	2	385	653	429
	Grand total . . . . .	135,633	106,541	128,613	111,781	118,125	101,276

(a) Figures for 1964-65 and 1965-66 are estimates. Estimates for those divisions which have been grouped are not available separately. (b) Included with Divisions 58 and 59. (c) Includes Divisions 51 and 52. (d) Definitions changed from July 1965.

EXPORTS, BY COUNTRY OF CONSIGNMENT: DIVISIONS OF THE AUSTRALIAN EXPORT  
COMMODITY CLASSIFICATION, 1964-65 TO 1966-67(a)—continued  
(\$'000)

Division No.	Description	Germany, Federal Republic of			Hong Kong		
		1964-65	1965-66	1966-67	1964-65	1965-66	1966-67
00	Live animals . . . . .				154	10	157
01	Meat and meat preparations . . . . .	2,843	1,462	206	1,384	1,142	981
02	Dairy products and eggs . . . . .	1,073	1,660	454	1,512	1,637	2,309
03	Fish and fish preparations . . . . .	18	30	23	46	59	312
04	Cereal grains and cereal preparations . . . . .	9,458	10,574	6,765	4,061	5,283	7,147
05	Fruit and vegetables . . . . .	7,942	14,008	11,152	1,460	1,097	1,123
06	Sugar and sugar preparations and honey . . . . .	206	71	32	168	44	354
07	Coffee, tea, cocoa, spices and manufactures thereof . . . . .	45	5		1	3	14
08	Feeding-stuff for animals (except unmilled cereals) . . . . .			103	340	96	81
09	Miscellaneous preparations chiefly for food . . . . .	1			716	71	356
11	Beverages . . . . .		1	1	104	114	100
12	Tobacco and tobacco manufactures . . . . .		1		2	2	
21	Hides, skins and fur skins, undressed . . . . .	3,119	2,448	3,690	108	178	385
22	Oil-seeds, oil nuts and oil kernels . . . . .	13		2		1	2
23	Crude rubber (including synthetic and reclaimed) . . . . .			4	52	57	25
24	Wood, timber and cork . . . . .	53	34	40	148	52	117
25	Pulp and waste paper . . . . .						1
26	Textile fibres and their waste . . . . .	50,273	51,261	40,643	7,905	8,399	8,259
27	Crude fertilisers and crude minerals (except coal, petroleum and precious stones) . . . . .	65	38	12	18	14	39
28	Metalliferous ores and metal scrap . . . . .	3,047	4,524	4,146	143	70	94
29	Crude animal and vegetable materials, n.e.s. . . . .	1,156	1,381	1,732	12	16	146
32	Coal, coke and briquettes . . . . .				199	474	32
33	Petroleum and petroleum products . . . . .				9	44	51
34	Petroleum gases and other gaseous hydrocarbons . . . . .						
41	Animal oils and fats . . . . .			132			
42	Fixed vegetable oils and fats . . . . .	66	200		156	126	63
43	Animal and vegetable oils and fats, processed and waxes of animal or vegetable origin . . . . .			61			39
51	Chemical elements and compounds . . . . .	(b)	(b)	33	(b)	(b)	120
52	Mineral tar and crude chemicals from coal, petroleum and natural gas . . . . .	(b)	(b)		(b)	(b)	
53	Dyeing, tanning and colouring materials . . . . .	22	24	28	70	44	207
54	Medicinal and pharmaceutical products . . . . .	139	269	136	1,262	312	482
55	Essential oils and perfume materials; toilet, polishing and cleansing preparations . . . . .	23	25	10	160	219	257
56	Fertilisers, manufactured . . . . .						
57	Explosives and pyrotechnic products . . . . .			36	3	6	
58	Plastic materials, regenerated cellulose and artificial resins . . . . .	(c)240	(c)277	496	(c)1,354	(c)984	1,196
59	Chemical materials and products, n.e.s. . . . .			326			61
61	Leather, leather manufactures, n.e.s., and dressed fur skins . . . . .	29	16	5	986	1,143	764
62	Rubber manufactures, n.e.s. . . . .	113	93	10	36	39	24
63	Wood and cork manufactures (except furniture) . . . . .	5	6	11	18	46	21
64	Paper, paperboard and manufactures thereof . . . . .	3	12	7	692	473	562
65	Textile yarn, fabrics, made-up articles and related products . . . . .	16	135	60	505	595	320
66	Non-metallic mineral manufactures, n.e.s. . . . .	426	786	821	1,229	1,305	3,329
67	Iron and steel . . . . .	403	248	242	1,312	1,753	2,990
68	Non-ferrous metals . . . . .	1,886	8,411	1,621	2,656	2,952	2,784
69	Manufactures of metal, n.e.s. . . . .			230			623
71	Machinery (except electric) . . . . .			607			819
72	Electric machinery, apparatus and appliances . . . . .	480	1,207	247	2,705	2,527	620
73	Transport equipment . . . . .			546			1,325
81	Sanitary, plumbing, heating and lighting fixtures and fittings . . . . .	4	3	1	68	113	55
82	Furniture . . . . .		1	2	83	81	35
83	Travel goods, handbags and similar articles . . . . .	10			24	41	25
84	Clothing and clothing accessories; articles of knitted or crocheted fabric . . . . .	14	23	88	227	166	364
85	Footwear, gaiters, and similar articles and parts therefor . . . . .		1		40	7	9
86	Professional, scientific and controlling instruments; photo- graphic and optical goods, watches and clocks . . . . .	190	169	226	88	132	382
89	Miscellaneous manufactured articles, n.e.s. . . . .	92	131	142	474	807	976
9A	Commodities and transactions of merchandise trade, not elsewhere classified . . . . .	143	178	285	3,211	544	3,634
	Total merchandise(d) . . . . .	83,617	99,715	75,412	35,899	33,279	44,171
9B	Commodities and transactions not included in merchandise trade(d) . . . . .	220	585	322	18,858	25,495	20,089
	Grand total . . . . .	83,837	100,300	75,734	54,757	58,774	64,260

(a) Figures for 1964-65 and 1965-66 are estimates. Estimates for those divisions which have been grouped are not available separately. (b) Included with Divisions 58 and 59. (c) Includes Divisions 51 and 52. (d) Definition changed from July 1965.

EXPORTS, BY COUNTRY OF CONSIGNMENT: DIVISIONS OF THE AUSTRALIAN EXPORT  
COMMODITY CLASSIFICATION, 1964-65 TO 1966-67(a)—continued

(\$'000)

Division No.	Description	India			Italy		
		1964-65	1965-66	1966-67	1964-65	1965-66	1966-67
00	Live animals . . . . .	39	36	56	..	..	..
01	Meat and meat preparations . . . . .	64	53	30	11,273	4,502	1,523
02	Dairy products and eggs . . . . .	1,870	1,083	887	435	268	20
03	Fish and fish preparations . . . . .	..	..	..	8	352	204
04	Cereal grains and cereal preparations . . . . .	24,921	9,696	23,357	3,410	4,162	9,742
05	Fruit and vegetables . . . . .	14	32	20	652	673	614
06	Sugar and sugar preparations and honey . . . . .	3	3	2	3	1	..
07	Coffee, tea, cocoa, spices and manufactures thereof . . . . .	..	..	..	..	..	..
08	Feeding-stuff for animals (except unmilled cereals) . . . . .	4	..	..	5	..	..
09	Miscellaneous preparations chiefly for food . . . . .	5	1	..	1	..	..
11	Beverages . . . . .	19	19	15	2	2	4
12	Tobacco and tobacco manufactures . . . . .	..	4	1	..	..	..
21	Hides, skins and fur skins, undressed . . . . .	200	468	287	9,576	14,502	20,211
22	Oil-seeds, oil nuts and oil kernels . . . . .	..	..	..	1	1	1
23	Crude rubber (including synthetic and reclaimed) . . . . .	..	..	..	..	..	..
24	Wood, timber and cork . . . . .	..	..	50	2	12	10
25	Pulp and waste paper . . . . .	..	..	..	..	..	..
26	Textile fibres and their waste . . . . .	13,410	5,753	16,765	54,854	77,232	82,816
27	Crude fertilisers and crude minerals (except coal, petroleum and precious stones) . . . . .	49	46	123	73	86	56
28	Metalliferous ores and metal scrap . . . . .	161	152	775	848	1,563	3,738
29	Crude animal and vegetable materials, n.e.s. . . . .	3	1	3	248	265	270
32	Coal, coke and briquettes . . . . .	..	..	..	..	6	..
33	Petroleum and petroleum products . . . . .	..	..	..	..	..	..
34	Petroleum gases and other gaseous hydrocarbons . . . . .	..	..	..	..	..	..
41	Animal oils and fats . . . . .	..	..	1,714	..	..	392
42	Fixed vegetable oils and fats . . . . .	..	..	..	..	..	..
43	Animal and vegetable oils and fats, processed and waxes of animal or vegetable origin . . . . .	516	64	..	304	488	..
51	Chemical elements and compounds . . . . .	(b)	(b)	44	(b)	(b)	65
52	Mineral tar and crude chemicals from coal, petroleum and natural gas . . . . .	(b)	(b)	..	(b)	(b)	..
53	Dyeing, tanning and colouring materials . . . . .	31	26	78	1	23	59
54	Medicinal and pharmaceutical products . . . . .	11	68	108	7	21	72
55	Essential oils and perfume materials; toilet, polishing and cleansing preparations . . . . .	151	43	3	3	14	57
56	Fertilisers, manufactured . . . . .	..	..	..	..	..	..
57	Explosives and pyrotechnic products . . . . .	30	..	..	..	..	11
58	Plastic materials, regenerated cellulose and artificial resins . . . . .	(c)164	(c)100	16	(c)51	(c)148	2
59	Chemical materials and products, n.e.s. . . . .	..	..	64	..	..	148
61	Leather, leather manufactures, n.e.s., and dressed fur skins . . . . .	2	10	18	4	5	3
62	Rubber manufactures, n.e.s. . . . .	4	6	..	20	18	1
63	Wood and cork manufactures (except furniture) . . . . .	1	10	..	3	1	5
64	Paper, paperboard and manufactures thereof . . . . .	626	5	59	1	4	4
65	Textile yarn fabrics, made-up articles and related products . . . . .	10	..	7	24	21	27
66	Non-metallic mineral manufactures, n.e.s. . . . .	29	50	32	7	21	9
67	Iron and steel . . . . .	568	354	573	164	1,231	2,279
68	Non-ferrous metals . . . . .	10,369	8,128	11,390	2,116	3,372	3,043
69	Manufactures of metal, n.e.s. . . . .	..	..	19	..	..	183
71	Machinery (except electric) . . . . .	..	..	600	..	..	294
72	Electric machinery, apparatus and appliances . . . . .	1,236	937	227	449	443	195
73	Transport equipment . . . . .	..	..	227	..	..	29
81	Sanitary, plumbing, heating and lighting fixtures and fittings . . . . .	12	..	3	2	5	..
82	Furniture . . . . .	..	..	..	1	..	4
83	Travel goods, handbags and similar articles . . . . .	..	..	..	1	..	..
84	Clothing and clothing accessories; articles of knitted or crocheted fabric . . . . .	2	2	1	10	24	53
85	Footwear, gaiters, and similar articles and parts thereof . . . . .	..	..	11	1	1	..
86	Professional, scientific and controlling instruments; photo- graphic and optical goods, watches and clocks . . . . .	18	22	..	40	122	36
89	Miscellaneous manufactured articles, n.e.s. . . . .	43	24	15	47	52	104
9A	Commodities and transactions of merchandise trade, not elsewhere classified . . . . .	56	184	187	48	45	89
	Total merchandise(d) . . . . .	54,641	27,380	57,768	84,697	109,687	126,282
9B	Commodities and transactions not included in merchandise trade(d) . . . . .	759	621	571	493	557	475
	Grand total . . . . .	55,400	28,001	58,339	85,190	110,244	126,757

(a) Figures for 1964-65 and 1965-66 are estimates. Estimates for those divisions which have been grouped are not available separately. (b) Included with Divisions 58 and 59. (c) Includes Divisions 51 and 52. (d) Definition changed from July 1965.

EXPORTS, BY COUNTRY OF CONSIGNMENT: DIVISIONS OF THE AUSTRALIAN EXPORT  
COMMODITY CLASSIFICATION, 1964-65 TO 1966-67(a)—continued  
(\$'000)

Division No.	Description	Japan			Malaysia(e)		
		1964-65	1965-66	1966-67	1964-65	1965-66	1966-67
00	Live animals . . . . .	104	46	171	1,120	416	258
01	Meat and meat preparations . . . . .	10,171	15,931	16,445	4,727	1,752	1,073
02	Dairy products and eggs . . . . .	1,589	4,180	16,028	13,883	7,768	8,261
03	Fish and fish preparations . . . . .	1,314	1,275	2,099	350	216	491
04	Cereal grains and cereal preparations . . . . .	35,640	24,787	38,831	15,529	9,580	18,632
05	Fruit and vegetables . . . . .	433	658	805	5,441	2,272	1,634
06	Sugar and sugar preparations and honey . . . . .	35,730	18,240	21,393	2,615	3,432	4,254
07	Coffee, tea, cocoa, spices and manufactures thereof . . . . .	12	426	2,907	14	21	7
08	Feeding-stuff for animals (except unmilled cereals) . . . . .	1,718	464	2,306	1,358	338	698
09	Miscellaneous preparations chiefly for food . . . . .	21	31	19	1,153	2,006	84
11	Beverages . . . . .	36	29	42	541	277	182
12	Tobacco and tobacco manufactures . . . . .	1	..	..	4	1	1
21	Hides, skins and fur skins, undressed . . . . .	6,015	12,690	8,358	523	119	40
22	Oil-seeds, oil nuts and oil kernels . . . . .	1	1	425	..	2	..
23	Crude rubber (including synthetic and reclaimed) . . . . .	384	332	228	14	12	14
24	Wood, timber and cork . . . . .	79	81	55	1	3	14
25	Pulp and waste paper . . . . .	..	14	68	..	4	93
26	Textile fibres and their waste . . . . .	242,726	259,982	274,542	11	63	13
27	Crude fertilisers and crude minerals (except coal, petroleum and precious stones) . . . . .	602	440	360	781	379	270
28	Metalliferous ores and metal scrap . . . . .	32,608	37,986	85,270	48	13	452
29	Crude animal and vegetable materials, n.e.s. . . . .	385	507	859	65	24	92
32	Coal, coke and briquettes . . . . .	..	..	68,734	..	..	56
33	Petroleum and petroleum products . . . . .	50,351	60,980	1,483	5,380	573	92
34	Petroleum gases and other gaseous hydrocarbons . . . . .	..	90	8	1	..	..
41	Animal oils and fats . . . . .	..	..	1,900	..	..	329
42	Fixed vegetable oils and fats . . . . .	..	..	2	..	..	..
43	Animal and vegetable oils and fats, processed and waxes of animal or vegetable origin . . . . .	1,180	581	51	1,458	673	40
51	Chemical elements and compounds . . . . .	(b)	(b)	4,995	(b)	(b)	443
52	Mineral tar and crude chemicals from coal, petroleum and natural gas . . . . .	(b)	(b)	22	(b)	(b)	16
53	Dyeing, tanning and colouring materials . . . . .	20	36	14	366	87	127
54	Medicinal and pharmaceutical products . . . . .	106	95	61	875	758	542
55	Essential oils and perfume materials; toilet, polishing and cleansing preparations . . . . .	39	162	156	657	419	378
56	Fertilisers, manufactured . . . . .	8	1	5	11	9	4
57	Explosives and pyrotechnic products . . . . .	..	1	2	236	443	2
58	Plastic materials, regenerated cellulose and artificial resins . . . . .	..	..	45	..	..	159
59	Chemical materials and products, n.e.s. . . . .	c)5,934	(c)8,974	6,335	(c)41	(c)491	144
61	Leather, leather manufactures, n.e.s., and dressed fur skins . . . . .	22	40	78	532	257	145
62	Rubber manufactures, n.e.s. . . . .	3	11	6	85	59	41
63	Wood and cork manufactures (except furniture) . . . . .	1	31	49	68	59	16
64	Paper, paperboard and manufactures thereof . . . . .	41	17	65	1,776	1,354	1,283
65	Textile yarn, fabrics, made-up articles and related products . . . . .	392	279	398	264	275	223
66	Non-metallic mineral manufactures, n.e.s. . . . .	4,015	4,413	5,000	178	137	134
67	Iron and steel . . . . .	1,887	1,169	5,696	1,514	886	1,433
68	Non-ferrous metals . . . . .	4,704	12,487	16,080	1,327	532	698
69	Manufactures of metal, n.e.s. . . . .	..	..	420	..	..	1,116
71	Machinery (except electric) . . . . .	..	..	941	..	..	4,300
72	Electric machinery, apparatus and appliances . . . . .	675	1,125	171	10,154	7,588	1,283
73	Transport equipment . . . . .	..	..	497	..	..	981
81	Sanitary, plumbing, heating and lighting fixtures and fittings . . . . .	8	7	2	173	101	139
82	Furniture . . . . .	1	4	7	140	99	50
83	Travel goods, handbags and similar articles . . . . .	4	24	19	6	7	2
84	Clothing and clothing accessories; articles of knitted or crocheted fabric . . . . .	115	109	69	218	129	131
85	Footwear, gaiters, and similar articles and parts therefor . . . . .	18	10	..	18	2	61
86	Professional, scientific and controlling instruments; photo- graphic and optical goods, watches and clocks . . . . .	140	139	180	91	180	77
89	Miscellaneous manufactured articles, n.e.s. . . . .	717	722	666	1,557	853	568
9A	Commodities and transactions of merchandise trade, not elsewhere classified . . . . .	96	114	158	782	418	743
	Total merchandise(d) . . . . .	440,048	469,720	585,524	76,454	45,085	52,313
9B	Commodities and transactions not included in merchandise trade(d) . . . . .	692	690	913	6,463	4,685	9,468
	Grand total . . . . .	440,740	470,410	586,437	82,917	49,770	61,781

(a) Figures for 1964-65 and 1965-66 are estimates. Estimates for those divisions which have been grouped are not available separately. (b) Included with Divisions 58 and 59. (c) Includes Divisions 51 and 52. (d) Definition changed from July 1965. (e) Includes Singapore from 1 July 1964 to 30 September 1965.

EXPORTS, BY COUNTRY OF CONSIGNMENT: DIVISIONS OF THE AUSTRALIAN EXPORT  
COMMODITY CLASSIFICATION, 1964-65 TO 1966-67(a)—continued  
(\$'000)

Division No.	Description	Netherlands			New Zealand		
		1964-65	1965-66	1966-67	1964-65	1965-66	1966-67
00	Live animals . . . . .				252	317	221
01	Meat and meat preparations . . . . .	645	550	300	6	23	20
02	Dairy products and eggs . . . . .	6	6	432	11	58	75
03	Fish and fish preparations . . . . .	24	44	68		59	19
04	Cereal grains and cereal preparations . . . . .	3,419	2,107	11,817	9,847	8,259	6,511
05	Fruit and vegetables . . . . .	982	2,498	1,633	4,829	5,561	4,509
06	Sugar and sugar preparations and honey . . . . .	1		9	4,222	2,054	5,086
07	Coffee, tea, cocoa, spices and manufactures thereof . . . . .	25	11	9	85	111	105
08	Feeding-stuff for animals (except unmilled cereals) . . . . .		1		30	28	105
09	Miscellaneous preparations chiefly for food . . . . .	1	2	1	25	43	101
11	Beverages . . . . .		1	2	263	312	271
12	Tobacco and tobacco manufactures . . . . .	3			34	35	21
21	Hides, skins and fur skins, undressed . . . . .	1,721	1,219	1,321	11	168	303
22	Oil-seeds, oil nuts and oil kernels . . . . .	114			58	33	57
23	Crude rubber (including synthetic and reclaimed) . . . . .				127	242	133
24	Wood, timber and cork . . . . .	95	86	70	1,508	1,703	1,803
25	Pulp and waste paper . . . . .						
26	Textile fibres and their waste . . . . .	3,459	5,822	6,107	3,833	3,103	2,767
27	Crude fertilisers and crude minerals (except coal, petroleum and precious stones) . . . . .	42	167	117	1,400	1,281	1,051
28	Metalliferous ores and metal scrap . . . . .	1,895	3,345	2,786	79	128	63
29	Crude animal and vegetable materials, n.e.s. . . . .	267	276	456	346	371	312
32	Coal, coke and briquettes . . . . .	1		1	8,069	6,083	252
33	Petroleum and petroleum products . . . . .						7,689
34	Petroleum gases and other gaseous hydrocarbons . . . . .				40	44	30
41	Animal oils and fats . . . . .			1,038			10
42	Fixed vegetable oils and fats . . . . .						15
43	Animal and vegetable oils and fats, processed and waxes of animal or vegetable origin . . . . .	330	532	44	192	278	75
51	Chemical elements and compounds . . . . .	(b)	(b)	296	(b)	(b)	4,212
52	Mineral tar and crude chemicals from coal, petroleum and natural gas . . . . .	(b)	(b)		(b)	(b)	13
53	Dyeing, tanning and colouring materials . . . . .	119	198	112	632	722	1,061
54	Medicinal and pharmaceutical products . . . . .	19	57	448	4,663	7,178	7,070
55	Essential oils and perfume materials; toilet, polishing and cleansing preparations . . . . .	8	4	3	470	640	482
56	Fertilisers, manufactured . . . . .				57	40	44
57	Explosives and pyrotechnic products . . . . .	10	9		1,722	1,518	2,286
58	Plastic materials, regenerated cellulose and artificial resins . . . . .	(c)413	(c)227	1	(c)7,333	(c)8,858	3,349
59	Chemical materials and products, n.e.s. . . . .			29			1,706
61	Leather, leather manufactures, n.e.s., and dressed fur skins . . . . .	23	17	51	197	182	185
62	Rubber manufactures, n.e.s. . . . .	36	65		362	533	617
63	Wood and cork manufactures (except furniture) . . . . .	4	2	2	227	353	518
64	Paper, paperboard and manufactures thereof . . . . .		12		1,444	1,554	1,421
65	Textile yarn, fabrics, made-up articles and related products . . . . .	10	80	23	8,243	7,932	7,659
66	Non-metallic mineral manufactures, n.e.s. . . . .	38	15	9	1,449	1,231	1,047
67	Iron and steel . . . . .	3	4	1	25,988	30,281	34,073
68	Non-ferrous metals . . . . .	3,856	19,864	8,463	8,759	12,316	13,115
69	Manufactures of metal, n.e.s. . . . .	95		169			6,416
71	Machinery (except electric) . . . . .	99	419	184	45,637	49,130	11,121
72	Electric machinery, apparatus and appliances . . . . .	81		183			7,465
73	Transport equipment . . . . .	79		112			24,108
81	Sanitary, plumbing, heating and lighting fixtures and fittings . . . . .	22	10		203	362	240
82	Furniture . . . . .			2	35	32	11
83	Travel goods, handbags and similar articles . . . . .				28	24	13
84	Clothing and clothing accessories; articles of knitted or crocheted fabric . . . . .	2	18	68	186	191	270
85	Footwear, gaiters, and similar articles and parts thereof . . . . .			2	29	46	56
86	Professional, scientific and controlling instruments; photo- graphic and optical goods, watches and clocks . . . . .	29	77	93	3,123	3,547	3,494
89	Miscellaneous manufactured articles, n.e.s. . . . .	58	42	67	4,788	5,289	4,656
9A	Commodities and transactions of merchandise trade, not elsewhere classified . . . . .	59	35	24	1,609	1,936	1,965
	Total merchandise(d) . . . . .	18,094	37,821	36,548	152,449	164,190	170,280
9B	Commodities and transactions not included in merchandise trade(d) . . . . .	2,608	1,164	422	5,853	7,087	7,072
	Grand total . . . . .	20,702	38,985	36,970	158,302	171,277	177,352

(a) Figures for 1964-65 and 1965-66 are estimates. Estimates for those divisions which have been grouped are not available separately. (b) Included with Divisions 58 and 59. (c) Includes Divisions 51 and 52. (d) Definitions changed from July 1965.

EXPORTS, BY COUNTRY OF CONSIGNMENT: DIVISIONS OF THE AUSTRALIAN EXPORT  
COMMODITY CLASSIFICATION, 1964-65 TO 1966-67(a)—continued

(\$'000)

Division No.	Description	Pakistan			Papua and New Guinea		
		1964-65	1965-66	1966-67	1964-65	1965-66	1966-67
00	Live animals . . . . .	..	..	..	207	123	119
01	Meat and meat preparations . . . . .	6	8	3	4,376	5,416	5,493
02	Dairy products and eggs . . . . .	25	42	221	942	970	1,284
03	Fish and fish preparations . . . . .	..	..	..	90	126	207
04	Cereal grains and cereal preparations . . . . .	3,198	2,234	38,880	4,481	5,768	6,399
05	Fruit and vegetables . . . . .	1	1	2	640	1,187	911
06	Sugar and sugar preparations and honey . . . . .	11	24	12	889	930	1,016
07	Coffee, tea, cocoa, spices and manufactures thereof . . . . .	..	..	..	349	462	578
08	Feeding-stuff for animals (except unmilled cereals) . . . . .	..	..	..	253	329	383
09	Miscellaneous preparations chiefly for food . . . . .	4	1	..	365	489	561
11	Beverages . . . . .	3	3	3	930	1,019	1,181
12	Tobacco and tobacco manufactures . . . . .	1	..	..	1,168	1,209	1,361
21	Hides, skins and fur skins, undressed . . . . .	..	..	..	..	3	4
22	Oil-seeds, oil nuts and oil kernels . . . . .	..	..	..	..	..	..
23	Crude rubber (including synthetic and reclaimed) . . . . .	5	..	..	..	1	1
24	Wood, timber and cork . . . . .	..	..	602	52	58	88
25	Pulp and waste paper . . . . .	..	..	..	..	1	4
26	Textile fibres and their waste . . . . .	1,465	1,020	1,291	71	92	37
27	Crude fertilisers and crude minerals (except coal, petroleum and precious stones) . . . . .	..	..	17	132	88	152
28	Metalliferous ores and metal scrap . . . . .	25	..	567	11	9	10
29	Crude animal and vegetable materials, n.e.s. . . . .	16	2	1	20	39	108
32	Coal, coke and briquettes . . . . .	776	154	473	746	1,025	4
33	Petroleum and petroleum products . . . . .	..	..	..	47	57	700
34	Petroleum gases and other gaseous hydrocarbons . . . . .	..	..	..	..	..	3
41	Animal oils and fats . . . . .	..	..	1,840	..	..	287
42	Fixed vegetable oils and fats . . . . .	..	..	..	..	..	49
43	Animal and vegetable oils and fats, processed and waxes of animal or vegetable origin . . . . .	1,006	1,339	39	204	343	24
51	Chemical elements and compounds . . . . .	(b)	(b)	14	(b)	(b)	357
52	Mineral tar and crude chemicals from coal, petroleum and natural gas . . . . .	(b)	(b)	..	(b)	(b)	10
53	Dyeing, tanning and colouring materials . . . . .	3	4	13	505	736	776
54	Medicinal and pharmaceutical products . . . . .	30	8	28	546	524	465
55	Essential oils and perfume materials; toilet, polishing and cleansing preparations . . . . .	8	..	..	664	835	751
56	Fertilisers, manufactured . . . . .	..	..	..	9	20	13
57	Explosives and pyrotechnic products . . . . .	..	..	..	152	159	102
58	Plastic materials, regenerated cellulose and artificial resins . . . . .	..	..	..	..	..	313
59	Chemical materials and products, n.e.s. . . . .	(c)118	(c)1	17	(c)727	(c)786	492
61	Leather, leather manufactures, n.e.s., and dressed fur skins . . . . .	..	..	..	13	18	18
62	Rubber manufactures, n.e.s. . . . .	2	4	12	387	483	542
63	Wood and cork manufactures (except furniture) . . . . .	..	..	..	102	203	442
64	Paper, paperboard and manufactures thereof . . . . .	47	20	5	884	1,152	1,463
65	Textile yarn, fabrics, made-up articles and related products . . . . .	246	5	3	329	397	453
66	Non-metallic mineral manufactures, n.e.s. . . . .	13	58	14	872	1,431	1,899
67	Iron and steel . . . . .	78	648	5,572	2,217	2,694	2,702
68	Non-ferrous metals . . . . .	302	423	1,931	220	427	622
69	Manufactures of metal, n.e.s. . . . .	..	..	19	..	..	6,536
71	Machinery (except electric) . . . . .	..	..	719	..	..	8,441
72	Electric machinery, apparatus and appliances . . . . .	1,349	842	102	14,993	20,607	3,759
73	Transport equipment . . . . .	..	..	226	..	..	9,593
81	Sanitary, plumbing, heating and lighting fixtures and fittings . . . . .	1	..	..	186	242	347
82	Furniture . . . . .	..	1	..	210	295	355
83	Travel goods, handbags and similar articles . . . . .	..	..	..	21	15	25
84	Clothing and clothing accessories; articles of knitted or crocheted fabric . . . . .	..	3	3	497	561	818
85	Footwear, gaiters, and similar articles and parts thereof . . . . .	..	..	..	169	203	283
86	Professional, scientific and controlling instruments; photographic and optical goods, watches and clocks . . . . .	18	36	10	418	557	584
89	Miscellaneous manufactured articles, n.e.s. . . . .	18	8	6	1,117	1,096	1,227
9A	Commodities and transactions of merchandise trade, not elsewhere classified . . . . .	25	141	183	7,082	7,769	10,767
	Total merchandise(d) . . . . .	8,800	7,030	52,830	48,292	60,955	75,116
9B	Commodities and transactions not included in merchandise trade(d) . . . . .	474	353	313	10,225	11,767	11,778
	Grand total . . . . .	9,274	7,383	53,143	58,517	72,722	86,894

(a) Figures for 1964-65 and 1965-66 are estimates. Estimates for those divisions which have been grouped are not available separately. (b) Included with Divisions 58 and 59. (c) Includes Divisions 51 and 52. (d) Definition changed from July 1965.

EXPORTS, BY COUNTRY OF CONSIGNMENT: DIVISIONS OF THE AUSTRALIAN EXPORT  
COMMODITY CLASSIFICATION, 1964-65 TO 1966-67(a)—continued

(\$'000)

Division No.	Description	Philippines			Singapore		
		1964-65	1965-66	1966-67	1964-65	1965-66	1966-67
00	Live animals . . . . .	352	354	284	..	(e) 949	1,489
01	Meat and meat preparations . . . . .	1,346	1,631	899	..	2,919	3,666
02	Dairy products and eggs . . . . .	2,006	2,274	4,939	..	3,108	4,424
03	Fish and fish preparations . . . . .	1	..	..	..	96	269
04	Cereal grains and cereal preparations . . . . .	4,727	2,662	3,125	..	7,309	13,309
05	Fruit and vegetables . . . . .	483	417	610	..	2,646	4,738
06	Sugar and sugar preparations and honey . . . . .	..	..	4	..	97	551
07	Coffee, tea, cocoa, spices and manufactures thereof . . . . .	..	..	3	..	5	16
08	Feeding-stuff for animals (except unmilled cereals) . . . . .	424	557	527	..	396	635
09	Miscellaneous preparations chiefly for food . . . . .	91	162	3	..	642	63
11	Beverages . . . . .	13	7	5	..	185	192
12	Tobacco and tobacco manufactures . . . . .	..	2	..	..	1	..
21	Hides, skins and fur skins, undressed . . . . .	161	10	132	..	262	475
22	Oil-seeds, oil nuts and oil kernels . . . . .	..	..	..	..	..	..
23	Crude rubber (including synthetic and reclaimed) . . . . .	4	38	13	..	37	5
24	Wood, timber and cork . . . . .	..	..	..	..	3	4
25	Pulp and waste paper . . . . .	..	..	..	..	..	2
26	Textile fibres and their waste . . . . .	..	2	..	..	..	..
27	Crude fertilisers and crude minerals (except coal, petroleum and precious stones) . . . . .	169	183	231	..	109	228
28	Metalliferous ores and metal scrap . . . . .	23	30	19	..	..	14
29	Crude animal and vegetable materials, n.e.s. . . . .	4	20	25	..	17	150
32	Coal, coke and briquettes . . . . .	..	..	128	..	..	26
33	Petroleum and petroleum products . . . . .	137	604	533	..	3,123	6,007
34	Petroleum gases and other gaseous hydrocarbons . . . . .	..	..	..	..	1	..
41	Animal oils and fats . . . . .	..	..	466	..	..	111
42	Fixed vegetable oils and fats . . . . .	..	..	..	..	..	..
43	Animal and vegetable oils and fats, processed and waxes of animal or vegetable origin . . . . .	271	352	52	..	117	9
51	Chemical elements and compounds . . . . .	(b)	(b)	863	..	(b)	173
52	Mineral tar and crude chemicals from coal, petroleum and natural gas . . . . .	(b)	(b)	..	..	(b)	..
53	Dyeing, tanning and colouring materials . . . . .	129	123	152	..	148	262
54	Medicinal and pharmaceutical products . . . . .	334	294	182	..	303	234
55	Essential oils and perfume materials; toilet, polishing and cleansing preparations . . . . .	45	37	42	..	284	247
56	Fertilisers, manufactured . . . . .	11	..	..	..	2	1
57	Explosives and pyrotechnic products . . . . .	19	14	3	..	736	49
58	Plastic materials, regenerated cellulose and artificial resins . . . . .	..	..	37	..	..	86
59	Chemical materials and products, n.e.s. . . . .	(c) 625	(c) 706	163	..	(c) 187	122
61	Leather, leather manufactures, n.e.s., and dressed fur skins . . . . .	22	44	75	..	326	250
62	Rubber manufactures, n.e.s. . . . .	9	28	44	..	18	38
63	Wood and cork manufactures (except furniture) . . . . .	1	..	1	..	45	46
64	Paper, paperboard and manufactures thereof . . . . .	491	202	255	..	616	875
65	Textile yarn, fabrics, made-up articles and related products . . . . .	69	112	187	..	437	302
66	Non-metallic mineral manufactures, n.e.s. . . . .	170	179	392	..	134	222
67	Iron and steel . . . . .	1,182	3,300	8,906	..	787	2,156
68	Non-ferrous metals . . . . .	2,273	3,322	2,922	..	558	586
69	Manufactures of metal, n.e.s. . . . .	..	..	946	..	..	894
71	Machinery (except electric) . . . . .	..	..	2,333	..	2,973	2,066
72	Electric machinery, apparatus and appliances . . . . .	4,585	5,474	527	..	..	997
73	Transport equipment . . . . .	..	..	1,620	..	..	1,385
81	Sanitary, plumbing, heating and lighting fixtures and fittings . . . . .	12	17	21	..	97	161
82	Furniture . . . . .	36	41	14	..	63	28
83	Travel goods, handbags and similar articles . . . . .	..	..	..	..	3	6
84	Clothing and clothing accessories; articles of knitted or crocheted fabric . . . . .	29	21	26	..	119	270
85	Footwear, gaiters, and similar articles and parts therefor . . . . .	..	..	..	..	1	..
86	Professional, scientific and controlling instruments; photo- graphic and optical goods, watches and clocks . . . . .	129	65	256	..	92	316
89	Miscellaneous manufactured articles, n.e.s. . . . .	154	190	386	..	725	888
9A	Commodities and transactions of merchandise trade, not elsewhere classified . . . . .	69	95	93	..	258	976
	Total merchandise(d) . . . . .	20,607	23,568	32,446	..	30,936	50,022
9B	Commodities and transactions not included in merchandise trade(d) . . . . .	313	422	355	..	3,068	6,464
	Grand total . . . . .	20,920	23,990	32,801	..	34,004	56,486

(a) Figures for 1964-65 and 1965-66 are estimates. Estimates for those divisions which have been grouped are not available separately. (b) Included with Divisions 58 and 59. (c) Includes Divisions 51 and 52. (d) Definition changed from July 1965. (e) Included in Malaysia from 1 July 1964 to 30 September 1965.



EXPORTS, BY COUNTRY OF CONSIGNMENT: DIVISIONS OF THE AUSTRALIAN EXPORT  
COMMODITY CLASSIFICATION, 1964-65 TO 1966-67(a)—continued

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Division No.	Description	South Africa			United Kingdom		
		1964-65	1965-66	1966-67	1964-65	1965-66	1966-67
00	Live animals . . . . .	1	7	5		1	1
01	Meat and meat preparations . . . . .	41	20	20	98,557	79,949	52,576
02	Dairy products and eggs . . . . .	1,873	833	736	61,739	47,638	45,388
03	Fish and fish preparations . . . . .	284	205	139	185	81	50
04	Cereal grains and cereal preparations . . . . .	489	4,263	18,184	33,195	38,267	27,148
05	Fruit and vegetables . . . . .	159	140	360	47,049	53,828	47,482
06	Sugar and sugar preparations and honey . . . . .	2	1	3	43,480	44,976	41,687
07	Coffee, tea, cocoa, spices and manufactures thereof . . . . .	..	47	25	15	4	17
08	Feeding-stuff for animals (except unmilled cereals) . . . . .	2	..	..	400	122	404
09	Miscellaneous preparations chiefly for food . . . . .	9	6	49	825	1,670	242
11	Beverages . . . . .	25	9	5	2,254	1,983	1,571
12	Tobacco and tobacco manufactures . . . . .	1	1	..	44	1	110
21	Hides, skins and fur skins, undressed . . . . .	1,065	843	1,204	5,345	3,757	3,488
22	Oil-seeds, oil nuts and oil kernels . . . . .	..	..	..	261	1	1
23	Crude rubber (including synthetic and reclaimed) . . . . .	117	134	65	11	..	12
24	Wood, timber and cork . . . . .	1,263	239	692	396	538	684
25	Pulp and waste paper . . . . .	2,775	1,532	1,945	110,134	80,143	85,325
26	Textile fibres and their waste . . . . .	..	..	..	..	..	..
27	Crude fertilisers and crude minerals (except coal, petroleum and precious stones) . . . . .	14	15	6	183	208	163
28	Metalliferous ores and metal scrap . . . . .	774	683	1,167	21,051	22,028	19,411
29	Crude animal and vegetable materials, n.e.s. . . . .	114	102	162	3,534	3,700	4,390
32	Coal, coke and briquettes . . . . .	2,262	1,252	1,477	808	413	2,273
33	Petroleum and petroleum products . . . . .	..	..	2,308	..	..	3
34	Petroleum gases and other gaseous hydrocarbons . . . . .	..	..	9	4,256	1,609	1,427
41	Animal oils and fats . . . . .	2,252	1,471	..	..	..	..
42	Fixed vegetable oils and fats . . . . .	..	..	..	..	..	..
43	Animal and vegetable oils and fats, processed and waxes of animal or vegetable origin . . . . .	(b)	(b)	165	(b)	(b)	246
51	Chemical elements and compounds . . . . .	(b)	(b)	..	(b)	(b)	751
52	Mineral tar and crude chemicals from coal, petroleum and natural gas . . . . .	(b)	(b)	..	(b)	(b)	..
53	Dyeing, tanning and colouring materials . . . . .	1	30	91	61	36	154
54	Medicinal and pharmaceutical products . . . . .	56	48	436	469	465	306
55	Essential oils and perfume materials; toilet, polishing and cleansing preparations . . . . .	15	20	24	73	54	55
56	Fertilisers, manufactured . . . . .	..	..	..	..	..	..
57	Explosives and pyrotechnic products . . . . .	10	24	..	7	84	35
58	Plastic materials, regenerated cellulose and artificial resins . . . . .	(c)122	(c)161	129	(c)4,567	(c)3,991	475
59	Chemical materials and products, n.e.s. . . . .	..	..	84	..	..	2,461
61	Leather, leather manufactures, n.e.s., and dressed fur skins . . . . .	460	80	94	4,185	5,197	3,553
62	Rubber manufactures, n.e.s. . . . .	46	45	31	570	588	47
63	Wood and cork manufactures (except furniture) . . . . .	59	64	44	339	301	535
64	Paper, paperboard and manufactures thereof . . . . .	127	79	311	420	260	281
65	Textile yarn, fabrics, made-up articles and related products . . . . .	245	228	168	271	852	300
66	Non-metallic mineral manufactures, n.e.s. . . . .	351	133	11	444	878	799
67	Iron and steel . . . . .	149	208	261	1,423	2,103	6,056
68	Non-ferrous metals . . . . .	151	91	1,045	48,329	55,482	33,753
69	Manufactures of metal, n.e.s. . . . .	..	..	905	..	..	3,166
71	Machinery (except electric) . . . . .	8,141	7,832	3,396	7,095	7,675	3,231
72	Electric machinery, apparatus and appliances . . . . .	..	..	1,051	..	..	1,693
73	Transport equipment . . . . .	..	..	4,520	..	..	1,137
81	Sanitary, plumbing, heating and lighting fixtures and fittings . . . . .	19	33	11	45	46	36
82	Furniture . . . . .	58	48	5	82	76	14
83	Travel goods, handbags and similar articles . . . . .	5	1	2	4	2	1
84	Clothing and clothing accessories; articles of knitted or crocheted fabric . . . . .	84	158	148	89	165	661
85	Footwear, gaiters, and similar articles and parts thereof . . . . .	1	2	1	21	5	1
86	Professional, scientific and controlling instruments; photo- graphic and optical goods, watches and clocks . . . . .	219	307	481	2,530	2,275	1,938
89	Miscellaneous manufactured articles, n.e.s. . . . .	525	431	540	3,071	4,024	3,392
9A	Commodities and transactions of merchandise trade, not elsewhere classified . . . . .	100	88	77	1,817	520	1,297
	Total merchandise(d) . . . . .	24,466	21,911	42,593	509,634	465,999	400,337
9B	Commodities and transactions not included in merchandise trade(d) . . . . .	299	293	481	6,592	7,359	4,621
	Grand total . . . . .	24,765	22,204	43,074	516,226	473,358	404,958

(a) Figures for 1964-65 and 1965-66 are estimates. Estimates for those divisions which have been grouped are not available separately. (b) Included with Divisions 58 and 59. (c) Includes Divisions 51 and 52. (d) Definition changed from July 1965.

EXPORTS, BY COUNTRY OF CONSIGNMENT: DIVISIONS OF THE AUSTRALIAN EXPORT  
COMMODITY CLASSIFICATION, 1964-65 TO 1966-67(a)—continued

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Division No.	Description	United States of America			U.S.S.R.		
		1964-65	1965-66	1966-67	1964-65	1965-66	1966-67
00	Live animals . . . . .	94	440	627	..	..	..
01	Meat and meat preparations . . . . .	101,326	133,825	160,483	21	..	..
02	Dairy products and eggs . . . . .	1,086	1,339	1,643	..	..	..
03	Fish and fish preparations . . . . .	14,133	18,876	17,428	..	..	..
04	Cereal grains and cereal preparations . . . . .	38	56	182	44,648	29,245	..
05	Fruit and vegetables . . . . .	422	626	425	..	..	..
06	Sugar and sugar preparations and honey . . . . .	19,108	20,552	21,480	..	..	..
07	Coffee, tea, cocoa, spices and manufactures thereof . . . . .	34	45	69	..	..	..
08	Feeding-stuff for animals (except unmilled cereals) . . . . .	36	85	19	..	..	..
09	Miscellaneous preparations chiefly for food . . . . .	77	728	390	..	..	..
11	Beverages . . . . .	48	63	47	..	..	..
12	Tobacco and tobacco manufactures . . . . .	2	13	16	..	..	..
21	Hides, skins and fur skins, undressed . . . . .	2,777	1,860	1,704	..	..	..
22	Oil-seeds, oil nuts and oil kernels . . . . .	1	1	14	..	..	..
23	Crude rubber (including synthetic and reclaimed) . . . . .	25	5	7	..	..	..
24	Wood, timber and cork . . . . .	205	181	163	..	5	..
25	Pulp and waste paper . . . . .	..	..	..	..	..	..
26	Textile fibres and their waste . . . . .	62,767	69,559	50,981	31,681	18,588	20,305
27	Crude fertilisers and crude minerals (except coal, petroleum and precious stones) . . . . .	247	198	160	..	..	..
28	Metalliferous ores and metal scrap . . . . .	20,662	22,195	22,572	24	..	..
29	Crude animal and vegetable materials, n.e.s. . . . .	2,955	3,169	2,612	..	..	..
32	Coal, coke and briquettes . . . . .	..	..	..	..	..	..
33	Petroleum and petroleum products . . . . .	15	2	3	..	..	..
34	Petroleum gases and other gaseous hydrocarbons . . . . .	..	..	..	..	..	..
41	Animal oils and fats . . . . .	..	..	270	..	..	..
42	Fixed vegetable oils and fats . . . . .	..	..	..	..	..	..
43	Animal and vegetable oils and fats, processed and waxes of animal or vegetable origin . . . . .	448	178	..	..	..	..
51	Chemical elements and compounds . . . . .	(b)	(b)	6,074	(b)	(b)	..
52	Mineral tar and crude chemicals from coal, petroleum and natural gas . . . . .	(b)	(b)	191	(b)	(b)	..
53	Dyeing, tanning and colouring materials . . . . .	35	108	805	..	..	..
54	Medicinal and pharmaceutical products . . . . .	410	943	305	..	..	..
55	Essential oils and perfume materials; toilet, polishing and cleansing preparations . . . . .	139	185	185	..	..	..
56	Fertilisers, manufactured . . . . .	94	10	..	..	..	..
57	Explosives and pyrotechnic products . . . . .	..	..	..	..	..	..
58	Plastic materials, regenerated cellulose and artificial resins . . . . .	(c)3,970	(c)7,010	21	(c)	(c)	..
59	Chemical materials and products, n.e.s. . . . .	..	..	..	..	..	..
61	Leather, leather manufactures, n.e.s., and dressed fur skins . . . . .	249	519	358	..	..	..
62	Rubber manufactures, n.e.s. . . . .	202	131	114	..	..	..
63	Wood and cork manufactures (except furniture) . . . . .	332	251	249	..	..	..
64	Paper, paperboard and manufactures thereof . . . . .	407	351	236	..	..	..
65	Textile yarn, fabrics, made-up articles and related products . . . . .	336	370	236	..	..	..
66	Non-metallic mineral manufactures, n.e.s. . . . .	665	1,174	2,084	..	..	..
67	Iron and steel . . . . .	3,402	5,383	13,535	..	..	..
68	Non-ferrous metals . . . . .	13,544	27,136	21,595	..	..	..
69	Manufactures of metal, n.e.s. . . . .	..	..	1,543	..	..	..
71	Machinery (except electric) . . . . .	..	..	3,908	..	..	3
72	Electric machinery, apparatus and appliances . . . . .	4,353	6,951	1,599	..	..	..
73	Transport equipment . . . . .	..	..	3,266	..	..	..
81	Sanitary, plumbing, heating and lighting fixtures and fittings . . . . .	53	99	41	..	..	..
82	Furniture . . . . .	49	8	6	..	..	..
83	Travel goods, handbags and similar articles . . . . .	4	9	6	..	..	..
84	Clothing and clothing accessories; articles of knitted or crocheted fabric . . . . .	532	627	663	..	..	..
85	Footwear, gaiters, and similar articles and parts therefor . . . . .	7	13	7	..	..	..
86	Professional, scientific and controlling instruments; photo- graphic and optical goods, watches and clocks . . . . .	685	682	1,500	16	1	6
89	Miscellaneous manufactured articles, n.e.s. . . . .	878	952	2,131	12	3	1
9A	Commodities and transactions of merchandise trade, not elsewhere classified . . . . .	1,074	2,793	5,933	25	28	11
	Total merchandise(d) . . . . .	257,924	329,699	351,648	76,426	47,871	20,326
9B	Commodities and transactions not included in merchandise trade(d) . . . . .	6,269	8,689	7,740	15	21	4
	Grand total . . . . .	264,193	338,388	359,388	76,441	47,892	20,330

(a) Figures for 1964-65 and 1965-66 are estimates. Estimates for those divisions which have been grouped are not available separately. (b) Included with Divisions 58 and 59. (c) Includes Divisions 51 and 52. (d) Definitions changed from July 1965.

**Imports, by country of origin and by description**

The following table shows details of imports from principal countries, classified according to divisions of the Australian Import Commodity Classification, for the years 1964-65 to 1966-67.

**IMPORTS, BY COUNTRY OF ORIGIN: DIVISIONS OF THE AUSTRALIAN IMPORT  
COMMODITY CLASSIFICATION, 1964-65 TO 1966-67(a)**

(\$'000)

Division No.	Description	Belgium-Luxembourg			Canada		
		1964-65	1965-66	1966-67	1964-65	1965-66	1966-67
00	Live animals . . . . .	..	..	..	8	52	80
01	Meat and meat preparations . . . . .	..	..	..	2	3	1
02	Dairy products and eggs . . . . .	1	4	4	1,934	2,291	2,714
03	Fish and fish preparations . . . . .	11	3	10	2	37	191
04	Cereal grains and cereal preparations . . . . .	29	26	22	206	485	339
05	Fruit and vegetables . . . . .	216	129	15	2	3	3
06	Sugar and sugar preparations and honey . . . . .	61	69	39	..	124	5
07	Coffee, tea, cocoa, spices and manufactures thereof . . . . .	9	2	2	61	66	21
08	Feeding-stuff for animals (except unmilled cereals) . . . . .	..	..	..	32	32	44
09	Miscellaneous preparations chiefly for food . . . . .	1	16	9	207	118	130
11	Beverages . . . . .	..	..	..	56	60	111
12	Tobacco and tobacco manufactures . . . . .	39	12	16	32	567	1
21	Hides, skins and fur skins, undressed . . . . .	..	..	11	2,366	1,409	1,459
22	Oil-seeds, oil nuts and oil kernels . . . . .	..	..	..	9,323	11,779	11,923
23	Crude rubber (including synthetic and reclaimed) . . . . .	180	64	114	4,256	6,225	4,537
24	Wood, timber and cork . . . . .	4	6	15	1,479	1,157	895
25	Pulp and waste paper . . . . .	..	..	..	..	..	..
26	Textile fibres and their waste . . . . .	1,325	1,021	881	6,912	9,027	11,393
27	Crude fertilisers and crude minerals (except coal, petroleum and precious stones) . . . . .	30	18	34	1,877	864	841
28	Metalliferous ores and metal scrap . . . . .	..	..	..	328	257	281
29	Crude animal and vegetable materials, n.e.s. . . . .	48	32	71	..	..	..
32	Coal, coke and briquettes . . . . .	10	24	9	2	13	6
33	Petroleum and petroleum products . . . . .	..	..	..	1	..	..
34	Petroleum gases and other gaseous hydrocarbons . . . . .	..	..	..	..	..	..
41	Animal oils and fats . . . . .	..	..	..	..	..	..
42	Fixed vegetable oils and fats . . . . .	3	..	..	107	..	..
43	Animal and vegetable oils and fats, processed and waxes of animal or vegetable origin . . . . .	..	1	1	..	131	114
51	Chemical elements and compounds . . . . .	(b)	188	644	(b)	3,275	3,913
52	Mineral tar and crude chemicals from coal, petroleum and natural gas . . . . .	(b)	..	..	(b)	..	..
53	Dyeing, tanning and colouring materials . . . . .	41	27	28	32	107	148
54	Medicinal and pharmaceutical products . . . . .	27	26	11	123	231	410
55	Essential oils and perfume materials; toilet, polishing and cleansing preparations . . . . .	22	26	28	585	383	1,133
56	Fertilisers, manufactured . . . . .	199	401	107	365	1,035	1,038
57	Explosives and pyrotechnic products . . . . .	9	9	47	128	103	63
58	Plastic materials, regenerated cellulose and artificial resins . . . . .	(c)487	131	120	(c)9,955	3,079	3,572
59	Chemical materials and products, n.e.s. . . . .	78	95	95	333	291	..
61	Leather, leather manufactures, n.e.s., and dressed fur skins . . . . .	4	12	20	68	46	63
62	Rubber manufactures, n.e.s. . . . .	361	254	70	194	291	296
63	Wood and cork manufactures (except furniture) . . . . .	12	3	23	304	350	393
64	Paper, paperboard and manufactures thereof . . . . .	629	398	687	18,140	16,805	20,927
65	Textile yarn, fabrics, made-up articles and related products . . . . .	3,539	2,535	2,723	3,125	2,950	3,202
66	Non-metallic mineral manufactures, n.e.s. . . . .	3,892	3,183	4,120	336	437	512
67	Iron and steel . . . . .	3,161	2,151	1,011	9,587	6,309	5,216
68	Non-ferrous metals . . . . .	4,900	77	693	2,517	2,096	2,563
69	Manufactures of metal, n.e.s. . . . .	..	266	422	..	4,078	3,986
71	Machinery (except electric) . . . . .	..	2,639	2,387	..	9,500	12,712
72	Electric machinery, apparatus and appliances . . . . .	3,657	1,290	4,176	34,998	2,922	4,398
73	Transport equipment . . . . .	..	34	273	..	12,561	10,409
81	Sanitary, plumbing, heating and lighting fixtures and fittings . . . . .	4	35	8	35	52	63
82	Furniture . . . . .	..	..	1	104	186	53
83	Travel goods, handbags and similar articles . . . . .	9	..	..	37	49	102
84	Clothing and clothing accessories; articles of knitted or crocheted fabric . . . . .	10	11	17	706	773	585
85	Footwear, gaiters, and similar articles and parts thereof . . . . .	4	2	1	7	12	16
86	Professional, scientific and controlling instruments; photographic and optical goods, watches and clocks . . . . .	474	496	535	1,293	1,613	1,327
89	Miscellaneous manufactured articles, n.e.s. . . . .	347	327	208	1,378	1,011	1,247
9A	Commodities and transactions of merchandise trade, not elsewhere classified . . . . .	484	464	515	3,112	2,294	3,084
	<i>Total merchandise(d)</i> . . . . .	24,240	16,491	20,224	116,638	107,647	116,907
9B	Commodities and transactions not included in merchandise trade(d) . . . . .	640	39	17	368	325	292
	<b>Grand total</b> . . . . .	24,880	16,530	20,241	117,006	107,972	117,199

(a) Figures for 1964-65 and 1965-66 are estimates. Estimates for those divisions which have been grouped are not available separately. (b) Included with Divisions 58 and 59. (c) Includes Divisions 51 and 52. (d) Definition changed from July 1965.

IMPORTS, BY COUNTRY OF ORIGIN: DIVISIONS OF THE AUSTRALIAN IMPORT  
COMMODITY CLASSIFICATION, 1964-65 TO 1966-67(a)—continued  
(\$'000)

Division No.	Description	Ceylon			China (mainland)		
		1964-65	1965-66	1966-67	1964-65	1965-66	1966-67
00	Live animals . . . . .	..	..	..	4	20	46
01	Meat and meat preparations . . . . .	..	..	..	..	..	..
02	Dairy products and eggs . . . . .	..	..	..	..	..	..
03	Fish and fish preparations . . . . .	2	..	..	360	866	763
04	Cereal grains and cereal preparations . . . . .	..	..	..	10	15	22
05	Fruit and vegetables . . . . .	325	392	334	322	391	473
06	Sugar and sugar preparations and honey . . . . .	..	..	..	5	11	27
07	Coffee, tea, cocoa, spices and manufactures thereof . . . . .	15,489	16,049	14,050	375	670	808
08	Feeding-stuff for animals (except unmilled cereals) . . . . .	..	..	..	6	13	..
09	Miscellaneous preparations chiefly for food . . . . .	1	..	1	9	13	73
11	Beverages . . . . .	..	..	..	1	1	1
12	Tobacco and tobacco manufactures . . . . .	..	..	..	..	..	1
21	Hides, skins and fur skins, undressed . . . . .	..	..	..	332	247	63
22	Oil-seeds, oil nuts and oil kernels . . . . .	..	..	..	550	210	76
23	Crude rubber (including synthetic and reclaimed) . . . . .	48	40	51	..	..	..
24	Wood, timber and cork . . . . .	..	..	1	..	..	..
25	Pulp and waste paper . . . . .	..	..	..	..	..	..
26	Textile fibres and their waste . . . . .	643	416	393	990	601	509
27	Crude fertilisers and crude minerals (except coal, petroleum and precious stones) . . . . .	78	59	63	270	130	183
28	Metalliferous ores and metal scrap . . . . .	..	..	..	68	80	130
29	Crude animal and vegetable materials, n.e.s. . . . .	121	107	88	1,699	1,357	1,442
32	Coal, coke and briquettes . . . . .	..	..	1	..	3	34
33	Petroleum and petroleum products . . . . .	..	..	..	..	..	..
34	Petroleum gases and other gaseous hydrocarbons . . . . .	..	..	..	..	..	..
41	Animal oils and fats . . . . .	..	..	..	..	..	..
42	Fixed vegetable oils and fats . . . . .	21	17	14	480	495	1,275
43	Animal and vegetable oils and fats, processed and waxes of animal or vegetable origin . . . . .	..	..	..	..	2	..
51	Chemical elements and compounds . . . . .	(b)	2	..	(b)	523	677
52	Mineral tar and crude chemicals from coal, petroleum and natural gas . . . . .	(b)	..	..	(b)	..	..
53	Dyeing, tanning and colouring materials . . . . .	..	..	..	203	16	18
54	Medicinal and pharmaceutical products . . . . .	..	..	..	15	34	23
55	Essential oils and perfume materials; toilet, polishing and cleansing preparations . . . . .	12	10	4	155	184	184
56	Fertilisers, manufactured . . . . .	..	..	..	142	136	190
57	Explosives and pyrotechnic products . . . . .	..	..	..	..	..	..
58	Plastic materials, regenerated cellulose and artificial resins . . . . .	..	..	..	..	1	..
59	Chemical materials and products, n.e.s. . . . .	(c)12	1	1	(c)368	256	203
61	Leather, leather manufactures, n.e.s., and dressed fur skins . . . . .	..	..	16	..	8	52
62	Rubber manufactures, n.e.s. . . . .	..	..	..	17	32	23
63	Wood and cork manufactures (except furniture) . . . . .	..	..	16	59	201	195
64	Paper, paperboard and manufactures thereof . . . . .	..	..	..	901	747	460
65	Textile yarn, fabrics, made-up articles and related products . . . . .	45	24	22	11,074	10,718	12,523
66	Non-metallic mineral manufactures, n.e.s. . . . .	26	60	114	313	746	1,190
67	Iron and steel . . . . .	..	..	..	10	36	45
68	Non-ferrous metals . . . . .	4	..	..	280	401	96
69	Manufactures of metal, n.e.s. . . . .	..	..	..	..	242	276
71	Machinery (except electric) . . . . .	..	..	..	243	175	93
72	Electric machinery, apparatus and appliances . . . . .	..	..	..	..	16	20
73	Transport equipment . . . . .	..	..	..	..	2	11
81	Sanitary, plumbing, heating and lighting fixtures and fittings . . . . .	..	..	..	17	18	24
82	Furniture . . . . .	..	..	..	19	15	24
83	Travel goods, handbags and similar articles . . . . .	..	..	..	19	22	61
84	Clothing and clothing accessories; articles of knitted or crocheted fabric . . . . .	5	..	..	1,332	1,175	1,302
85	Footwear, gaiters, and similar articles and parts therefor . . . . .	1	..	..	720	626	228
86	Professional, scientific and controlling instruments; photographic and optical goods, watches and clocks . . . . .	..	..	..	471	491	446
89	Miscellaneous manufactured articles, n.e.s. . . . .	22	2	1	564	999	1,103
9A	Commodities and transactions of merchandise trade, not elsewhere classified . . . . .	399	381	367	449	520	722
	Total merchandise(d) . . . . .	17,255	17,560	15,521	22,853	23,452	26,116
9B	Commodities and transactions not included in merchandise trade(d) . . . . .	22	3	14	9	8	32
	Grand total . . . . .	17,277	17,563	15,535	22,862	23,460	26,148

(a) Figures for 1964-65 and 1965-66 are estimates. Estimates for those divisions which have been grouped are not available separately. (b) Included with Divisions 58 and 59. (c) Includes Divisions 51 and 52. (d) Definition changed from July 1965.

IMPORTS, BY COUNTRY OF ORIGIN: DIVISIONS OF THE AUSTRALIAN IMPORT  
COMMODITY CLASSIFICATION, 1964-65 TO 1966-67(a)—continued  
(\$'000)

Division No.	Description	France			Germany, Federal Republic of		
		1964-65	1965-66	1966-67	1964-65	1965-66	1966-67
00	Live animals . . . . .	9	6	14	5	..	..
01	Meat and meat preparations . . . . .	21	34	57	49	47	69
02	Dairy products and eggs . . . . .	18	21	14	617	959	445
03	Fish and fish preparations . . . . .	12	8	15	68	88	86
04	Cereal grains and cereal preparations . . . . .	109	155	163	118	176	142
05	Fruit and vegetables . . . . .	64	13	7	12	10	10
06	Sugar and sugar preparations and honey . . . . .	17	17	20	138	49	57
07	Coffee, tea, cocoa, spices and manufactures thereof . . . . .	128	93	201	..	4	14
08	Feeding-stuff for animals (except unmilled cereals) . . . . .	4	38	25	48	43	44
09	Miscellaneous preparations chiefly for food . . . . .	933	945	1,018	100	107	148
11	Beverages . . . . .	12	15	23	12	8	14
12	Tobacco and tobacco manufactures . . . . .	36	8	34	..	5	..
21	Hides, skins and fur skins, undressed . . . . .	..	..	..	..	..	..
22	Oil-seeds, oil nuts and oil kernels . . . . .	..	..	..	..	..	..
23	Crude rubber (including synthetic and reclaimed) . . . . .	531	532	968	73	88	246
24	Wood, timber and cork . . . . .	10	15	32	15	12	26
25	Pulp and waste paper . . . . .	..	..	..	1	..	1
26	Textile fibres and their waste . . . . .	238	536	102	1,096	851	930
27	Crude fertilisers and crude minerals (except coal, petroleum and precious stones) . . . . .	37	163	168	362	95	175
28	Metalliferous ores and metal scrap . . . . .	40	..	3	15	10	3
29	Crude animal and vegetable materials, n.e.s. . . . .	41	91	117	239	120	193
32	Coal, coke and briquettes . . . . .	628	133	84	118	262	83
33	Petroleum and petroleum products . . . . .	5	1	3	..	233	207
34	Petroleum gases and other gaseous hydrocarbons . . . . .	..	..	..	..	..	..
41	Animal oils and fats . . . . .	..	..	..	..	4	2
42	Fixed vegetable oils and fats . . . . .	34	22	9	498	849	430
43	Animal and vegetable oils and fats, processed and waxes of animal or vegetable origin . . . . .	..	1	..	..	22	36
51	Chemical elements and compounds . . . . .	(b)	2,019	2,741	(b)	7,748	8,814
52	Mineral tar and crude chemicals from coal, petroleum and natural gas . . . . .	(b)	..	..	(b)	..	39
53	Dyeing, tanning and colouring materials . . . . .	247	241	217	1,879	2,467	3,291
54	Medicinal and pharmaceutical products . . . . .	505	412	325	5,046	7,286	5,035
55	Essential oils and perfume materials; toilet, polishing and cleansing preparations . . . . .	963	986	1,015	694	681	864
56	Fertilisers, manufactured . . . . .	653	392	134	1,814	996	1,338
57	Explosives and pyrotechnic products . . . . .	68	20	124	82	69	73
58	Plastic materials, regenerated cellulose and artificial resins . . . . .	(c)5,148	2,234	1,627	(c)17,771	8,847	7,726
59	Chemical materials and products, n.e.s. . . . .	468	688	688	..	1,787	2,704
61	Leather, leather manufactures, n.e.s., and dressed fur skins . . . . .	1,329	847	759	236	219	470
62	Rubber manufactures, n.e.s. . . . .	839	1,013	1,594	761	1,026	1,554
63	Wood and cork manufactures (except furniture) . . . . .	63	41	56	415	394	418
64	Paper, paperboard and manufactures thereof . . . . .	376	209	457	1,777	1,846	1,816
65	Textile yarn, fabrics, made-up articles and related products . . . . .	3,799	3,736	4,379	5,900	5,254	5,580
66	Non-metallic mineral manufactures, n.e.s. . . . .	1,560	1,656	1,775	2,474	3,424	3,747
67	Iron and steel . . . . .	1,303	1,385	659	2,117	1,961	1,404
68	Non-ferrous metals . . . . .	846	258	446	6,393	1,010	1,442
69	Manufactures of metal, n.e.s. . . . .	..	625	1,002	..	5,666	5,157
71	Machinery (except electric) . . . . .	..	20,009	25,869	..	56,357	51,934
72	Electric machinery, apparatus and appliances . . . . .	40,763	6,679	8,146	88,936	17,506	15,290
73	Transport equipment . . . . .	..	26,969	26,194	..	18,311	15,167
81	Sanitary, plumbing, heating and lighting fixtures and fittings . . . . .	122	23	26	570	242	251
82	Furniture . . . . .	28	13	11	62	117	203
83	Travel goods, handbags and similar articles . . . . .	22	19	24	426	133	152
84	Clothing and clothing accessories; articles of knitted or crocheted fabric . . . . .	545	649	644	423	380	349
85	Footwear, gaiters, and similar articles and parts thereof . . . . .	271	313	307	82	99	99
86	Professional, scientific and controlling instruments; photographic and optical goods, watches and clocks . . . . .	843	1,314	986	8,142	9,923	9,207
89	Miscellaneous manufactured articles, n.e.s. . . . .	1,399	1,360	1,599	5,453	5,461	6,035
9A	Commodities and transactions of merchandise trade, not elsewhere classified . . . . .	1,531	14,187	8,665	3,834	4,160	3,896
	Total merchandise(d) . . . . .	66,152	90,924	93,548	158,871	167,417	157,420
9B	Commodities and transactions not included in merchandise trade(d) . . . . .	751	746	590	2,143	809	1,119
	Grand total . . . . .	66,903	91,670	94,138	161,014	168,226	158,539

(a) Figures for 1964-65 and 1965-66 are estimates. Estimates for those divisions which have been grouped are not available separately. (b) Included with Divisions 58 and 59. (c) Includes Divisions 51 and 52. (d) Definition changed from July 1965.

IMPORTS, BY COUNTRY OF ORIGIN: DIVISIONS OF THE AUSTRALIAN IMPORT  
COMMODITY CLASSIFICATION, 1964-65 TO 1966-67(a)—continued

(\$'000)

Division No.	Description	Hong Kong			India		
		1964-65	1965-66	1966-67	1964-65	1965-66	1966-67
00	Live animals . . . . .	..	..	1	1	..	1
01	Meat and meat preparations . . . . .	..	..	..	..	..	..
02	Dairy products and eggs . . . . .	..	..	..	..	..	..
03	Fish and fish preparations . . . . .	265	422	897	535	891	886
04	Cereal grains and cereal preparations . . . . .	31	38	37	..	8	7
05	Fruit and vegetables . . . . .	97	145	132	2,224	1,496	2,264
06	Sugar and sugar preparations and honey . . . . .	14	6	21	..	..	..
07	Coffee, tea, cocoa, spices and manufactures thereof . . . . .	40	8	10	5,224	4,501	5,605
08	Feeding-stuff for animals (except unmilled cereals) . . . . .	..	..	..	29	..	3
09	Miscellaneous preparations chiefly for food . . . . .	94	93	102	100	1	1
11	Beverages . . . . .	6	6	7	..	..	..
12	Tobacco and tobacco manufactures . . . . .	..	..	..	43	3	17
21	Hides, skins and fur skins, undressed . . . . .	..	2	..	288	119	41
22	Oil-seeds, oil nuts and oil kernels . . . . .	26	19	17	3	..	..
23	Crude rubber (including synthetic and reclaimed) . . . . .	..	..	..	..	..	..
24	Wood, timber and cork . . . . .	244	90	96	1	1	7
25	Pulp and waste paper . . . . .	..	..	..	..	..	..
26	Textile fibres and their waste . . . . .	49	141	150	978	694	703
27	Crude fertilisers and crude minerals (except coal, petroleum and precious stones) . . . . .	14	..	..	347	521	277
28	Metalliferous ores and metal scrap . . . . .	..	..	..	..	..	..
29	Crude animal and vegetable materials, n.e.s. . . . .	192	250	316	571	543	490
32	Coal, coke and briquettes . . . . .	..	..	1	113	420	157
33	Petroleum and petroleum products . . . . .	..	548	..	..	..	..
34	Petroleum gases and other gaseous hydrocarbons . . . . .	..	..	..	..	..	..
41	Animal oils and fats . . . . .	..	..	..	..	..	..
42	Fixed vegetable oils and fats . . . . .	83	18	20	440	172	81
43	Animal and vegetable oils and fats, processed and waxes of animal or vegetable origin . . . . .	..	1	..	..	24	3
51	Chemical elements and compounds . . . . .	(b)	46	45	(b)	50	43
52	Mineral tar and crude chemicals from coal, petroleum and natural gas . . . . .	(b)	..	..	(b)	32	..
53	Dyeing, tanning and colouring materials . . . . .	..	..	1	10	21	15
54	Medicinal and pharmaceutical products . . . . .	15	36	32	8	127	21
55	Essential oils and perfume materials; toilet, polishing and cleansing preparations . . . . .	11	25	13	36	48	40
56	Fertilisers, manufactured . . . . .	..	..	..	..	..	..
57	Explosives and pyrotechnic products . . . . .	11	12	2	..	..	..
58	Plastic materials, regenerated cellulose and artificial resins . . . . .	..	46	22	..	..	..
59	Chemical materials and products, n.e.s. . . . .	(c) 228	49	51	(c) 114	..	2
61	Leather, leather manufactures, n.e.s., and dressed fur skins . . . . .	7	9	56	246	354	237
62	Rubber manufactures, n.e.s. . . . .	4	2	3	8	255	98
63	Wood and cork manufactures (except furniture) . . . . .	31	39	79	2	5	11
64	Paper, paperboard and manufactures thereof . . . . .	72	98	136	76	2	67
65	Textile yarn, fabrics, made-up articles and related products . . . . .	10,123	8,923	11,734	28,011	23,286	20,848
66	Non-metallic mineral manufactures, n.e.s. . . . .	191	168	265	178	234	119
67	Iron and steel . . . . .	8	5	3	192	71	366
68	Non-ferrous metals . . . . .	..	..	..	..	..	..
69	Manufactures of metal, n.e.s. . . . .	..	379	450	..	66	104
71	Machinery (except electric) . . . . .	..	165	82	..	199	379
72	Electric machinery, apparatus and appliances . . . . .	877	259	383	131	34	121
73	Transport equipment . . . . .	..	412	62	..	3	4
81	Sanitary, plumbing, heating and lighting fixtures and fittings . . . . .	366	309	372	3	6	13
82	Furniture . . . . .	579	495	533	3	6	19
83	Travel goods, handbags and similar articles . . . . .	663	679	947	3	1	14
84	Clothing and clothing accessories; articles of knitted or crocheted fabric . . . . .	3,364	3,947	5,044	6	13	5
85	Footwear, gaiters, and similar articles and parts thereof . . . . .	142	96	252	152	141	277
86	Professional, scientific and controlling instruments; photographic and optical goods, watches and clocks . . . . .	382	519	603	11	22	17
89	Miscellaneous manufactured articles, n.e.s. . . . .	4,532	6,247	7,162	159	149	108
9A	Commodities and transactions of merchandise trade, not elsewhere classified . . . . .	1,134	477	3,909	535	444	334
	Total merchandise(d) . . . . .	23,893	25,228	34,051	40,782	34,963	33,807
9B	Commodities and transactions not included in merchandise trade(d) . . . . .	521	130	142	127	49	82
	Grand total . . . . .	24,414	25,358	34,193	40,909	35,012	33,889

(a) Figures for 1964-65 and 1965-66 are estimates. Estimates for those divisions which have been grouped are not available separately. (b) Included with Divisions 58 and 59. (c) Includes Divisions 51 and 52. (d) Definitions changed from July 1965.

IMPORTS, BY COUNTRY OF ORIGIN: DIVISIONS OF THE AUSTRALIAN IMPORT  
COMMODITY CLASSIFICATION, 1964-65 TO 1966-67(a)—continued  
(\$'000)

Division No.	Description	Indonesia			Italy		
		1964-65	1965-66	1966-67	1964-65	1965-66	1966-67
00	Live animals . . . . .	..	..	..	61	88	83
01	Meat and meat preparations . . . . .	..	..	..	669	632	712
02	Dairy products and eggs . . . . .	..	..	..	18	12	10
03	Fish and fish preparations . . . . .	..	..	1	63	57	103
04	Cereal grains and cereal preparations . . . . .	..	..	..	834	995	1,191
05	Fruit and vegetables . . . . .	..	..	..	37	19	17
06	Sugar and sugar preparations and honey . . . . .	..	..	..	83	160	44
07	Coffee, tea, cocoa, spices and manufactures thereof . . . . .	4,354	4,532	2,523	176	256	170
08	Feeding-stuff for animals (except unmilled cereals) . . . . .	..	..	..	72	45	70
09	Miscellaneous preparations chiefly for food . . . . .	..	..	..	269	332	402
11	Beverages . . . . .	140	30	18	10	5	7
12	Tobacco and tobacco manufactures . . . . .	..	..	21	..	4	..
21	Hides, skins and fur skins, undressed . . . . .	..	..	..	..	..	..
22	Oil-seeds, oil nuts and oil kernels . . . . .	16	..	..	1	..	..
23	Crude rubber (including synthetic and reclaimed) . . . . .	127	25	11	..	1	1
24	Wood, timber and cork . . . . .	..	..	..	..	..	..
25	Pulp and waste paper . . . . .	15	63	262	396	326	289
26	Textile fibres and their waste . . . . .	..	..	..	431	473	341
27	Crude fertilisers and crude minerals (except coal, petroleum and precious stones) . . . . .	..	..	..	..	..	..
28	Metalliferous ores and metal scrap . . . . .	53	50	45	75	70	56
29	Crude animal and vegetable materials, n.e.s. . . . .	..	..	..	..	..	..
32	Coal, coke and briquettes . . . . .	56,776	56,678	53,505	..	..	..
33	Petroleum and petroleum products . . . . .	7	..	..	..	..	..
34	Petroleum gases and other gaseous hydrocarbons . . . . .	..	..	..	..	..	..
41	Animal oils and fats . . . . .	..	..	..	..	1	2
42	Fixed vegetable oils and fats . . . . .	..	3	31	..	371	278
43	Animal and vegetable oils and fats, processed and waxes of animal or vegetable origin . . . . .	..	..	..	364	..	..
51	Chemical elements and compounds . . . . .	(b)	..	..	(b)	1,849	1,125
52	Mineral tar and crude chemicals from coal, petroleum and natural gas . . . . .	(b)	161	66	(b)	19	1
53	Dyeing, tanning and colouring materials . . . . .	..	..	..	106	88	140
54	Medicinal and pharmaceutical products . . . . .	..	10	..	115	148	176
55	Essential oils and perfume materials; toilet, polishing and cleansing preparations . . . . .	16	6	7	265	273	283
56	Fertilisers, manufactured . . . . .	..	..	..	2,067	113	553
57	Explosives and pyrotechnic products . . . . .	..	..	..	49	44	56
58	Plastic materials, regenerated cellulose and artificial resins . . . . .	(c)974	..	..	(c)1,722	920	994
59	Chemical materials and products, n.e.s. . . . .	..	..	..	..	259	128
61	Leather, leather manufactures, n.e.s., and dressed fur skins . . . . .	..	..	..	189	175	126
62	Rubber manufactures, n.e.s. . . . .	..	..	..	1,147	1,378	1,537
63	Wood and cork manufactures (except furniture) . . . . .	..	..	2	109	276	200
64	Paper, paperboard and manufactures thereof . . . . .	..	..	..	115	169	325
65	Textile yarn, fabrics, made-up articles and related products . . . . .	2	18	15	8,396	7,127	6,574
66	Non-metallic mineral manufactures, n.e.s. . . . .	..	..	..	744	1,020	1,276
67	Iron and steel . . . . .	..	..	..	770	815	797
68	Non-ferrous metals . . . . .	..	..	..	409	26	43
69	Manufactures of metal, n.e.s. . . . .	..	..	..	..	868	1,020
71	Machinery (except electric) . . . . .	9	1	..	19,831	15,553	14,786
72	Electric machinery, apparatus and appliances . . . . .	..	..	..	..	1,827	3,713
73	Transport equipment . . . . .	..	..	..	..	3,961	5,172
81	Sanitary, plumbing, heating and lighting fixtures and fittings . . . . .	..	..	..	167	213	220
82	Furniture . . . . .	..	..	..	177	176	189
83	Travel goods, handbags and similar articles . . . . .	..	..	..	192	150	197
84	Clothing and clothing accessories; articles of knitted or crocheted fabric . . . . .	32	..	..	1,482	1,515	1,591
85	Footwear, gaiters, and similar articles and parts therefor . . . . .	..	..	..	1,736	2,031	2,943
86	Professional, scientific and controlling instruments; photographic and optical goods, watches and clocks . . . . .	1	..	1	1,299	1,292	1,469
89	Miscellaneous manufactured articles, n.e.s. . . . .	2	1	1	2,397	2,329	2,552
9A	Commodities and transactions of merchandise trade, not elsewhere classified . . . . .	1,478	159	105	2,880	859	905
	Total merchandise(d) . . . . .	64,002	61,737	56,616	49,924	49,320	52,870
9B	Commodities and transactions not included in merchandise trade(d) . . . . .	32	26	13	587	381	308
	Grand total . . . . .	64,034	61,763	56,629	50,511	49,701	53,178

(a) Figures for 1964-65 and 1965-66 are estimates. Estimates for those divisions which have been grouped are not available separately. (b) Included with Divisions 58 and 59. (c) Includes Divisions 51 and 52. (d) Definition changed from July 1965.

IMPORTS. BY COUNTRY OF ORIGIN: DIVISIONS OF THE AUSTRALIAN IMPORT  
COMMODITY CLASSIFICATION, 1964-65 TO 1966-67(a)—continued  
(\$'000)

Division No.	Description	Japan			Malaysia(e)		
		1964-65	1965-66	1966-67	1964-65	1965-66	1966-67
00	Live animals . . . . .	..	..	..	..	..	..
01	Meat and meat preparations . . . . .	4	8	6	..	..	..
02	Dairy products and eggs . . . . .	..	..	..	..	..	..
03	Fish and fish preparations . . . . .	5,663	7,284	7,361	3	33	167
04	Cereal grains and cereal preparations . . . . .	18	45	91	1	1	..
05	Fruit and vegetables . . . . .	133	196	215	71	74	91
06	Sugar and sugar preparations and honey . . . . .	2	7	27	1	..	..
07	Coffee, tea, cocoa, spices and manufactures thereof . . . . .	506	625	1,025	950	1,037	1,214
08	Feeding-stuff for animals (except unmilled cereals) . . . . .	..	..	..	..	1	..
09	Miscellaneous preparations chiefly for food . . . . .	19	70	95	26	15	4
11	Beverages . . . . .	9	12	14	..	..	..
12	Tobacco and tobacco manufactures . . . . .	..	2	12	1	..	..
21	Hides, skins and fur skins, undressed . . . . .	24	44	13	7	..	2
22	Oil-seeds, oil nuts and oil kernels . . . . .	..	..	..	..	..	..
23	Crude rubber (including synthetic and reclaimed) . . . . .	1,624	1,632	2,270	17,673	13,614	13,557
24	Wood, timber and cork . . . . .	119	151	100	13,625	8,244	7,939
25	Pulp and waste paper . . . . .	147	423	199	..	..	..
26	Textile fibres and their waste . . . . .	1,944	2,510	2,729	..	2	..
27	Crude fertilisers and crude minerals (except coal, petroleum and precious stones) . . . . .	1,284	749	1,072	10	..	..
28	Metalliferous ores and metal scrap . . . . .	6	8	26	204	37	29
29	Crude animal and vegetable materials, n.e.s. . . . .	108	152	205	231	165	131
32	Coal, coke and briquettes . . . . .	..	..	..	..	..	..
33	Petroleum and petroleum products . . . . .	1,713	4,390	304	9,938	5,489	1,019
34	Petroleum gases and other gaseous hydrocarbons . . . . .	5	..	..	..	..	..
41	Animal oils and fats . . . . .	..	1,088	714	..	..	..
42	Fixed vegetable oils and fats . . . . .	..	837	1,753	..	..	..
43	Animal and vegetable oils and fats, processed and waxes of animal or vegetable origin . . . . .	1,796	..	..	503	779	662
51	Chemical elements and compounds . . . . .	(b)	6	13	..	..	..
52	Mineral tar and crude chemicals from coal, petroleum and natural gas . . . . .	(b)	10,859	14,539	(b)	11	..
53	Dyeing, tanning and colouring materials . . . . .	162	242	399	(b)	..	..
54	Medicinal and pharmaceutical products . . . . .	250	254	448	8	..	..
55	Essential oils and perfume materials; toilet, polishing and cleansing preparations . . . . .	28	194	280	..	8	6
56	Fertilisers, manufactured . . . . .	486	36	65	30	17	27
57	Explosives and pyrotechnic products . . . . .	51	473	1,499	..	..	..
58	Plastic materials, regenerated cellulose and artificial resins . . . . .	..	103	96	..	..	79
59	Chemical materials and products, n.e.s. . . . .	(c)12,367	6,604	7,291	(c)65	..	5
61	Leather, leather manufactures, n.e.s., and dressed fur skins . . . . .	259	525	602	2	7	..
62	Rubber manufactures, n.e.s. . . . .	3,277	392	694	5	182	222
63	Wood and cork manufactures (except furniture) . . . . .	1,527	3,696	3,793	37	32	35
64	Paper, paperboard and manufactures thereof . . . . .	3,209	2,264	2,212	1	..	..
65	Textile yarn, fabrics, made-up articles and related products . . . . .	66,942	4,062	4,756	16	40	107
66	Non-metallic mineral manufactures, n.e.s. . . . .	9,081	63,902	70,347	26	..	4
67	Iron and steel . . . . .	44,202	9,363	9,260	1	..	5
68	Non-ferrous metals . . . . .	624	35,534	24,448	5,846	1,588	2,227
69	Manufactures of metal, n.e.s. . . . .	..	682	865	..	..	..
71	Machinery (except electric) . . . . .	..	12,640	10,001	..	21	9
72	Electric machinery, apparatus and appliances . . . . .	66,250	20,007	26,899	82	10	13
73	Transport equipment . . . . .	..	18,645	17,059	..	..	8
81	Sanitary, plumbing, heating and lighting fixtures and fittings . . . . .	264	34,008	47,149	..	3	27
82	Furniture . . . . .	451	210	205	..	..	..
83	Travel goods, handbags and similar articles . . . . .	1,750	557	557	5	1	3
84	Clothing and clothing accessories; articles of knitted or crocheted fabric . . . . .	1,823	1,592	1,712	5	1	..
85	Footwear, gaiters, and similar articles and parts therefor . . . . .	192	1,856	2,480	1	..	1
86	Professional, scientific and controlling instruments; photo- graphic and optical goods, watches and clocks . . . . .	7,188	209	556	1	5	5
89	Miscellaneous manufactured articles, n.e.s. . . . .	12,443	7,723	8,297	12	9	6
9A	Commodities and transactions of merchandise trade, not elsewhere classified . . . . .	3,828	14,141	15,304	82	71	32
	Total merchandise(d) . . . . .	251,779	4,852	5,632	2,112	121	164
9B	Commodities and transactions not included in merchandise trade(d) . . . . .	6,795	4,112	356	744	304	184
	Grand total . . . . .	258,574	280,173	296,044	52,322	31,924	27,985

(a) Figures for 1964-65 and 1965-66 are estimates. Estimates for those divisions which have been grouped are not available separately. (b) Included with Divisions 58 and 59. (c) Includes Divisions 51 and 52. (d) Definition changed from July 1965. (e) Includes Singapore from 1 July 1964 to 30 September 1965.



IMPORTS, BY COUNTRY OF ORIGIN: DIVISIONS OF THE AUSTRALIAN IMPORT  
COMMODITY CLASSIFICATION, 1964-65 TO 1966-67(a)—continued  
(\$'000)

Division No.	Description	Netherlands			New Zealand		
		1964-65	1965-66	1966-67	1964-65	1965-66	1966-67
00	Live animals . . . . .	12	9	7	1,762	1,225	1,527
01	Meat and meat preparations . . . . .	357	430	420	854	106	92
02	Dairy products and eggs . . . . .	405	378	344	212	308	313
03	Fish and fish preparations . . . . .	180	200	253	1,463	1,388	1,528
04	Cereal grains and cereal preparations . . . . .	450	423	498	97	203	387
05	Fruit and vegetables . . . . .	104	130	128	1,673	2,844	2,206
06	Sugar and sugar preparations and honey . . . . .	1,077	740	848	587	547	602
07	Coffee, tea, cocoa, spices and manufactures thereof . . . . .	126	135	5	10	7	30
08	Feeding-stuff for animals (except unmilled cereals) . . . . .	32	29	28	44	349	132
09	Miscellaneous preparations chiefly for food . . . . .	126	135	159	119	46	60
11	Beverages . . . . .	32	29	28	22	1	6
12	Tobacco and tobacco manufactures . . . . .	2,555	2,269	2,758			
21	Hides, skins and fur skins, undressed . . . . .	12	23	11	266	455	380
22	Oil-seeds, oil nuts and oil kernels . . . . .	53	111	42	58	52	48
23	Crude rubber (including synthetic and reclaimed) . . . . .	400	371	617	2		
24	Wood, timber and cork . . . . .				2,529	2,219	2,310
25	Pulp and waste paper . . . . .				6,036	6,291	6,687
26	Textile fibres and their waste . . . . .	205	1,208	924	2,505	2,860	2,507
27	Crude fertilisers and crude minerals (except coal, petroleum and precious stones) . . . . .	77	11	7	69	27	31
28	Metalliferous ores and metal scrap . . . . .	6	1	1	119	231	816
29	Crude animal and vegetable materials, n.e.s. . . . .	459	201	210	2,024	1,270	1,281
32	Coal, coke and briquettes . . . . .	404	5	6		1	
33	Petroleum and petroleum products . . . . .	515	62	17		158	150
34	Petroleum gases and other gaseous hydrocarbons . . . . .	28					
41	Animal oils and fats . . . . .		4			311	222
42	Fixed vegetable oils and fats . . . . .	579	192	121		1	1
43	Animal and vegetable oils and fats, processed and waxes of animal or vegetable origin . . . . .		299	358	68		
51	Chemical elements and compounds . . . . .	(b)	2,742	2,562	(b)	510	562
52	Mineral tar and crude chemicals from coal, petroleum and natural gas . . . . .	(b)	9	8	(b)		
53	Dyeing, tanning and colouring materials . . . . .	286	352	230	21	21	39
54	Medicinal and pharmaceutical products . . . . .	286	389	961	401	329	427
55	Essential oils and perfume materials; toilet, polishing and cleansing preparations . . . . .	228	237	163	5	15	123
56	Fertilisers, manufactured . . . . .	23	11	9		34	17
57	Explosives and pyrotechnic products . . . . .	1					
58	Plastic materials, regenerated cellulose and artificial resins . . . . .	(c) 3,860	1,871	3,810	(c) 440	98	35
59	Chemical materials and products, n.e.s. . . . .	885	787			62	112
61	Leather, leather manufactures, n.e.s., and dressed fur skins . . . . .	3	8	8	23	51	112
62	Rubber manufactures, n.e.s. . . . .	47	57	60	15	220	293
63	Wood and cork manufactures (except furniture) . . . . .	57	40	67	124	29	31
64	Paper, paperboard and manufactures thereof . . . . .	1,172	901	945	18,033	18,496	16,043
65	Textile yarn, fabrics, made-up articles and related products . . . . .	3,682	2,859	2,887	528	833	948
66	Non-metallic mineral manufactures, n.e.s. . . . .	326	858	629	273	135	258
67	Iron and steel . . . . .	148	84	59	7	2	62
68	Non-ferrous metals . . . . .	482	174	238	261	118	72
69	Manufactures of metal, n.e.s. . . . .		595	506		124	164
71	Machinery (except electric) . . . . .		3,518	4,059		1,216	1,605
72	Electric machinery, apparatus and appliances . . . . .	12,118	5,994	6,383	1,958	521	1,639
73	Transport equipment . . . . .		6,532	9,462		82	344
81	Sanitary, plumbing, heating and lighting fixtures and fittings . . . . .	156	58	56	16	22	26
82	Furniture . . . . .	76	40	17	17	23	49
83	Travel goods, handbags and similar articles . . . . .	15	8	3	55	81	160
84	Clothing and clothing accessories; articles of knitted or crocheted fabric . . . . .	41	59	27	59	227	109
85	Footwear, gaiters, and similar articles and parts thereof . . . . .			2	99	96	104
86	Professional, scientific and controlling instruments; photographic and optical goods, watches and clocks . . . . .	869	1,135	1,184	34	50	74
89	Miscellaneous manufactured articles, n.e.s. . . . .	2,205	1,922	2,077	736	834	980
9A	Commodities and transactions of merchandise trade, not elsewhere classified . . . . .	742	944	855	1,672	1,020	894
	Total merchandise(d) . . . . .	34,344	39,969	45,862	45,314	46,158	46,607
9B	Commodities and transactions not included in merchandise trade(d) . . . . .	2,418	254	1,194	1,227	701	667
	Grand total . . . . .	36,762	40,223	47,056	46,541	46,859	47,274

(a) Figures for 1964-65 and 1965-66 are estimates. Estimates for those divisions which have been grouped are not available separately. (b) Included with Divisions 58 and 59. (c) Includes Divisions 51 and 52. (d) Definition changed from July 1965.

IMPORTS, BY COUNTRY OF ORIGIN: DIVISIONS OF THE AUSTRALIAN IMPORT  
COMMODITY CLASSIFICATION, 1964-65 TO 1966-67(a)—continued

(\$'000)

Division No.	Description	Papua and New Guinea			South Africa		
		1964-65	1965-66	1966-67	1964-65	1965-66	1966-67
00	Live animals . . . . .	..	..	..	..	..	..
01	Meat and meat preparations . . . . .	..	..	..	..	..	..
02	Dairy products and eggs . . . . .	..	..	..	..	..	..
03	Fish and fish preparations . . . . .	16	31	24	1,736	2,708	2,091
04	Cereal grains and cereal preparations . . . . .	..	..	..	..	10	4
05	Fruit and vegetables . . . . .	197	174	142	11	30	60
06	Sugar and sugar preparations and honey . . . . .	..	..	..	2	1	..
07	Coffee, tea, cocoa, spices and manufactures thereof . . . . .	5,140	4,866	6,110	6	1	2
08	Feeding-stuff for animals (except unmilled cereals) . . . . .	..	..	..	1,237	1,674	2,170
09	Miscellaneous preparations chiefly for food . . . . .	..	..	..	..	..	2
11	Beverages . . . . .	..	..	..	4	2	3
12	Tobacco and tobacco manufactures . . . . .	..	..	..	2,662	2,087	2,991
21	Hides, skins and fur skins, undressed . . . . .	405	531	503	9	6	2
22	Oil-seeds, oil nuts and oil kernels . . . . .	4,946	5,166	4,321	35	62	25
23	Crude rubber (including synthetic and reclaimed) . . . . .	2,690	2,419	2,516	..	..	..
24	Wood, timber and cork . . . . .	856	860	916	..	..	..
25	Pulp and waste paper . . . . .	..	..	..	..	..	..
26	Textile fibres and their waste . . . . .	..	..	..	138	111	70
27	Crude fertilisers and crude minerals (except coal, petroleum and precious stones) . . . . .	1	..	..	2,269	2,560	2,901
28	Metalliferous ores and metal scrap . . . . .	78	57	96	831	344	120
29	Crude animal and vegetable materials, n.e.s. . . . .	5	13	24	160	211	188
32	Coal, coke and briquettes . . . . .	..	..	..	..	68	71
33	Petroleum and petroleum products . . . . .	..	..	..	80	16	30
34	Petroleum gases and other gaseous hydrocarbons . . . . .	..	..	..	..	..	..
41	Animal oils and fats . . . . .	..	..	..	..	57	60
42	Fixed vegetable oils and fats . . . . .	223	180	110	662	57	140
43	Animal and vegetable oils and fats, processed and waxes of animal or vegetable origin . . . . .	..	..	..	..	5	3
51	Chemical elements and compounds . . . . .	(b)	..	..	(b)	801	672
52	Mineral tar and crude chemicals from coal, petroleum and natural gas . . . . .	(b)	..	..	(b)	..	..
53	Dyeing, tanning and colouring materials . . . . .	..	..	..	783	447	485
54	Medicinal and pharmaceutical products . . . . .	..	..	..	29	7	9
55	Essential oils and perfume materials; toilet, polishing and cleansing preparations . . . . .	..	..	..	23	33	10
56	Fertilisers, manufactured . . . . .	..	..	..	..	..	..
57	Explosives and pyrotechnic products . . . . .	..	..	..	..	..	3
58	Plastic materials, regenerated cellulose and artificial resins . . . . .	..	..	..	..	25	12
59	Chemical materials and products, n.e.s. . . . .	(c)2	..	..	(c)815	25	3
61	Leather, leather manufactures, n.e.s., and dressed fur skins . . . . .	..	..	..	..	4	2
62	Rubber manufactures, n.e.s. . . . .	..	1	..	167	343	..
63	Wood and cork manufactures (except furniture) . . . . .	2,076	1,783	1,904	1	2	3
64	Paper, paperboard and manufactures thereof . . . . .	..	..	..	66	40	86
65	Textile yarn, fabrics, made-up articles and related products . . . . .	2	..	1	6	317	1
66	Non-metallic mineral manufactures, n.e.s. . . . .	..	1	..	488	1,244	1,036
67	Iron and steel . . . . .	..	..	..	2,073	1,856	1,893
68	Non-ferrous metals . . . . .	23	..	..	41	38	89
69	Manufactures of metal, n.e.s. . . . .	..	1	2	..	295	369
71	Machinery (except electric) . . . . .	..	1	3	..	131	484
72	Electric machinery, apparatus and appliances . . . . .	29	2	3	647	120	162
73	Transport equipment . . . . .	..	9	4	..	762	74
81	Sanitary, plumbing, heating and lighting fixtures and fittings . . . . .	..	..	..	13	5	10
82	Furniture . . . . .	..	..	..	..	1	..
83	Travel goods, handbags and similar articles . . . . .	..	..	..	..	1	5
84	Clothing and clothing accessories; articles of knitted or crocheted fabric . . . . .	..	..	..	8	5	3
85	Footwear, gaiters, and similar articles and parts thereof . . . . .	..	..	..	..	..	..
86	Professional, scientific and controlling instruments; photographic and optical goods, watches and clocks . . . . .	6	7	8	261	118	59
89	Miscellaneous manufactured articles, n.e.s. . . . .	35	44	33	753	73	78
9A	Commodities and transactions of merchandise trade, not elsewhere classified . . . . .	1,443	319	262	531	547	527
	Total merchandise(d) . . . . .	18,173	16,463	16,980	16,546	17,251	17,008
9B	Commodities and transactions not included in merchandise trade(d) . . . . .	1,547	1,170	1,192	251	150	82
	Grand total . . . . .	19,720	17,633	18,172	16,797	17,401	17,090

(a) Figures for 1964-65 and 1965-66 are estimates. Estimates for those divisions which have been grouped are not available separately. (b) Included with Divisions 58 and 59. (c) Includes Divisions 51 and 52. (d) Definition changed from July 1965.

IMPORTS, BY COUNTRY OF ORIGIN: DIVISIONS OF THE AUSTRALIAN IMPORT  
COMMODITY CLASSIFICATION, 1964-65 TO 1966-67(a)—continued  
(\$'000)

Division No.	Description	Sweden			Switzerland		
		1964-65	1965-66	1966-67	1964-65	1965-66	1966-67
00	Live animals . . . . .	..	..	..	..	..	..
01	Meat and meat preparations . . . . .	..	..	..	1	1	6
02	Dairy products and eggs . . . . .	3	9	32	158	143	127
03	Fish and fish preparations . . . . .	32	58	57	2	..	..
04	Cereal grains and cereal preparations . . . . .	76	113	169	12	9	10
05	Fruit and vegetables . . . . .	12	10	20	3	10	18
06	Sugar and sugar preparations and honey . . . . .	..	..	..	..	6	..
07	Coffee, tea, cocoa, spices and manufactures thereof . . . . .	..	..	..	34	29	48
08	Feeding-stuff for animals (except unmilled cereals) . . . . .	..	1	..	..	..	..
09	Miscellaneous preparations chiefly for food . . . . .	3	1	5	5	32	26
11	Beverages . . . . .	1	1	1	1	..	4
12	Tobacco and tobacco manufactures . . . . .	1	..	..	7	8	10
21	Hides, skins and fur skins, undressed . . . . .	17	21	29	..	..	..
22	Oil-seeds, oil nuts and oil kernels . . . . .	..	..	..	..	..	..
23	Crude rubber (including synthetic and reclaimed) . . . . .	..	..	..	..	..	..
24	Wood, timber and cork . . . . .	162	76	109	..	..	..
25	Pulp and waste paper . . . . .	6,453	4,517	5,332	..	12	23
26	Textile fibres and their waste . . . . .	812	723	755	60	11	13
27	Crude fertilisers and crude minerals (except coal, petroleum and precious stones) . . . . .	37	27	42	4	3	7
28	Metalliferous ores and metal scrap . . . . .	..	15	..	..	..	..
29	Crude animal and vegetable materials, n.e.s. . . . .	15	1	1	44	53	68
32	Coal, coke and briquettes . . . . .	..	1	1	1	10	12
33	Petroleum and petroleum products . . . . .	..	..	..	..	..	..
34	Petroleum gases and other gaseous hydrocarbons . . . . .	..	..	..	..	..	..
41	Animal oils and fats . . . . .	..	..	..	..	..	..
42	Fixed vegetable oils and fats . . . . .	..	322	203	..	..	..
43	Animal and vegetable oils and fats, processed and waxes of animal or vegetable origin . . . . .	378	13	13	12	..	..
51	Chemical elements and compounds . . . . .	(b)	387	512	(b)	3,505	3,052
52	Mineral tar and crude chemicals from coal, petroleum and natural gas . . . . .	(b)	..	..	(b)	..	2
53	Dyeing, tanning and colouring materials . . . . .	38	9	10	2,303	2,421	3,079
54	Medicinal and pharmaceutical products . . . . .	225	165	155	6,679	6,371	5,959
55	Essential oils and perfume materials; toilet, polishing and cleansing preparations . . . . .	29	6	11	665	608	525
56	Fertilisers, manufactured . . . . .	..	..	..	..	..	..
57	Explosives and pyrotechnic products . . . . .	27	31	43	..	..	..
58	Plastic materials, regenerated cellulose and artificial resins . . . . .	..	146	90	..	313	423
59	Chemical materials and products, n.e.s. . . . .	(c) 662	228	195	(c) 3,062	200	255
61	Leather, leather manufactures, n.e.s., and dressed fur skins . . . . .	153	67	135	10	11	17
62	Rubber manufactures, n.e.s. . . . .	55	90	192	17	19	25
63	Wood and cork manufactures (except furniture) . . . . .	522	592	359	35	17	18
64	Paper, paperboard and manufactures thereof . . . . .	6,993	6,056	6,098	131	145	169
65	Textile yarn, fabrics, made-up articles and related products . . . . .	311	326	305	3,829	3,939	3,900
66	Non-metallic mineral manufactures, n.e.s. . . . .	398	418	511	208	192	218
67	Iron and steel . . . . .	3,393	3,264	3,251	201	27	76
68	Non-ferrous metals . . . . .	703	130	444	150	139	133
69	Manufactures of metal, n.e.s. . . . .	..	3,624	3,833	..	459	546
71	Machinery (except electric) . . . . .	..	14,839	13,042	..	10,915	9,791
72	Electric machinery, apparatus and appliances . . . . .	28,428	11,672	12,201	9,899	3,199	3,998
73	Transport equipment . . . . .	..	776	680	..	229	258
81	Sanitary, plumbing, heating and lighting fixtures and fittings . . . . .	213	144	138	5	4	5
82	Furniture . . . . .	18	26	44	12	2	3
83	Travel goods, handbags and similar articles . . . . .	3	3	8	9	6	6
84	Clothing and clothing accessories; articles of knitted or crocheted fabric . . . . .	27	19	14	486	446	382
85	Footwear, gaiters, and similar articles and parts thereof . . . . .	2	2	2	70	108	135
86	Professional, scientific and controlling instruments; photo- graphic and optical goods, watches and clocks . . . . .	202	348	415	5,886	6,991	6,175
89	Miscellaneous manufactured articles, n.e.s. . . . .	314	303	292	623	1,579	1,152
9A	Commodities and transactions of merchandise trade, not elsewhere classified . . . . .	893	2,110	885	534	572	723
	Total merchandise(d) . . . . .	51,611	51,688	50,636	35,157	42,744	41,398
9B	Commodities and transactions not included in merchandise trade(d) . . . . .	1,957	99	214	301	267	379
	Grand total . . . . .	53,568	51,787	50,850	35,458	43,011	41,777

(a) Figures for 1964-65 and 1965-66 are estimates. Estimates for those divisions which have been grouped are not available separately. (b) Included with Divisions 58 and 59. (c) Includes Divisions 51 and 52. (d) Definition changed from July 1965.

IMPORTS, BY COUNTRY OF ORIGIN: DIVISIONS OF THE AUSTRALIAN IMPORT  
COMMODITY CLASSIFICATION, 1964-65 TO 1966-67(a)—continued

(\$'000)

Division No.	Description	United Kingdom			United States of America		
		1964-65	1965-66	1966-67	1964-65	1965-66	1966-67
00	Live animals . . . . .	376	503	927	194	53	87
01	Meat and meat preparations . . . . .	140	84	83	30	77	42
02	Dairy products and eggs . . . . .	26	26	27	58	57	61
03	Fish and fish preparations . . . . .	6,242	7,397	6,280	508	678	1,147
04	Cereal grains and cereal preparations . . . . .	455	651	866	268	678	475
05	Fruit and vegetables . . . . .	812	825	1,101	2,785	3,731	2,779
06	Sugar and sugar preparations and honey . . . . .	561	660	613	41	84	56
07	Coffee, tea, cocoa, spices and manufactures thereof . . . . .	375	353	405	669	463	608
08	Feeding-stuff for animals (except unmilled cereals) . . . . .	11	215	2,720	1,227	2,374	2,151
09	Miscellaneous preparations chiefly for food . . . . .	250	426	503	271	246	611
11	Beverages . . . . .	8,853	9,100	7,863	74	148	151
12	Tobacco and tobacco manufactures . . . . .	1,240	1,377	1,215	14,434	17,305	18,287
21	Hides, skins and fur skins, undressed . . . . .	79	88	87	466	205	206
22	Oil-seeds, oil nuts and oil kernels . . . . .	80	56	64	91	3,454	252
23	Crude rubber (including synthetic and reclaimed) . . . . .	409	705	748	5,895	5,094	5,111
24	Wood, timber and cork . . . . .	147	56	87	9,794	8,556	8,847
25	Pulp and waste paper . . . . .	5	3	4	4,209	3,232	2,724
26	Textile fibres and their waste . . . . .	6,690	5,503	6,239	14,550	7,533	5,655
27	Crude fertilisers and crude minerals (except coal, petroleum and precious stones) . . . . .	1,527	1,348	1,384	8,421	12,806	14,251
28	Metalliferous ores and metal scrap . . . . .	382	79	180	349	76	315
29	Crude animal and vegetable materials, n.e.s. . . . .	1,450	822	1,111	3,478	2,580	2,613
32	Coal, coke and briquettes . . . . .	2,084	1	1	9,106	132	201
33	Petroleum and petroleum products . . . . .	2,035	1,460	1	15	7,370	6,741
34	Petroleum gases and other gaseous hydrocarbons . . . . .	1	1	1	10	21	14
41	Animal oils and fats . . . . .	112	93	13	3,295	2,060	419
42	Fixed vegetable oils and fats . . . . .	513	762	3,540	353	36,233	2,137
43	Animal and vegetable oils and fats, processed and waxes of animal or vegetable origin . . . . .	272	329	(b)	28,317	2,430	6,379
51	Chemical elements and compounds . . . . .	(b)	20,825	22,832	(b)	3,392	3,555
52	Mineral tar and crude chemicals from coal, petroleum and natural gas . . . . .	(b)	154	59	(b)	3,555	2,543
53	Dyeing, tanning and colouring materials . . . . .	5,993	6,478	7,503	1,414	1,952	2,430
54	Medicinal and pharmaceutical products . . . . .	16,275	14,093	15,013	8,270	5,691	6,379
55	Essential oils and perfume materials; toilet, polishing and cleansing preparations . . . . .	4,565	4,518	5,092	3,315	3,392	3,953
56	Fertilisers, manufactured . . . . .	913	389	899	2,559	3,555	5,113
57	Explosives and pyrotechnic products . . . . .	2,725	1,513	1,696	2,224	2,664	2,543
58	Plastic materials, regenerated cellulose and artificial resins . . . . .	(c) 56,805	26,372	26,448	(c) 57,080	16,710	16,440
59	Chemical materials and products, n.e.s. . . . .	13,937	16,969	1	12,281	14,949	742
61	Leather, leather manufactures, n.e.s., and dressed fur skins . . . . .	1,378	1,671	1,909	607	997	742
62	Rubber manufactures, n.e.s. . . . .	11,232	10,771	11,002	8,621	8,308	7,382
63	Wood and cork manufactures (except furniture) . . . . .	948	711	792	577	349	341
64	Paper, paperboard and manufactures thereof . . . . .	11,116	11,512	11,023	12,307	12,167	13,846
65	Textile yarn, fabrics, made-up articles and related products . . . . .	57,244	47,924	42,537	22,389	21,287	23,663
66	Non-metallic mineral manufactures, n.e.s. . . . .	19,826	18,539	17,800	6,168	7,845	8,040
67	Iron and steel . . . . .	24,793	21,913	16,666	7,903	7,592	6,968
68	Non-ferrous metals . . . . .	13,192	8,539	7,398	13,803	3,610	2,819
69	Manufactures of metal, n.e.s. . . . .	25,641	24,831	15,224	15,224	15,273	201,804
71	Machinery (except electric) . . . . .	200,363	181,700	388,512	200,588	201,804	48,303
72	Electric machinery, apparatus and appliances . . . . .	67,242	66,122	40,948	40,948	48,303	179,452
73	Transport equipment . . . . .	121,044	100,432	146,376	146,376	179,452	312
81	Sanitary, plumbing, heating and lighting fixtures and fittings . . . . .	1,919	1,665	1,637	686	215	293
82	Furniture . . . . .	880	1,020	592	365	340	229
83	Travel goods, handbags and similar articles . . . . .	1,158	416	415	442	245	229
84	Clothing and clothing accessories; articles of knitted or crocheted fabric . . . . .	5,647	6,142	5,636	1,199	1,037	1,115
85	Footwear, gaiters, and similar articles and parts thereof . . . . .	681	744	1,044	18	42	36
86	Professional, scientific and controlling instruments; photographic and optical goods, watches and clocks . . . . .	17,103	23,596	24,655	15,529	22,457	27,525
89	Miscellaneous manufactured articles, n.e.s. . . . .	40,484	37,883	42,090	23,636	27,110	32,361
9A	Commodities and transactions of merchandise trade, not elsewhere classified . . . . .	20,359	22,865	28,455	20,422	22,745	34,429
	Total merchandise(d) . . . . .	740,911	751,691	718,396	678,521	697,041	770,995
9B	Commodities and transactions not included in merchandise trade(d) . . . . .	20,501	7,060	5,415	13,725	6,556	10,268
	Grand total . . . . .	761,412	758,751	723,811	692,246	703,597	781,263

(a) Figures for 1964-65 and 1965-66 are estimates. Estimates for those divisions which have been grouped are not available separately. (b) Included with Divisions 58 and 59. (c) Includes Divisions 51 and 52. (d) Definition changed from July 1965.

## Trade with major groups of countries

Australia's trade with major groups of countries is shown in the following table. Particulars of Australia's balance of payments with countries in these groups are shown on page 387.

TRADE OF AUSTRALIA, BY MAJOR GROUP OF COUNTRIES, 1964-65 TO 1966-67  
(\$'000 f.o.b.)

	1964-65	1965-66	1966-67
STERLING AREA			
Exports to—			
United Kingdom . . . . .	516,226	473,358	404,958
Other countries . . . . .	553,968	554,322	727,208
Total . . . . .	1,070,194	1,027,680	1,132,166
Imports from—			
United Kingdom . . . . .	761,412	758,751	723,811
Other countries . . . . .	348,256	335,293	371,647
Total . . . . .	1,109,668	1,094,044	1,095,458
Excess of exports (+) or imports (—)	—39,474	—66,362	+36,708
NON-STERLING COUNTRIES—NORTH AMERICA			
Exports to—			
Canada . . . . .	39,914	43,171	51,690
United States of America(a) . . . . .	268,440	343,747	369,012
Total . . . . .	308,354	386,918	420,702
Imports from—			
Canada . . . . .	117,006	107,972	117,199
United States of America(a) . . . . .	692,356	703,775	781,566
Total . . . . .	809,362	811,747	898,765
Excess of exports (+) or imports (—)	—501,008	—424,829	—478,063
OTHER NON-STERLING COUNTRIES			
Exports to—			
European Economic Community . . . . .	385,737	438,929	418,804
European Free Trade Association(b) . . . . .	33,271	29,991	39,015
Other countries—			
Japan . . . . .	440,740	470,410	586,437
Eastern Europe, China (mainland), etc. . . . .	246,908	188,727	189,389
Other . . . . .	166,245	178,298	237,412
Total . . . . .	1,272,901	1,306,355	1,471,057
Imports from—			
European Economic Community . . . . .	345,235	372,282	379,492
European Free Trade Association(b) . . . . .	133,584	138,518	137,113
Other countries—			
Japan . . . . .	258,574	280,173	296,044
Eastern Europe, China (mainland), etc. . . . .	46,469	40,685	41,579
Other . . . . .	201,811	202,043	196,890
Total . . . . .	985,673	1,033,701	1,051,118
Excess of exports (+) or imports (—)	+287,228	+272,652	+419,939
ALL GROUPS			
Total exports . . . . .	2,651,449	2,720,953	3,023,925
Total imports . . . . .	2,904,703	2,939,492	3,045,341
Excess of exports (+) or imports (—)	—253,254	—218,539	—21,416

(a) Includes United States of America Territories and Dependencies.

(b) Other than United Kingdom.

Countries constituting the several groups are listed below.

<b>STERLING AREA—</b>			
Antarctica	Sierra Leone	Malagasy, Republic of	Bhutan
Bahama Is.	Singapore	Mali	Bolivia
Bahrain	Solomon Is.	Mauritania	Brazil
Barbados	South Africa	Netherlands	Cambodia
Bermuda	South Arabia,	New Caledonia	Chile
Botswana	Federation of	Niger	China, Republic of
British Indian Ocean	South Arabia,	Polynesia (French)	(Formosa)
Territory	Non-federated States	Reunion and	Colombia
Brunei	South West Africa	Southern Is.	Costa Rica
Ceylon	Swaziland	Rwanda	Cuba
Christmas Is.	Tanzania	St Pierre and	Dominican Republic
Cocos Is.	Tonga	Miquelon	Ecuador
Cook Is.	Trinidad and Tobago	Senegal	El Salvador
Cyprus	Trucial States	Somaliland (French)	Ethiopia
Falkland Is.	Uganda	Togo	Guatemala
Fiji	United Kingdom	Upper Volta	Guinea
Gambia	Virgin Is. (British)	Wallis and Futuna Is.	Haiti
Ghana	Western Samoa	West Indies (French)	Honduras (not British)
Gibraltar	Windward Is.		Indonesia
Gilbert and Ellice Is.	Zambia	<b>EUROPEAN FREE TRADE</b>	Iran
Guyana		<b>ASSOCIATION(a)—</b>	Iraq
Honduras (British)	<b>NON-STERLING</b>	Angola	Israel
Hong Kong	<b>COUNTRIES—</b>	Austria	Japan
Iceland	<b>NORTH AMERICA—</b>	Cape Verde Is.	Korea, Republic of
India	Canada	Denmark	Laos
Ireland	United States of	Finland	Lebanon
Jamaica	America and	Guinea (Portuguese)	Liberia
Jordan	Dependencies	Macao	Mexico
Kenya	(Guam, Okinawa,	Mozambique	Morocco
Kuwait	Puerto Rico, Samoa,	Norway	Nepal
Leeward Is.	Virgin Is. and	Portugal	New Hebrides
Lesotho	other U.S. Pacific Is.)	Sweden	Nicaragua
Libya		Switzerland	Panama
Malawi	<b>EUROPEAN ECONOMIC</b>	Timor	Paraguay
Malaysia	<b>COMMUNITY—</b>		Peru
Maldives Is.	Algeria	<b>EASTERN EUROPE, CHINA</b>	Philippines
Malta	Belgium-Luxembourg	<b>(MAINLAND), ETC.—</b>	Saudi Arabia
Mauritius	Burundi	Albania	Somalia
Muscat and Oman	Cameroon	Bulgaria	Spain
Nauru	Central African	China (mainland)	Spanish Equatorial
New Zealand	Republic	Czechoslovakia	(West) Africa
Nigeria	Chad	Germany (East)	Sudan
Niue and Tokelau Is.	Congo-Brazzaville	Hungary	Surinam
Norfolk Is.	Congo-Kinshasa	Korea (North)	Syria
Pakistan	Dahomey	Poland	Thailand
Papua and New Guinea	France	Romania	Tunisia
Qatar	Gabon	U.S.S.R.	Turkey
Rhodesia	Germany, Federal	Vietnam, North	United Arab Republic
Ross Dependency	Republic of		Uruguay
St Helena and	Greece	<b>OTHER—</b>	Venezuela
Ascension	Guiana (French)	Afghanistan	Vietnam, Republic of
Seychelles	Italy	Antilles	Yemen
	Ivory Coast	Argentina	Yugoslavia

(a) Other than United Kingdom.

## Trade with the United Kingdom

Since 1908, permanent resident Commissioners appointed by the British Board of Trade have been located in Australia for the purpose of advising manufacturers and merchants in Britain about Australian trade affairs. Particulars of British trade representation in Australia are given in the chapter International Relations. From 8 August 1907 the Commonwealth Customs Tariffs have provided preferential rates of customs duties on certain goods the produce or manufacture of the United Kingdom, with the object of assisting the British manufacturer to retain or improve his position in this market in relation to other countries. The main provisions in these Acts relating to preference are dealt with on pages 328–9 in this chapter. For details of exports to and imports from the United Kingdom, by divisions of the Australian Export and Import Commodity Classifications, see tables on pages 358 and 369 respectively.

## Trade with eastern countries

Details of exports to and imports from eastern countries are shown in the following table. Further information for principal eastern countries, by divisions of the Australian Export and Import Commodity Classifications, is shown in the tables on pages 350-9 and 360-9 respectively.

## TRADE OF AUSTRALIA WITH EASTERN COUNTRIES, BY COUNTRY OF CONSIGNMENT OR ORIGIN, 1964-65 TO 1966-67

(\$'000 f.o.b.)

Country	Exports			Imports		
	1964-65	1965-66	1966-67	1964-65	1965-66	1966-67
Brunei . . . . .	125	213	252	7,232	9,353	11,484
Burma . . . . .	5,114	4,165	4,491	72	91	258
Cambodia . . . . .	296	134	436	2	30	23
Ceylon . . . . .	18,671	17,408	15,787	17,277	17,563	15,535
China (mainland) . . . . .	135,633	106,541	128,613	22,862	23,460	26,148
China, Republic of (Formosa) . . . . .	8,137	16,227	18,842	4,355	4,270	4,801
Hong Kong . . . . .	54,757	58,774	64,260	24,414	25,358	34,193
India . . . . .	55,400	28,001	58,339	40,909	35,012	33,889
Indonesia . . . . .	7,431	5,359	6,938	64,034	61,763	56,629
Japan . . . . .	440,740	470,410	586,437	258,574	280,173	296,044
Korea (North) . . . . .	2,305	5,446	6,378	86	..	..
Korea, Republic of . . . . .	3,972	4,849	8,088	774	1,761	1,428
Laos . . . . .	2	127	70	16	..	..
Macao . . . . .	18	11	193	85	55	49
Malaysia(a) . . . . .	(a)82,917	(a)49,770	61,781	(a)52,322	(a)31,924	27,985
Nepal . . . . .	2	3	77	14	1	1
Pakistan . . . . .	9,274	7,383	53,143	13,188	16,390	17,999
Philippines . . . . .	20,920	23,990	32,801	3,242	2,518	2,793
Singapore(b) . . . . .	(b)	(b)34,004	56,486	(b)	(b)3,699	8,708
Thailand . . . . .	13,855	15,573	23,722	1,139	1,150	1,666
Timor . . . . .	208	300	217	..	55	..
Vietnam (North) . . . . .	155	65	..	1	..	..
Vietnam, Republic of . . . . .	2,617	6,520	11,837	49	41	101
<b>Total . . . . .</b>	<b>862,549</b>	<b>855,273</b>	<b>1,139,188</b>	<b>510,647</b>	<b>514,667</b>	<b>539,734</b>

(a) Includes Singapore from 1 July 1964 to 30 September 1965.

(b) See note (a).

## Overseas trade at customs ports

The following table shows the value of exports and imports at customs ports of Australia during the year 1966-67, and the totals for each State and Territory.

## OVERSEAS TRADE: CUSTOMS PORTS, AUSTRALIA, 1966-67

(\$'000 f.o.b.)

Port or customs station	Exports	Imports	Port or customs station	Exports	Imports
<b>New South Wales—</b>			<b>South Australia—continued</b>		
Sydney . . . . .	563,839	1,102,680	Port Pirie (including Port Germein) . . . . .	66,882	713
Kingsford-Smith airport . . . . .	73,964	96,674	Port Wallaroo . . . . .	8,323	1,119
Botany Bay (Kurnell) . . . . .	2,781	48,261	Whyalla . . . . .	11,752	4,295
Newcastle (including Port Stephens) . . . . .	152,762	32,736	Parcels post, Adelaide . . . . .	(a)	2,389
Port Kembla . . . . .	85,100	29,188	<i>Total, South Australia</i> . . . . .	<i>325,170</i>	<i>196,771</i>
Parcels post, Sydney . . . . .	(a)	14,058			
<i>Total, New South Wales</i> . . . . .	<i>878,446</i>	<i>1,323,597</i>			
<b>Victoria—</b>			<b>Western Australia—</b>		
Melbourne . . . . .	715,495	902,998	Fremantle . . . . .	273,968	103,144
Melbourne airport . . . . .	5,165	71,264	Perth (including airport) . . . . .	1,195	4,644
Geelong . . . . .	79,025	60,188	Kwinana . . . . .	12,039	33,956
Portland . . . . .	1,502	13,906	Albany . . . . .	30,048	2,238
Westernport . . . . .		13,049	Broome . . . . .	2,166	216
Parcels post, Melbourne . . . . .	(a)	11,109	Bunbury . . . . .	21,347	2,838
<i>Total, Victoria</i> . . . . .	<i>801,187</i>	<i>1,072,514</i>	Busselton . . . . .	156	..
			Derby . . . . .	733	68
			Esperance . . . . .	5,634	889
			Geraldton . . . . .	27,437	3,193
			King Bay (Dampier) . . . . .	21,457	4,965
			Point Samson (including Roebourne) . . . . .	515	..
<b>Queensland—</b>			Port Hedland . . . . .	21,806	1,587
Brisbane . . . . .	277,935	162,511	Wyndham . . . . .	2,824	240
Brisbane airport . . . . .	2,442	3,880	Parcels post, Perth . . . . .	(a)	1,412
Bowen . . . . .	5,014	6	<i>Total, Western Australia</i> . . . . .	<i>421,325</i>	<i>159,390</i>
Bundaberg . . . . .	11,610	58			
Cairns (including airport) . . . . .	19,083	2,589			
Gladstone . . . . .	26,351	15,503	<b>Tasmania—</b>		
Innisfail . . . . .	21,487	2	Hobart (including airport) . . . . .	43,539	57,271
Mackay . . . . .	43,679	1,358	Burnie (including airport) . . . . .	15,968	13,980
Maryborough (including Urongan) . . . . .	41	105	Devonport (including airport and Ulverstone) . . . . .	6,183	1,685
Rockhampton (including airport and Port Alma) . . . . .	34,194	742	Launceston (including airport and Beauty Point) . . . . .	23,145	12,636
Thursday Island . . . . .	980	152	Parcels post . . . . .	(b)	(b)
Townsville (including airport) . . . . .	51,832	5,015	<i>Total, Tasmania</i> . . . . .	<i>88,835</i>	<i>85,572</i>
Weipa . . . . .	5,320	516			
Parcels post, Brisbane . . . . .	(a)	1,240			
<i>Total, Queensland</i> . . . . .	<i>499,968</i>	<i>193,677</i>	<b>Northern Territory—</b>		
			Darwin . . . . .	8,968	7,386
<b>South Australia—</b>					
Port Adelaide (including Stenhouse Bay) . . . . .	185,908	156,418	<b>Australian Capital Territory—</b>		
Adelaide city (including airport) . . . . .		5,494	Canberra . . . . .	26	6,434
Port Stanvac . . . . .		1,251	<i>Total</i> . . . . .	<i>3,023,925</i>	<i>3,045,341</i>
Ardrossan . . . . .		9,069			
Cape Thevenard . . . . .		7,706			
Edithburgh . . . . .		117			
Port Augusta . . . . .	9,596	1			
Port Lincoln . . . . .	24,566	1,740			

(a) Included with main port. (b) Included with respective port.



**Ships' and aircraft stores**

Ships' and aircraft stores loaded on overseas ships and aircraft are excluded from exports. The value of these stores is shown in the table below for each of the years 1964-65 to 1966-67.

**STORES LOADED ON BOARD OVERSEAS VESSELS AND  
AIRCRAFT: AUSTRALIA, 1964-65 TO 1966-67**

(\$'000)

<i>Stores</i>	<i>1964-65</i>	<i>1965-66</i>	<i>1966-67</i>
Cigarettes, cigars and tobacco . . . . .	751	814	943
Fuel, lubricating oil and lubricants . . . . .	18,599	21,142	22,663
Foodstuffs for human consumption—			
Meats . . . . .	3,416	3,716	3,691
Sugar . . . . .	50	36	45
Milk and cream, preserved . . . . .	61	60	91
Butter . . . . .	331	254	184
Cheese . . . . .	66	65	95
Eggs in shell . . . . .	408	471	520
Seafoods . . . . .	433	462	617
Prepared grains . . . . .	218	236	225
Vegetables . . . . .	692	620	780
Fruit . . . . .	339	306	426
Tea . . . . .	..	..	26
Other . . . . .	437	468	579
Fodder . . . . .	159	159	84
Alcoholic beverages . . . . .	1,387	1,513	1,682
Coal . . . . .	221	1	11
Other ships' stores . . . . .	2,791	3,828	5,510
<b>Total . . . . .</b>	<b>30,359</b>	<b>34,151</b>	<b>38,172</b>

**Movement of bullion and specie**

The following table shows the values of gold and silver bullion and specie, and of bronze specie, exported from, and imported into, Australia during each of the years 1964-65 to 1966-67.

**EXPORTS AND IMPORTS OF BULLION AND SPECIE: AUSTRALIA, 1964-65 TO 1966-67**

(\$ f.o.b.)

	<i>Exports</i>			<i>Imports</i>		
	<i>1964-65</i>	<i>1965-66</i>	<i>1966-67</i>	<i>1964-65</i>	<i>1965-66</i>	<i>1966-67</i>
Gold—Bullion . . . . .	18,404,346	24,417,466	18,080,273	4,058,438	4,177,183	4,161,519
Specie . . . . .	..	720	15,460	75,782	9,790	51,561
<i>Total, gold . . . . .</i>	<i>18,404,346</i>	<i>24,418,186</i>	<i>18,095,733</i>	<i>4,134,220</i>	<i>4,186,973</i>	<i>4,213,080</i>
Silver—Bullion . . . . .	1,726,956	475,666	3,559,690	108,514	141,945	125,560
Specie . . . . .	501,198	360,285	405,646	55,100	620,346	147,812
<i>Total, silver . . . . .</i>	<i>2,228,154</i>	<i>835,951</i>	<i>3,965,336</i>	<i>163,614</i>	<i>762,291</i>	<i>273,372</i>
Other (including bronze and cupro-nickel)—Specie . . . . .	3,900	722,914	76,207	102	741,709	31,644
<b>Total—</b>						
Australian produce . . . . .	20,575,744	25,957,620	22,118,915	..	..	..
Re-exports . . . . .	60,656	19,431	18,361	..	..	..
<b>Grand total . . . . .</b>	<b>20,636,400</b>	<b>25,977,051</b>	<b>22,137,276</b>	<b>4,297,936</b>	<b>5,690,973</b>	<b>4,518,096</b>

The following table shows the exports and imports of bullion and specie to and from various countries during the year 1966-67.

**EXPORTS AND IMPORTS OF BULLION AND SPECIE, BY COUNTRY OF CONSIGNMENT OR ORIGIN, 1966-67**

(\$ f.o.b.)

Country	Exports			Imports		
	Bullion	Specie	Total	Bullion	Specie	Total
Austria . . . . .	..	..	..	..	4,650	4,650
Belgium-Luxembourg . . . . .	..	80	80	..	..	..
Canada . . . . .	..	4,460	4,460	..	2,444	2,444
Czechoslovakia . . . . .	..	..	..	..	392	392
Fiji . . . . .	17,256	..	17,256	3,365,041	3	3,365,044
France . . . . .	..	..	..	121	..	121
Germany, Federal Republic of . . . . .	..	..	..	27,970	691	28,661
Gilbert and Ellice Is. . . . .	..	9,500	9,500	..	..	..
Greece . . . . .	131,076	..	131,076	..	..	..
Hong Kong . . . . .	17,663,811	1,334	17,665,145	..	284	284
Hungary . . . . .	..	..	..	..	338	338
Ireland . . . . .	..	..	..	..	486	486
Israel . . . . .	..	..	..	..	282	282
Italy . . . . .	..	..	..	28	..	28
Jamaica . . . . .	..	..	..	..	480	480
Japan . . . . .	736,012	..	736,012	..	..	..
Malaysia . . . . .	350	557	907	..	435	435
Nauru . . . . .	..	19,800	19,800	..	..	..
New Hebrides . . . . .	..	42,400	42,400	..	..	..
New Zealand . . . . .	695,696	17,225	712,921	32,365	950	33,315
Norfolk Is. . . . .	327	6,640	6,967	..	..	..
Papua and New Guinea . . . . .	..	330,683	330,683	834,459	..	834,459
Rhodesia . . . . .	..	..	..	..	254	254
Singapore . . . . .	768	200	968	..	..	..
Solomon Is. . . . .	..	49,600	49,600	3,616	..	3,616
South Africa . . . . .	..	140	140	..	..	..
Switzerland . . . . .	281	..	281	..	48,915	48,915
Tonga . . . . .	..	..	..	..	564	564
United Kingdom . . . . .	2,394,386	13,714	2,408,100	20,465	6,985	27,450
United States of America . . . . .	..	980	980	2,779	5,142	7,921
Australia re-imported . . . . .	..	..	..	..	157,657	157,657
Origin unknown . . . . .	..	..	..	235	65	300
<b>Total . . . . .</b>	<b>21,639,963</b>	<b>497,313</b>	<b>22,137,276</b>	<b>4,287,079</b>	<b>231,017</b>	<b>4,518,096</b>

**Total import clearances, dutiable clearances, and net customs duties collected**

The following table shows the value of total import clearances, total dutiable clearances, and the net customs duties collected during each of the years 1962-63 to 1966-67, together with the ratio of total dutiable clearances to total clearances.

**TOTAL IMPORT CLEARANCES, DUTIABLE CLEARANCES, AND NET CUSTOMS DUTIES 1962-63 TO 1966-67**

	1962-63	1963-64	1964-65	1965-66	1966-67
Total import clearances . . . . .	\$'000 2,156,750	2,364,386	2,890,332	2,914,520	3,030,897
Total dutiable clearances . . . . .	.. 944,463	1,043,201	1,239,936	1,230,459	1,228,320
Total net customs duties collected . . . . .	.. 205,898	227,934	263,015	265,590	269,296
Ratio of dutiable clearances to total clearances . . . . .	per cent 43.8	44.1	42.9	42.2	40.5
Ratio of duties collected to dutiable clearances . . . . .	.. .. 21.8	21.8	21.2	21.6	21.9

## Overseas trade in calendar years

For the purpose of comparison with countries which record overseas trade in calendar years, the following table has been compiled to show estimates of Australian exports and imports for each of the calendar years 1965 to 1967.

## OVERSEAS TRADE IN CALENDAR YEARS, AUSTRALIA, 1965, 1966, AND 1967

(\$'000 f.o.b.)

Year	Merchandise		Non-merchandise		Total	
	Exports	Imports	Exports	Imports	Exports	Imports
1965 . . .	2,603,723	2,959,404	79,513	55,789	2,683,236	3,015,193
1966 . . .	2,744,164	2,853,901	88,959	41,197	2,833,123	2,895,098
1967 . . .	3,004,814	3,085,679	102,820	46,402	3,107,634	3,132,081

## Excise

Although excise goods have no immediate bearing on overseas trade, the rate of excise duty is in some cases related to the import duty on similar goods. Moreover, as the Excise Acts are administered by the Department of Customs and Excise, it is convenient to publish here the quantities of Australian produce on which excise duty has been paid. Particulars of customs and excise revenue are shown in the chapter Public Finance. The following table shows the quantities of spirits, beer, tobacco, etc., on which excise duty was paid in Australia during the years 1965-66 and 1966-67.

## QUANTITY OF SPIRITS, BEER, TOBACCO, ETC. ON WHICH EXCISE DUTY WAS PAID: AUSTRALIA, 1965-66 AND 1966-67

Article	1965-66	1966-67	Article	1965-66	1966-67
	'000 gallons	'000 gallons		'000 lb	'000 lb
Beer . . . . .	270,546	282,356	Cigarettes—machine-made . . . . .	48,747	47,724
	'000 proof gallons	'000 proof gallons		'000 gallons	'000 gallons
Spirits—			Petrol—		
Brandy . . . . .	955	958	Aviation gasoline (by-law)(a) . . . . .	12,932	9,858
Gin . . . . .	346	327	Gasoline(a) . . . . .	1,593,253	1,754,437
Whisky . . . . .	330	322	<i>Total petrol</i> . . . . .	1,606,185	1,764,295
Rum . . . . .	521	470	Aviation turbine kerosene(a) . . . . .	80,224	103,993
Liqueurs . . . . .	67	66	Automotive diesel fuel . . . . .	113,426	123,898
Vodka . . . . .	120	125		doz packs	doz packs
Flavoured spirituous liquors . . . . .	15	13	Playing cards . . . . .	113,780	112,006
<i>Total spirits (potable)</i> . . . . .	2,354	2,281		60 papers or tubes	60 papers or tubes
Spirits for—				'000	'000
Fortifying wine . . . . .	2,248	2,524	Cigarette papers and tubes . . . . .	58,981	56,859
Industrial or scientific purposes . . . . .	382	413		8,640	8,640
Manufacture of—			<i>matches</i> . . . . .	matches	matches
Essences . . . . .	126	129	Matches . . . . .	3,474,931	3,335,275
Scents and toilet preparations . . . . .	99	114		'000 tons	'000 tons
Vinegar . . . . .	218	247	Coal . . . . .	18,686	18,985
Tobacco . . . . .	'000 lb 8,334	'000 lb 7,652		'000 doz containers	'000 doz containers
Cigars . . . . .	130	133	Canned fruit . . . . .	6,546	7,010

(a) Includes supplies to Commonwealth Government on which excise was paid. During the years 1965-66 and 1966-67 refunds were made on 40,714,000 and 42,638,000 gallons, respectively.

## OVERSEAS INVESTMENT BY PRIVATE INVESTORS

Surveys of overseas investment have been conducted since 1947-48 to obtain particulars of certain types of private capital flows to and from Australia. The surveys, when supplemented by other information, provide statistics of overseas investment in companies in Australia and in Australian public authority securities repayable in Australian currency, as well as statistics of Australian investment in companies overseas and in foreign government securities. Particulars of investment income from most of those classes of investment are also obtained from the surveys.

Certain types of private overseas investment are not included in the statistics which follow. Investment in real estate (except when made through companies) and loans between Australian individuals and non-resident individuals are not covered. Nor are changes in short-term liabilities between exporters and importers in Australia and overseas covered, except in so far as they arise from exports and imports between branches or subsidiaries and their home offices—in this case they are included in the figures of investment in branches or subsidiaries.

In the tables which classify investment in Australia according to country of origin, the investment is shown as an inflow from the country which is the immediate source of the capital. Income payable overseas is classified on a similar basis, i.e. it is classified to the country to which it is directly payable.

Remittances between Australia and overseas by Australian life insurance companies are regarded as capital transactions made to bring assets located in overseas countries into line with commitments in those countries, and are included as a flow of investment between Australia and overseas. Similar considerations apply to overseas life insurance companies with branches in Australia.

The following are explanatory notes relating to some of the terms used in the tables.

*Companies.* In these statistics the term 'companies' relates to both incorporated and unincorporated businesses.

*Overseas.* For the purpose of these statistics, Papua and New Guinea and the other external territories under the control of Australia are regarded as overseas countries.

*Portfolio investment and institutional loans.* Investment other than direct investment, including loans raised overseas from financial institutions and other companies which have no direct investment in the borrowing company.

*Subsidiaries.* For the purpose of these statistics this term is applied to all companies in which there is a 'direct' overseas holding of ordinary shares (or voting stock). A holding is treated as 'direct' when there is ownership of twenty-five per cent or more of a company's ordinary shares (or voting stock) by one company or a number of companies incorporated in one country, or ownership of fifty per cent or more of a company's ordinary shares (or voting stock) by individuals or companies in one country.

*Undistributed profits.* This term refers, in the case of Australian subsidiaries, to the equity of the overseas parent in the net earnings for taxation purposes of the Australian company, less tax (or tax provision) and less dividends declared. In the case of overseas subsidiaries of Australian companies, this term represents the equity of the Australian parent in the book value of the net earnings of the subsidiary after tax, less dividends paid or payable.

*Unremitted profits.* For these statistics this represents the net earnings of branches during the year, after tax, less remittances by the branches to their home offices during the year of net earnings and interest (irrespective of the period to which the earnings and interest relate). 'Net earnings' of Australian branches of overseas companies are, in general, based on the value of their income for taxation purposes.

The annual bulletin *Insurance and Other Private Finance* and the *Annual Bulletin of Overseas Investment: Australia* contain additional figures relating to overseas investment, including a longer range of years covered, and also a more detailed description of the figures.

### Private overseas investment in companies in Australia and investment income payable overseas by companies in Australia

The inflow of private overseas investment in Australia since 1962-63 is shown in the next three tables.

## OVERSEAS TRANSACTIONS

**ANNUAL INFLOW OF PRIVATE OVERSEAS INVESTMENT IN COMPANIES IN AUSTRALIA  
BY CATEGORY OF INVESTMENT AND TYPE OF COMPANY(a), 1962-63 TO 1966-67**  
(\$ million)

Annual inflow of direct private overseas investment in companies in Australia						Portfolio investment and institutional loans (b)	Grand total
Year	Australian branches		Australian subsidiaries		Total		
	Un-remitted profits	Other direct investment	Undistributed profits	Other direct investment			
1962-63 .	16	6	90	267	380	82	463
1963-64 .	22	36	110	246	414	30	445
1964-65 .	11	67	108	346	532	43	574
1965-66 .	14	81	103	263	461	208	669
1966-67 .	9	88	89	94	281	175	456

(a) Increases in investment by some overseas investors are offset against withdrawals of investment by other overseas investors. (b) Partly estimated.

**ANNUAL INFLOW OF PRIVATE OVERSEAS INVESTMENT IN  
COMPANIES IN AUSTRALIA, BY DOMICILE OF INVESTOR AND  
CATEGORY OF INVESTMENT(a), 1962-63 TO 1966-67**  
(\$ million)

Year	United Kingdom	New Zealand	U.S.A. and Canada	Other countries	Total
<b>DIRECT INVESTMENT</b>					
<b>Undistributed income(b)—</b>					
1962-63 . . .	71	1	27	7	106
1963-64 . . .	80	3	45	5	132
1964-65 . . .	69	3	40	7	119
1965-66 . . .	60	3	49	5	117
1966-67 . . .	56	3	41	-2	98
<b>Other direct investment—</b>					
1962-63 . . .	95	-3	145	37	274
1963-64 . . .	99	-3	147	39	282
1964-65 . . .	170	..	193	48	412
1965-66 . . .	159	-2	136	52	344
1966-67 . . .	32	-3	137	16	183
<b>PORTFOLIO INVESTMENT AND INSTITUTIONAL LOANS(c)</b>					
1962-63 . . .	41	7	14	20	82
1963-64 . . .	14	9	8	..	30
1964-65 . . .	19	10	10	5	43
1965-66 . . .	40	-1	126	43	208
1966-67 . . .	27	-2	78	72	175
<b>TOTAL</b>					
1962-63 . . .	207	5	185	65	463
1963-64 . . .	193	9	200	44	445
1964-65 . . .	257	14	242	62	574
1965-66 . . .	259	..	311	100	669
1966-67 . . .	115	-2	257	86	456

(a) See footnote (a) to preceding table. (b) Unremitted profits of Australian branches plus undistributed profits of Australian subsidiaries. (c) Partly estimated.  
Minus sign (-) denotes outflow.

**ANNUAL INFLOW OF DIRECT PRIVATE OVERSEAS INVESTMENT IN  
COMPANIES IN AUSTRALIA, BY INDUSTRY IN WHICH CAPITAL  
INVESTED, 1962-63 TO 1966-67**

(\$ million)

<i>Year</i>	<i>Primary production</i>	<i>Manu- facturing</i>	<i>Other industries</i>	<i>Total</i>
1962-63 . . . . .	18	245	116	380
1963-64 . . . . .	36	218	160	414
1964-65 . . . . .	84	254	194	532
1965-66 . . . . .	123	181	157	461
1966-67 . . . . .	98	128	55	281

The next three tables show investment income payable overseas by companies in Australia.

**INVESTMENT INCOME PAYABLE OVERSEAS BY COMPANIES IN AUSTRALIA  
BY CATEGORY OF INCOME AND TYPE OF COMPANY, 1962-63 TO 1966-67**

(\$ million)

	<i>1962-63</i>	<i>1963-64</i>	<i>1964-65</i>	<i>1965-66</i>	<i>1966-67</i>
<b>Income payable on direct investment—</b>					
Australian branches—					
Unremitted profits . . . . .	16	22	11	14	9
Remitted profits and interest . . . . .	37	39	42	42	48
Australian subsidiaries—					
Undistributed profits . . . . .	90	110	108	103	89
Distributed profits—					
Dividends payable . . . . .	81	70	78	86	99
Interest remitted . . . . .	5	7	11	13	17
<i>Total, income payable on direct investment</i>	<i>229</i>	<i>248</i>	<i>250</i>	<i>259</i>	<i>262</i>
<b>Income paid on portfolio investment and institutional loans—</b>					
Dividends . . . . .	26	29	32	35	39
Interest . . . . .	2	4	5	14	22
<i>Total, income payable on portfolio investment, etc.</i>	<i>29</i>	<i>33</i>	<i>37</i>	<i>50</i>	<i>61</i>
<b>Grand total . . . . .</b>	<b>257</b>	<b>281</b>	<b>287</b>	<b>308</b>	<b>323</b>

## OVERSEAS TRANSACTIONS

**INVESTMENT INCOME PAYABLE OVERSEAS BY COMPANIES IN AUSTRALIA  
BY COUNTRY TO WHICH PAYABLE AND CATEGORY OF INCOME  
1962-63 TO 1966-67  
(\$ million)**

<i>Year</i>	<i>United Kingdom</i>	<i>New Zealand</i>	<i>U.S.A. and Canada</i>	<i>Other countries</i>	<i>Total</i>
<b>DIRECT INVESTMENT INCOME</b>					
<b>Undistributed income(a)—</b>					
1962-63 . . . .	71	1	27	7	106
1963-64 . . . .	80	3	45	5	132
1964-65 . . . .	69	3	40	7	119
1965-66 . . . .	60	3	49	5	117
1966-67 . . . .	56	3	41	-2	98
<b>Distributed income on direct investment(b)—</b>					
1962-63 . . . .	58	2	59	3	122
1963-64 . . . .	58	1	52	6	116
1964-65 . . . .	71	1	54	6	131
1965-66 . . . .	84	..	50	6	141
1966-67 . . . .	90	1	62	11	164
<b>INCOME PAYABLE ON PORTFOLIO INVESTMENT AND INSTITUTIONAL LOANS</b>					
1962-63 . . . .	16	7	3	3	29
1963-64 . . . .	19	7	3	3	33
1964-65 . . . .	20	8	4	4	37
1965-66 . . . .	23	9	13	5	50
1966-67 . . . .	26	9	18	8	61
<b>TOTAL</b>					
1962-63 . . . .	145	10	89	14	257
1963-64 . . . .	157	11	100	13	281
1964-65 . . . .	160	12	98	17	287
1965-66 . . . .	167	12	112	16	308
1966-67 . . . .	172	12	121	18	323

(a) Unremitted profits of Australian branches plus undistributed profits of Australian subsidiaries.

(b) Consists of remitted profits and interest of Australian branches, distributed profits and remitted interest of Australian subsidiaries.

Minus sign (—) denotes outflow.

**INCOME PAYABLE OVERSEAS ON DIRECT INVESTMENT BY  
COMPANIES IN AUSTRALIA, BY INDUSTRY IN WHICH CAPITAL  
INVESTED, 1962-63 TO 1966-67  
(\$ million)**

<i>Year</i>	<i>Primary production</i>	<i>Manu- facturing</i>	<i>Other industries</i>	<i>Total</i>
1962-63 . . . .	10	151	68	229
1963-64 . . . .	18	157	74	248
1964-65 . . . .	14	174	62	250
1965-66 . . . .	24	163	71	259
1966-67 . . . .	27	158	78	262

**Australian investment in companies overseas and investment income receivable from companies overseas**

The outflow of Australian investment in companies since 1962-63 and a classification by country in which the capital was invested are shown in the following two tables.

**ANNUAL OUTFLOW OF PRIVATE AUSTRALIAN INVESTMENT IN COMPANIES OVERSEAS  
BY CATEGORY OF INVESTMENT AND TYPE OF COMPANY(a), 1962-63 TO 1966-67**  
(\$ million)

<i>Annual outflow of direct private Australian investment in companies overseas</i>									
<i>Year</i>	<i>Overseas branches</i>		<i>Overseas subsidiaries</i>		<i>Total</i>	<i>Portfolio investment and institutional loans</i>	<i>Grand total</i>		
	<i>Unre-mitted profits</i>	<i>Other direct investment</i>	<i>Undis-tributed profits</i>	<i>Other direct investment</i>					
1962-63	.	.	..	-4	9	9	14	-6	8
1963-64	.	.	1	3	13	-5	12	-8	4
1964-65	.	.	..	3	20	10	32	-6	26
1965-66	.	.	2	3	16	13	33	-5	29
1966-67	.	.	-1	8	15	5	26	-7	19

(a) Increases in investment by some Australian investors are offset against withdrawals of investment by other Australian investors.

Minus sign (-) denotes inflow.

**ANNUAL OUTFLOW OF PRIVATE AUSTRALIAN INVESTMENT IN  
COMPANIES OVERSEAS, BY COUNTRY IN WHICH CAPITAL  
INVESTED(a), 1962-63 TO 1966-67**  
(\$ million)

Year	<i>United Kingdom</i>	<i>New Zealand</i>	<i>U.S.A. and Canada</i>	<i>Other countries</i>	<i>Total</i>
1962-63.	1	11	..	-4	8
1963-64.	-17	18	1	2	4
1964-65.	-7	12	..	21	26
1965-66.	2	14	1	12	29
1966-67.	-4	8	..	15	19

(a) Increases in investment by some Australian investors are offset against withdrawals of investment by other Australian investors.

Minus sign (-) denotes inflow.

The next two tables show income from direct investment receivable by Australian companies from companies overseas, and the countries from which it is receivable.

**INCOME FROM DIRECT INVESTMENT RECEIVABLE BY AUSTRALIAN  
COMPANIES FROM COMPANIES OVERSEAS, BY TYPE OF  
COMPANY AND CATEGORY OF INCOME, 1962-63 TO 1966-67**  
(\$ million)

Year	<i>Overseas branches</i>		<i>Overseas subsidiaries</i>		<i>Total</i>
	<i>Unre-mitted profits (net)</i>	<i>Remitted profits and interest</i>	<i>Undis-tributed profits (net)</i>	<i>Dividends and interest receivable</i>	
1962-63.	..	9	9	11	29
1963-64.	1	5	13	13	32
1964-65.	..	4	20	18	41
1965-66.	2	4	16	16	38
1966-67.	-1	5	15	21	39



## OVERSEAS TRANSACTIONS

INCOME FROM DIRECT INVESTMENT RECEIVABLE BY AUSTRALIAN  
COMPANIES FROM COMPANIES OVERSEAS, BY COUNTRY  
FROM WHICH RECEIVABLE, 1962-63 TO 1966-67  
(\$ million)

Year	United Kingdom	New Zealand	U.S.A. and Canada	Other countries	Total
1962-63.	1	12	..	16	29
1963-64.	..	16	1	15	32
1964-65.	2	21	..	18	41
1965-66.	1	16	1	19	38
1966-67.	1	18	1	19	39

## Net annual flow of investment

The net annual flow of investment between Australia and overseas, and its classification by country, are shown in the following two tables. In addition to private overseas investment, the annual inflow of overseas investment in Australian public authority securities and net overseas remittances by life insurance companies have been incorporated in both tables.

NET ANNUAL FLOW OF INVESTMENT BETWEEN  
AUSTRALIA AND OVERSEAS COUNTRIES(a)  
1962-63 TO 1966-67  
(\$ million)

Year	Annual inflow of investment	Annual outflow of investment	Net annual flow
1962-63 . . .	547	8	539
1963-64 . . .	464	9	455
1964-65 . . .	549	16	533
1965-66 . . .	643	23	620
1966-67 . . .	478	21	457

(a) Increases in investment by some overseas investors are offset against withdrawals of investment by other investors.

NET ANNUAL FLOW OF INVESTMENT BETWEEN AUSTRALIA AND OVERSEAS  
COUNTRIES, BY COUNTRY, 1962-63 TO 1966-67  
(\$ million)

Year	United Kingdom	New Zealand	U.S.A. and Canada	Other countries	I.B.R.D. (a)	Net annual flow
1962-63 . . .	222	-8	245	67	12	539
1963-64 . . .	236	-9	182	40	7	455
1964-65 . . .	213	..	276	46	-1	533
1965-66 . . .	222	-16	332	89	-7	620
1966-67 . . .	41	-6	361	83	-23	457

(a) Particulars are not available of the domicile of securities issued to the International Bank for Reconstruction and Development.

Minus sign (-) denotes outflow.

## BALANCE OF PAYMENTS

Estimates of a country's balance of payments are prepared for the purpose of providing a systematic record in money terms of the economic transactions which take place over a period between that country and all other countries. Such records are essential to the examination of influences which external factors have on the domestic economy. The Australian economy is subject to fairly large fluctuations in export income, and it is also affected in important respects by variations in the level of foreign investment and the demand for imports. Consequently, these estimates have always assumed particular importance in this country.

Official estimates of Australia's balance of payments covering the period 1928-29 to 1930-31 were included in the Appendix to Year Book No. 24, 1931. Except for the war years (1939 to 1945), estimates have since been published annually. Detailed estimates are currently provided twice yearly in the form of a mimeographed publication *Balance of Payments*. This publication brings the estimates forward to the end of the most recent financial year or half-year and, together with a printed volume *The Australian Balance of Payments, 1928-29 to 1950-51*, provides also a description of the various items included and the sources from which the information is obtained. A summarised statement of the principal current account items and capital movements is prepared and issued on a quarterly basis in the *Balance of Payments—Quarterly Summary*.

The form of presentation of the Australian estimates has recently been revised in order to bring it more closely into line with the recommendations of the Balance of Payments Manual of the International Monetary Fund (I.M.F.). The basic distinction remains, however, between 'current account' and 'capital account' transactions. Current account transactions may be defined as those involving changes in the ownership of goods or the rendering of services between residents of Australia and the rest of the world and include such items as exports, imports, shipping freights, dividends, profits and interest, travel, and government expenditure. The current account also includes the value of transfers in the form of gifts in cash or kind made or received by residents of Australia, both private and government, to or from the rest of the world. Capital account transactions may be defined as those involving claims to money and titles of investment between residents of one country and those of another country and include government loan-raising operations overseas, investment by overseas residents in Australian companies, the investment of Australian residents in companies overseas, and transactions involving changes in the overseas assets and liabilities of certain Australian marketing authorities.

By definition, the balance of payments on current account and the balance of payments on capital account during a given period must exactly offset one another. Errors and omissions, however, occur in the estimation of the amounts involved in various items in both the current and capital accounts, and, in addition, there are differences in timing between the statistical recording of trade and invisible transactions and the relevant foreign exchange transactions. It is therefore necessary to introduce into the estimates a 'balancing item' which allows the identity between the current and capital account balances to be preserved. The 'balancing item' is included in the capital account, but, as mentioned above, it includes discrepancies in the current account and does not, as is frequently supposed, include only errors, omissions and timing differences related to capital transactions.

Details of the estimates are assembled from a variety of sources of which the following are the more important: (i) statistics of exports and imports obtained from Australian trade statistics; (ii) details of the import valuation adjustment obtained from a sample of the invoices submitted to the Department of Customs and Excise in respect of imports into Australia; (iii) information on particular invisible current account items and capital movements obtained by regular inquiry from private organisations and government departments; (iv) details of receipts and payments of foreign exchange provided by the banking system; (v) information on dividends remitted, undistributed income and private investment in companies provided by statistics of overseas investment collected by this Bureau; (vi) information on freight on imports and other items concerned with overseas shipping obtained from a sample of the invoices submitted to the Department of Customs and Excise in respect of imports into Australia and a survey of shipping operations conducted by this Bureau; and (vii) information on international reserves supplied by the Reserve Bank of Australia.

**Current account**

The balance of payments on current account is arranged to show a series of credit items and a corresponding series of debit items. Primarily, entries on the credit side include all current transactions which result in receipts of foreign exchange (for goods and services, property income or transfers), and on the debit side the similar transactions which result in payments of foreign exchange. The principal exceptions to this rule are the amounts shown for undistributed income and where debts incurred for current account items, principally goods, are subsequently capitalised. In respect

of these amounts no movement of foreign exchange takes place, the amounts concerned being treated as credits or debits in the relevant sections of the current account, and as corresponding outflows or inflows in the relevant sections of the capital account. A further exception occurs in the case of transfers in kind where no foreign exchange movement takes place. The values of transfers received or provided in kind are shown as credits or debits respectively.

The largest items shown in the current account are exports and imports, and the difference between them represents the balance of trade. This is the most important, and usually the most variable, relationship in the balance of payments. *For balance of payments purposes, certain adjustments are made to the recorded trade statistics.* Briefly, these adjustments are made to exclude those transactions for which there is no change of ownership between residents and non-residents of Australia and to include certain transactions for which there has been a change of ownership but for which customs entries are not required. In addition, a valuation adjustment is made to the recorded import statistics in order to remove the overstatement which results from the basis of valuation for customs duty. A full description of the adjustments is provided in Appendix V. of the publication *Balance of Payments, 1960-61 to 1964-65*. A full evaluation of the overall position on current account, however, occurs only after the invisible items have been taken into account. The most important of these are the transportation items. Entries appear on both the debit and credit sides, the principal component on the debit side being freight payable overseas on imports into Australia. The principal component on the credit side is expenditure by overseas carriers, which represents mainly overseas ships' expenditure for stevedoring, port charges, etc. incurred in loading and discharging goods at Australian ports, and stores purchased in Australia. The items next in importance are those concerning income from property. Debit entries under this heading include dividends, profits, interest and royalties payable overseas, while the credit entries include similar details of amounts receivable by Australian residents. These items include undistributed income for which, as mentioned above, no monetary payments occur. The remaining items are smaller than those mentioned above, and include travel, government transactions, transfers (including foreign aid made available by the Australian Government), and, on the credit side, the net value of Australian gold production.

#### Capital account

The capital account is also arranged to show a series of net credits and debits. Entries on the credit side represent a net increase in non-residents' assets in Australia or a net decrease in Australian assets overseas, while debit entries represent a net decrease in non-residents' assets in Australia or a net increase in Australian assets overseas.

Capital account transactions are also grouped according to the sector of the Australian party to the transactions. The government sector, therefore, includes all capital transactions of central, State, and local governments with the exception of transactions of monetary institutions (which are included in the monetary sector), while the private sector covers transactions of all resident individuals and private institutions (again, excepting monetary institutions). The monetary sector covers all banking institutions, including government-owned banks. Transactions of the monetary sector are further sub-divided into official and non-official transactions. Official transactions of Australian monetary institutions are those which cause changes in international reserves and in Australia's net I.M.F. position and transactions between the Reserve Bank of Australia and foreign central monetary institutions. Non-official transactions include all other transactions of Australian monetary institutions.

In the government sector the most important items are transactions by non-residents in government securities domiciled overseas and in Australia and transactions involving changes in Australia's assets with and liabilities to international non-monetary institutions such as the International Bank for Reconstruction and Development and the Asian Development Bank. Other government transactions are largely a reflection of the net effect on the balance of payments of leads and lags between payments made overseas for items of equipment for the defence services or government airlines and the delivery of the equipment. In periods where payments exceed the value of deliveries a net debit results; in periods where the value of deliveries exceeds payments a net credit is recorded.

In the private sector the most important items are overseas investment in Australian companies, Australian investment in companies overseas, and the transactions of marketing authorities. The figures for marketing authorities represent changes in the estimated value of commodity stocks held overseas by, or in amounts owed by overseas debtors to, the principal Australian marketing authorities.

In the monetary sector the most important item is that which shows the net change in Australia's international reserves. Also important are transactions involving changes in Australia's position with the I.M.F.

The balancing item includes errors and omissions and timing differences, referred to on page 383.

## Tables—Balance of payments

The following tables show, for the three years 1964-65 to 1966-67, particulars of:

- (i) the balance of payments; and
- (ii) the balance of payments on current account, by major groups of countries.

## BALANCE OF PAYMENTS: AUSTRALIA, 1964-65 TO 1966-67

(\$ million)

	1964-65		1965-66		1966-67	
	Credit	Debit	Credit	Debit	Credit	Debit
CURRENT ACCOUNT						
Goods—						
1 Exports f.o.b.(a)	2,574	..	2,626	..	2,926	..
2 Imports f.o.b.(a)	..	2,739	..	2,822	..	2,838
<i>Balance of trade</i>	..	165	..	196	88	..
Invisibles—						
3 Gold production	27	..	25	..	24	..
4 Transportation—						
4.1 Freight payable overseas(b)	..	298	..	310	..	304
4.2 Expenditure of overseas carriers	190	..	195	..	218	..
4.3 Other transportation	89	190	100	210	99	248
5 Travel	54	114	58	122	70	133
6 Government—						
6.1 Australian government—						
6.11 Defence expenditure	..	29	..	39	..	52
6.12 Other expenditure	..	22	..	27	..	30
6.13 Services to non-residents	27	..	32	..	36	..
6.2 Foreign governments' expenditure	32	..	45	..	46	..
7 Miscellaneous—						
7.1 Business expenses	30	42	29	51	26	54
7.2 Other	25	44	27	46	29	44
8 Property income—						
8.1 Direct investment—						
8.11 Undistributed	19	120	18	118	16	102
8.12 Distributed	22	137	20	141	25	159
8.2 Interest on government loans	..	72	..	72	..	72
8.3 Royalties and copyrights	3	46	4	50	4	55
8.4 Other	75	37	72	49	79	60
9 Government transfers—						
9.1 Papua-New Guinea	..	71	..	90	..	106
9.2 Other foreign aid	..	36	..	38	..	46
10 Private transfers—						
10.1 Migrants' funds	80	17	86	21	100	24
10.2 Other	35	49	35	53	34	55
<i>Balance on current account</i>	..	781	..	887	..	650

For footnotes see next page.

## OVERSEAS TRANSACTIONS

BALANCE OF PAYMENTS: AUSTRALIA 1964-65 TO 1966-67—*continued*  
(\$ million)

	1964-65		1965-66		1966-67	
	Credit	Debit	Credit	Debit	Credit	Debit
CAPITAL ACCOUNT (NET)						
Government (non-monetary)—						
11 Government securities—						
11.1 Domiciled overseas—						
11.11 I.B.R.D. . . . .	..	1	..	7	..	23
11.12 Other central government . . . . .	..	14	..	17	50	..
11.13 Local and semi-government . . . . .	..	6	..	3	..	3
11.14 Discounts, etc. . . . .	1	..	2	..	..	..
11.2 Domiciled in Australia . . . . .	..	5	..	1	7	..
12 International non-monetary institutions—						
12.1 Changes in assets . . . . .	..	4	..	6	..	14
12.2. Change in liabilities . . . . .	1	..	..	..	4	..
13 Other government transactions . . . . .	..	20	46	..	..	33
Private (non-monetary)—						
14 Overseas investment in Australian companies—						
14.1 Direct investment—						
14.11 Undistributed income . . . . .	120	..	118	..	102	..
14.12 Other . . . . .	401	..	326	..	189	..
14.2 Portfolio investment and institutional loans . . . . .	43	..	208	..	198	..
15 Australian investment overseas—						
15.1 Direct investment—						
15.11 Undistributed income . . . . .	..	19	..	18	..	16
15.12 Other . . . . .	..	13	..	17	..	11
15.2 Portfolio investment . . . . .	6	..	5	..	7	..
16 Other private investment . . . . .	10	..	5	..	2	..
17 Marketing authorities . . . . .	..	61	34	..	..	76
Monetary—						
18 Non-official transactions—						
18.1 Changes in assets . . . . .	..	..	..	..	..	1
18.2 Changes in liabilities . . . . .	17	..	10	..	14	..
19 Official transactions—						
19.1 I.M.F. account—						
19.11 Changes in assets . . . . .	..	..	..	89	..	..
19.12 Changes in liabilities . . . . .	..	22	49	..	..	26
19.2 International reserves . . . . .	318	..	..	21	177	..
19.3 Other . . . . .	..	..	..	..	..	31
Balancing item . . . . .	29	..	263	..	134	..
Balance on capital account . . . . .	781	..	887	..	650	..

(a) The amounts shown represent the recorded trade figures adjusted for balance of payments purposes. Adjustments affect both coverage and valuation. (b) Total freight and insurance on imports, whether payable overseas or in Australia, is estimated at \$325 million in 1964-65, \$340 million in 1965-66 and \$340 million in 1966-67.

**BALANCE OF PAYMENTS ON CURRENT ACCOUNT  
BY MAJOR GROUP OF COUNTRIES: AUSTRALIA  
1964-65 TO 1966-67**

(\$ million)

	1964-65	1965-66	1966-67
<b>EXPORTS f.o.b.(a)—</b>			
Sterling—			
United Kingdom . . . . .	509	466	400
Other . . . . .	507	498	659
Non-sterling—			
North America . . . . .	300	374	415
European Economic Community . . . . .	381	435	415
European Free Trade Association(b) . . . . .	30	29	38
Japan . . . . .	439	467	582
Eastern Europe, China (mainland), etc. . . . .	247	189	190
Other . . . . .	161	168	227
<i>Total exports</i> . . . . .	2,574	2,626	2,926
<b>IMPORTS f.o.b.(a)—</b>			
Sterling—			
United Kingdom . . . . .	686	697	673
Other . . . . .	325	310	342
Non-sterling—			
North America . . . . .	782	821	816
European Economic Community . . . . .	327	352	349
European Free Trade Association(b) . . . . .	127	133	133
Japan . . . . .	250	275	294
Eastern Europe, China (mainland), etc. . . . .	45	40	41
Other . . . . .	197	194	190
<i>Total imports</i> . . . . .	2,739	2,822	2,838
<b>INVISIBLES (NET)—</b>			
Sterling—			
United Kingdom . . . . .	-153	-176	-169
Other . . . . .	-138	-162	-191
Non-sterling—			
North America . . . . .	-209	-233	-236
European Economic Community . . . . .	-69	-75	-83
European Free Trade Association(b) . . . . .	9	8	7
Japan . . . . .	-4	5	6
Eastern Europe, China (mainland), etc. . . . .	-2	-3	-4
Other . . . . .	-58	-61	-71
International agencies . . . . .	-19	-19	-21
Gold production . . . . .	27	25	24
<i>Total invisibles (net)</i> . . . . .	-616	-691	-738
<b>BALANCE ON CURRENT ACCOUNT—</b>			
Sterling—			
United Kingdom . . . . .	-330	-407	-442
Other . . . . .	44	26	126
Non-sterling—			
North America . . . . .	-691	-680	-637
European Economic Community . . . . .	-15	8	-17
European Free Trade Association(b) . . . . .	-88	-96	-88
Japan . . . . .	185	197	294
Eastern Europe, China (mainland), etc. . . . .	200	146	145
Other . . . . .	-94	-87	-34
International agencies . . . . .	-19	-19	-21
Gold production . . . . .	27	25	24
<i>Total balance on current account</i> . . . . .	-781	-887	-650

(a) The amounts shown represent the recorded trade figures adjusted for balance of payments purposes. Adjustments affect both coverage and valuation. (b) Other than the United Kingdom.

Minus sign (-) denotes deficit.

**International reserves**

The following table shows the total net gold and foreign exchange holdings of official and banking institutions as at 30 June 1965, 1966 and 1967.

**AUSTRALIAN INTERNATIONAL RESERVES, 1964-65 TO 1966-67**

(Source: Reserve Bank of Australia)

(\$ million)

	30 June		
	1965	1966	1967
Gold . . . . .	205	198	204
United States dollars . . . . .	154	194	251
Sterling . . . . .	994	981	742
Other foreign exchange . . . . .	1	2	1
<b>Total . . . . .</b>	<b>1,354</b>	<b>1,375</b>	<b>1,198</b>

**Indexes of values of exports and imports at constant prices**

The following tables show indexes of exports and imports at constant prices for the years 1964-65, 1965-66 and 1966-67. These indexes are published half-yearly in *Balance of Payments*, and notes on their construction are contained in Appendix IV. of *Balance of Payments*, 1959-60 to 1963-64.

**INDEXES OF VALUES OF EXPORTS(a) AT CONSTANT PRICES  
1964-65 TO 1966-67**

(Base of each index: year 1959-60 = 100)

Commodity group	1964-65	1965-66	1966-67
Foodstuffs . . . . .	156	145	166
Wool and sheepskins . . . . .	102	102	104
Minerals, metals and metal manufactures(b) . . . . .	161	203	261
Other . . . . .	179	181	211
<b>All exports . . . . .</b>	<b>135</b>	<b>136</b>	<b>154</b>

(a) Excludes gold. (b) Excludes machinery.

**INDEXES OF VALUES OF IMPORTS(a) AT CONSTANT PRICES  
1964-65 TO 1966-67**

(Base of each index: year 1959-60 = 100)

Commodity group	1964-65	1965-66	1966-67
Food, drink and tobacco . . . . .	122	128	133
Textiles and clothing . . . . .	123	115	124
Oils, fats and waxes . . . . .	136	143	147
Metals, metal manufactures and machinery . . . . .	167	167	161
Other . . . . .	167	172	186
<b>All imports . . . . .</b>	<b>156</b>	<b>158</b>	<b>161</b>

(a) Excludes gold.

## CHAPTER 12

### TRANSPORT, COMMUNICATION AND TRAVEL

The statistics in this chapter relate in the main to the year 1966-67, with comparisons restricted to a few recent years. More detailed figures and particulars for earlier years are included in the annual bulletins, *Transport and Communication*, *Commonwealth Finance*, and *State, Territory and Local Government Authorities' Finance and Government Securities*, and in the annual mimeographed statement *Motor Vehicle Registrations*. Current information on subjects dealt with in this chapter appears in the *Quarterly Summary of Australian Statistics*, the *Monthly Review of Business Statistics*, the *Digest of Current Economic Statistics*, *Overseas Shipping Cargo* (quarterly), *Motor Vehicle Registrations* (monthly) and two preliminary monthly statements *Registrations of New Motor Vehicles*, *Road Traffic Accidents involving Casualties* (quarterly), and *Overseas Arrivals and Departures* (monthly and quarterly)—see page 451. Greater detail on the latter subject is contained in the annual bulletin *Demography*.

Information additional to that contained in Bureau publications is available in the annual reports and other statements of the Department of Shipping and Transport, the various harbour boards and trusts, the several Government railways authorities, the Department of Civil Aviation, the Postmaster-General's Department, the Overseas Telecommunications Commission, the Australian Broadcasting Control Board, and the Australian Broadcasting Commission.

#### THE AUSTRALIAN TRANSPORT ADVISORY COUNCIL AND ITS STANDING COMMITTEES

The Australian Transport Advisory Council, established April 1946, comprises the Commonwealth Minister for Shipping and Transport as Chairman, the Commonwealth Ministers for the Interior and Territories, and each State Minister for Transport. The administration of the Council and the standing committees it has established is the responsibility of the Commonwealth Department of Shipping and Transport. The general practice is that the Council convenes at least once a year, the annual meetings moving successively from one capital city to another. The Council primarily considers policy matters relating to transport operation, co-ordination and development.

The regulation of, and the executive responsibility for, transport is shared concurrently between the Commonwealth and State Governments. The Australian Transport Advisory Council is the meeting ground of Commonwealth and States at a ministerial level and provides an effective means for inviting discussion and reaching by way of mutual consent and understanding a uniformity of approach towards transport administrative procedures and policy. It also provides a means for reviewing and discussing proposals for the national solution of pressing transport problems and the rectification of transport deficiencies generally.

Some of the Council's most useful work has been accomplished through the agency of committees established by the Council from time to time. Some committees are of a semi-permanent nature. They were established to initiate discussion and action on transport problems referred by member Ministers and other authorities and to undertake specialised work. Most of these committees meet at regular intervals and report annually on their progress to the Australian Transport Advisory Council. These committees are: The Australian Motor Vehicle Standards Committee, The Australian Road Safety Council, The Australian Road Traffic Code Committee, The Committee of Transport Economic Research, The Australian Dangerous Goods Transport Committee, and The Australian Motor Vehicle Design Advisory Panel.

Further details of the work of the Australian Transport Advisory Council and its standing committees are given in Year Book No. 53, 1967, pages 421-4.

#### SHIPPING Control of shipping

##### Commonwealth navigation and shipping legislation

Section 51 (i) of the Commonwealth Constitution empowers the Parliament of the Commonwealth to make laws in respect of 'Trade and commerce with other countries, and among the States'. By Section 98 this power is further defined as extending to navigation and shipping.



*Legislation before 1914–18 War.* The first essay in the way of legislation in this direction was made in March 1904, when a Bill for a Navigation and Shipping Act was introduced in the Senate by the Attorney-General of the first Deakin Administration. This Bill was withdrawn at an early stage for further consideration and redrafting. The Deakin Ministry resigned in April 1904, and the succeeding Watson Government, in view of the far-reaching and important nature of the Bill, decided to refer it to a Royal Commission for consideration and report. In 1905 the Commission presented a draft Bill, the main principles of which, in so far as they affected overseas shipping, were then, at the invitation of the Imperial Government, considered at an Imperial Shipping Conference held in London in 1907, at which representatives of Great Britain, Australia, and New Zealand were present. The Conference considered, *inter alia*, the following recommendation of the Royal Commission: 'That the coastal trade of the Commonwealth be reserved for ships on the Australian Register, or ships conforming to Australian conditions, and licensed to trade on the Australian coast'; and recommended: 'That the vessels to which the conditions imposed by the law of Australia or New Zealand are applicable should be (i) vessels registered in the colony, while trading therein, and (ii) vessels wherever registered, while trading on the coast of the colony'. The Royal Commission made further modifications of the draft to conform with the resolutions of the Conference, and the resultant Bill was re-introduced in the Senate in September 1907 by the second Deakin Administration. Owing to pressure of other business, however, it lapsed. The Bill was again introduced in the Senate in September 1908, but again it lapsed; proceedings were resumed in 1909, but again the Bill lapsed. It was brought in again in 1910 by the second Fisher Administration, revived in 1911, lapsed again, and finally became, under the last-mentioned Government, the *Navigation Act 1912*. While preparations were being made to bring it into operation, the war broke out, and action was postponed.

#### *Navigation Act 1919 and amending Acts*

At the conclusion of the 1914–18 War the proclamation of the 1912 Act could no longer be delayed, and in 1919 the Government introduced another Bill to give power to proclaim different portions of the Act to commence at different times. In order to make the change as gradual as possible, groups of sections were brought into operation from time to time, the first group, which commenced on 1 July 1921, comprising the coasting trade provisions. Other parts of the Act deal with the subjects of masters and seamen, foreign seamen, surveys of ships, unseaworthy ships, passengers, wrecks and salvage, limitation of liability in respect of Government ships, Courts of Marine Inquiry, legal proceedings, and other miscellaneous matters.

Soon after the coasting trade provisions commenced, the owners of a number of intra-State ships took steps to have tested the validity of the application to their ships of the manning and accommodation provisions of the Act. The judgment of the High Court was to the effect that those provisions did not apply to vessels engaged solely in the domestic trade of a State. In consequence of this judgment the Government decided not to enforce the provisions of the Act then in force on any intra-State ship, and similarly other sections since brought into force have not in general been applied to such ships.

Although a considerable amount of shipping has thereby been left to the control of the various State Governments, for all ships trading beyond one State there is uniform procedure in regard to such matters as: (i) the engagement and discharge of seamen; (ii) the standard of accommodation provided for crews; (iii) scales of medicines; (iv) the survey of hulls, machinery and gear; (v) the carriage and stowage of cargo; (vi) loadlines; (vii) the adjustment of compasses; and (viii) the examination of masters, mates, and engineers for certificates of competency.

The Act provides for the granting of licences to ships to engage in the coasting trade if they meet the requirements of Section 288 in relation to Australian manning scales and the payment of wages in accordance with Australian award conditions. Non-Australian vessels are not excluded from engaging in the coasting trade under licence, but because of the high standard of pay and accommodation on Australian licensed vessels, virtually no non-Australian shipowner seeks a licence. Section 286(1.) of the Act provides that if no licensed ship is available for a service between ports, or if the service carried out is inadequate, the Minister may, if satisfied it is in the public interest to do so, grant permits to unlicensed ships to engage in the trade. In addition, foreign ships have occasionally been permitted to trade under exemptions granted under section 422A of the Act.

The 1919 Act also extended the coasting trade provisions of the Act to the Territories under the authority of the Commonwealth, and to those governed under a Mandate. In 1925, however, it was found necessary in the interest of the development of the Territories to issue an Order in Council directing that trade with and in the Territories of Papua and New Guinea should not be deemed to be engaging in the coasting trade. Another amending Act, passed in 1920, enabled the Commonwealth to give effect to provisions of the International Convention for the Safety of Life at Sea, and to grant permits to British ships to trade on the coast in special circumstances. A 1934 amendment brought the Act into line with a new International Convention for the Safety of Life at Sea (1929) and with an International Load Line Convention (1930). Further amendments were made in 1942 and by the *Statute Law Revision Act 1950*.

During the 1939–45 War a Maritime Industry Commission was established under National Security Regulations to deal with a limited number of industrial questions, and many of its Orders extended or modified provisions of the Navigation Act in regard to officers and seamen. Following serious postwar hold-ups in the shipping industry, the Act was amended in 1952, establishing machinery thereunder which replaced the Commission and dealt with industrial questions in the industry and with the allied problems of seamen and crew accommodation. Two Committees were set up under the Act to deal with the matters of the disciplining of seamen and with crew accommodation. Each Committee was made up of four members representative of shipowners, one of deck officers, one of engine-room officers and two of seamen other than officers, with an officer of the Department of Shipping and Transport as Chairman. Any question regarding administration or the making of regulations, etc. may be referred to the Marine Council, which is the disciplining Committee, but it is obligatory on the Minister to seek the Council's advice upon all proposed regulations with respect to the scales of officers, crew and provisions.

In 1956 the provisions relating to arbitration machinery, which had been inserted into the framework of the Act by the 1952 amendments, were repealed when the Arbitration Court was reconstituted as the Conciliation and Arbitration Commission.

The 1953 amending Navigation Act, which was brought into operation in 1959, amended the Principal Act to enable the Commonwealth to accept a further Safety of Life at Sea Convention (that of 1948), and in 1958, 1961, and 1965 further substantial amendments were made as the result of a series of general reviews of the provisions of the Act; these amendments corrected anomalies which had arisen or had been discovered, and brought the legislation into line with the developing shipping practices of other maritime nations. In 1966 the Statute Law Revision (Decimal Currency) Act provided for the conversion of all monetary references in the Act to decimal currency, and in 1967 a new amending Act was passed to enable Australia to accept still another Safety of Life at Sea Convention which had been drawn up in 1960. (This Act came into force on 20 March 1968.)

*Other Commonwealth Acts connected with shipping.* Other Commonwealth Acts connected with shipping are the *Sea Carriage of Goods Act* 1924, the *Seamen's Compensation Act* 1911–1967, the *Seamen's War Pensions and Allowances Act* 1940–1967, the *Pollution of the Sea by Oil Act* 1960–1965, the *Australian Coastal Shipping Commission Act* 1956–1966, the *Australian Coastal Shipping Agreement Act* 1956, the *Stevedoring Industry Act* 1956–1966, the *Beaches, Fishing Grounds and Sea Routes Protection Act* 1932–1966, the *Submarine Cables and Pipelines Protection Act* 1963–1966, and the *Lighthouses Act* 1911–1966, the last-mentioned being made under Section 51 (vii) of the Constitution, which provides power in respect of 'lighthouses, lightships, beacons and buoys'.

#### Australian Coastal Shipping Commission

This Commission was established in 1956 for the purpose of maintaining and operating interstate, overseas, and territorial shipping services, and replaced the Australian Shipping Board. It operates the Australian National Line, a Commonwealth-owned merchant shipping service, which at 30 June 1967 comprised thirty-seven vessels totalling 224,224 gross tons. These vessels included eight with a gross tonnage of 500 to 3,000, twelve with a gross tonnage of 3,000 to 5,000, and eleven with a gross tonnage of 5,000 to 8,000; the passenger vehicle deck vessels *Empress of Australia*, 12,037 gross tons and *Princess of Tasmania*, 3,981 gross tons; the bulk ore carriers *Mount Keira*, 10,229 gross tons, *Mount Kembla*, 10,112 gross tons, *Musgrave Range*, 14,467 gross tons; and the *Darling River*, 33,774 gross tons.

At 30 June 1967 vessels on order at Australian shipyards for the Commission included three 4,000 tons deadweight vehicle deck cargo vessels, a 55,000 tons deadweight bulk carrier, and an additional passenger vehicle deck vessel to operate between Melbourne and Tasmania.

Six terminals have been established in Melbourne, Sydney and Tasmania to service the Line's vehicle deck vessels.

During 1966–67 the passenger vessels 'Empress of Australia' and 'Princess of Tasmania' and the vehicle deck cargo vessel 'Bass Trader' carried a total of 113,587 passengers, 33,156 passengers' and trade vehicles, and 985,526 tons of commercial cargo between the mainland and Tasmania. Over the same period a total of 7,236,487 tons of cargo was carried by Australian National Line vessels.

#### Australian Shipbuilding Board

Established in March 1941 as a wartime measure under the National Security (Shipbuilding) Regulations and constituted in 1948 under the *Supply and Development Act* 1939–1948, the Board now operates under the control of the Minister for Shipping and Transport. In November 1963 the Commonwealth Public Service Board approved its permanent establishment as a branch of the Department of Shipping and Transport. The membership of the Board consists of a Chairman, a Finance Member, and three other members, one of whom is also a member of the Naval Board.

The functions of the Board are set out in detail in Regulation 22 (4) of the Supply and Development Regulations and in the exercise of those functions the Board is responsible for, briefly:

- (a) recommending to the Minister for Shipping and Transport the price at which vessels may be purchased and disposed of by him on behalf of the Commonwealth;
- (b) the design and inspection of construction of merchant ships;
- (c) research into all matters connected with or incidental to shipbuilding;
- (d) advice to the Minister on developments in the shipbuilding industry;
- (e) rendering assistance to all sections of the industry.

To 31 January 1968 the Board had arranged for the construction of 117 merchant vessels, and in addition one semi-submersible oil drilling rig, a suction hopper dredger, and a survey vessel. The deadweight tonnage of these vessels (not including the drilling rig and the dredger) was approximately 802,500 tons, at a cost of \$255 million. There were thirty-five smaller vessels to which the shipbuilding subsidy did not apply.

Current orders held by the Board at 31 January 1968 included nineteen vessels totalling 140,000 tons deadweight, and in addition two large dredgers and a 250-ton capacity floating crane. (These vessels are not classified in tons deadweight.)

The orders held include three bulk carriers ranging to 55,000 tons deadweight, two tankers, two dredgers, the floating crane, two specialised container vessels, one passenger cargo vessel, three roll-on roll-off vessels, one off-shore drilling rig supply vessel, a passenger ferry for Sydney Harbour, and a number of tugs.

Vessels under negotiation include tugs, three more off-shore oil rig supply vessels, and eight specialised vessels for gas or oil pipelines.

There are five major Australian shipyards building merchant vessels—two in Queensland, two in South Australia, and one in New South Wales; and two shipyards engaged principally in naval shipbuilding—one in New South Wales and one in Victoria. There are also numerous smaller yards, situated in every State, building smaller steel and wooden working and pleasure craft.

*Shipbuilding subsidy.* The Australian shipbuilding industry has been subsidised since 1947, and following the 1963 Tariff Board inquiry into measures of assistance to the Australian shipbuilding industry, the Government decided to extend the shipbuilding subsidy at its existing rate of up to one-third of the cost of construction to include all types of vessels of 200 tons gross and over built in recognised shipyards and intended for use in Australian coastal or inland waterways. This came into effect on 20 May 1964. In respect of vessels of less than 200 tons gross Australian shipbuilders are afforded protection under the Customs Tariff.

#### **Australian Stevedoring Industry Authority**

In March 1947 legislation established a permanent Stevedoring Industry Commission to continue in peace-time the functions performed during the war by the Commission established under National Security legislation. In June 1949 legislation was enacted to abolish the Stevedoring Industry Commission, on which employers and employees were represented, and establish in its place a Stevedoring Industry Board of three members, to attend to administrative matters formerly under the control of the Commission, such as the operation of labour bureaux at ports, payment of attendance money and provision of amenities. The industrial functions which previously came within the province of the Commission were assigned to a single Judge of the Commonwealth Court of Conciliation and Arbitration. In August 1956, following a Committee of Inquiry into the stevedoring industry, the Stevedoring Industry Board was replaced by the Australian Stevedoring Industry Authority of three members, including a representative of the management side of industry and a representative of the trade union movement. At the same time the judicial and non-judicial functions formerly exercised by the Commonwealth Court of Conciliation and Arbitration were divided between the Commonwealth Industrial Court and the Commonwealth Conciliation and Arbitration Commission respectively. Awards of the Conciliation and Arbitration Commission subsequently placed payment of sick pay, public holiday pay and annual leave under the administration of the Authority. Under amending legislation, which operated from 6 June 1961, the Authority became responsible for payment of long service leave to registered waterside workers, and its disciplinary powers were strengthened to reduce the time lost through unauthorised stoppages. Further amending legislation which operated from 8 October 1965 made the Authority responsible for the recruitment of waterside workers.

In October 1965 the Government invited the Australian Council of Trade Unions, the Waterside Workers' Federation of Australia, the Association of Employers of Waterside Labour, the Australian Stevedoring Industry Authority, and the Department of Labour and National Service to confer under the chairmanship of Mr A. E. Woodward, Q.C., with the overall objective of improving the long-term conditions in the stevedoring industry. Following a series of meetings, the Conference, known

as the National Stevedoring Industry Conference, published a General Report in April 1967 recording agreement between the parties on a number of matters. These included *inter alia* weekly hire for all registered waterside workers in major ports, together with a pension scheme and provision for reducing the statutory retirement age progressively from seventy to sixty-five years of age. Special arrangements have been agreed to cover any prospective redundancy problems. Following adoption of the Report by all the parties, including the Government, enabling legislation was introduced to allow the changes to be implemented. Permanent employment was commenced in Sydney on 27 November 1967. Other appropriate ports will follow progressively.

The statutory provisions relating to the industry are now contained in the *Stevedoring Industry (Temporary Provisions) Act 1967* (and Regulations made thereunder), the *Stevedoring Industry Act 1956–1966*, and Division 4 of Part III of the *Conciliation and Arbitration Act 1904–1967*.

#### Trade Practices Act 1965–1967 (Part XA)

The Trade Practices Act Part XA (Overseas Cargo Shipping) came into force on 1 September 1967. The Part is administered by the Minister for Trade and Industry.

The Act provides for the filing, with the Clerk of Shipping Agreements, of certain agreements of a specified character between shipowners operating in the outward trades from Australia. A shipowner who is a party to such an agreement may be called upon to negotiate with a 'shipper body' with regard to arrangements for, and the terms and conditions that are to be applicable to, the cargo shipping to which the agreement relates. A 'shipper body' is an association, designated by the Minister, that represents the interests of producers and shippers of Australian export goods. Whether a shipowner has failed so to negotiate, or whether the services provided pursuant to the agreement are adequate, efficient or economical, are matters that may be referred by the Minister for inquiry and report by the Trade Practices Tribunal. Certain powers are vested in the Governor-General to disapprove an agreement after consideration of a report to the Minister by the Tribunal. A probable effect of such a disapproval would be to force the shipowners to carry on business as individuals, and not as members of a 'conference'. ('Conferences' are the associations into which shipowners traditionally combine in the cargo liner trades). The Governor-General may, however, in his discretion approve such a shipowner entering into another similar agreement.

In addition to the provisions relating to conferences the Act also makes similar provisions for trades where only one line is operating. Such a line may, as a result of a declaration by the Governor-General, be prohibited from engaging in certain specified activities in carrying on that business, e.g. engaging in freight-cutting with the object of substantially damaging the business of another shipowner.

The Act also contains provisions which secure rights for Australian flag vessels to operate in the trades from Australia.

### System of record of shipping

In the system of recording statistics of overseas shipping, Australia is considered as a unit, and therefore only one entry and one clearance are counted for each voyage, without regard to the number of States visited (*see also* pages 395–6). For the purpose of these statistics all external territories are treated as overseas countries.

Returns are submitted by shipping companies or their representatives to Customs Houses at each port throughout Australia. A return is submitted for each movement of a vessel into and out of a port except for (i) naval vessels; (ii) yachts and other craft used for pleasure; (iii) foreign fishing vessels that neither load nor discharge cargo; and (iv) vessels of 200 net tons and under.

Cargo is recorded on returns either in terms of units of weight or in terms of units of measurement (a ton measurement is a unit of 40 cubic feet). Statistics show separate figures for cargo recorded in tons weight and cargo recorded in tons measurement. Type of vessel is shown on returns, and on the basis of this information separate cargo statistics are compiled for two groups—liner services; and tramps, bulkships, and tankers.

Returns for vessels arriving at an Australian port show cargo classified by the ports at which it was loaded. Similarly, cargo loaded at an Australian port is shown according to the ports at which it will be discharged. Overseas ports shown are not necessarily ports of origin or ultimate discharge because previous or subsequent transshipments overseas are not taken into account. Domestic transshipments can take place in Australian ports before overseas cargo is loaded or after it is discharged by reporting vessels, and for these movements the cargo is treated in the statistics as inter-state (or intra-state) cargo. Statistics for coastal cargo also do not take into account ports of origin or ultimate discharge of transhipped cargo.

The size of a vessel may be expressed in a number of ways. A vessel's gross tonnage, expressed in tons of 100 cubic feet, represents the total volume of the enclosed space, i.e. a ship of 25,000 tons has a total enclosed capacity of 2,500,000 cubic feet. Its net tonnage, expressed in tons of 100 cubic feet, represents the volume of enclosed space that can be used for cargo or passengers. Its displacement is its total weight and is expressed in tons of 2,240 lb. Its deadweight tonnage is the difference between the displacement of the vessel loaded to its summer loadline and the displacement light, i.e. it is the weight the vessel can carry, including the weight of bunkers and stores. Net tonnage is the concept generally used in the tables in this chapter, but since it can give a misleading impression of the size of ships which have a function other than carrying passengers and cargo (e.g. a tug has no net tonnage), some figures are given for deadweight tons and tons gross also.

Except in Shipping at principal ports (pages 398-9), intrastate (coastal) movements, including those of vessels engaged solely in trade within State limits, are excluded from the statistics in the following pages.

### Overseas shipping

#### Total movement

The following table shows the number of entrances and clearances combined of overseas vessels at Australian ports, and the aggregate net tonnage, during each of the years 1962-63 to 1966-67.

OVERSEAS SHIPPING: ENTRANCES AND CLEARANCES  
(COMBINED) OF VESSELS DIRECT, AUSTRALIA  
1962-63 TO 1966-67

		1962-63	1963-64	1964-65	1965-66	1966-67 (a)
Number of vessels		6,762	7,477	7,601	7,958	7,994
Net tonnage	'000 tons	37,584	41,640	43,295	46,382	55,062

(a) Excludes vessels of 200 net tons and under.

Particulars of the total overseas movement of shipping for each year from 1822 to 1920-21 were published in Year Book No. 15, page 507, and those for each year from 1921-22 to 1950-51 in Year Book No. 40, page 97.

#### Total overseas shipping, States, etc.

The following table shows, for each State and the Northern Territory, the number of entrances and clearances of vessels direct from and to overseas countries, and the aggregate net tonnage, during the year 1966-67.

OVERSEAS SHIPPING: ENTRANCES AND CLEARANCES OF VESSELS DIRECT, STATES AND  
NORTHERN TERRITORY, 1966-67 (a)

		N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	Aust.
Entrances	number	1,241	492	833	352	900	87	72	3,977
	'000 net tons	9,000	3,259	4,848	3,078	6,677	321	261	27,444
Clearances	number	1,076	553	1,018	287	984	56	43	4,017
	'000 net tons	8,391	5,164	5,468	1,282	6,861	253	200	27,618

(a) Excludes vessels of 200 net tons and under.

**Country of registration of overseas shipping**

Particulars of overseas shipping which entered Australian ports during each of the years 1964-65 to 1966-67 are given in the following table according to country of registration of vessels.

**OVERSEAS SHIPPING: ENTRANCES DIRECT, BY COUNTRY OF REGISTRATION OF VESSELS  
AUSTRALIA, 1964-65 TO 1966-67**  
(<sup>0</sup>000 net tons)

<i>Vessels registered at ports in—</i>	<i>1964-65</i>	<i>1965-66</i>	<i>1966-67 (a)</i>	<i>Vessels registered at ports in—</i>	<i>1964-65</i>	<i>1965-66</i>	<i>1966-67 (a)</i>
Australia . . . . .	119	141	368	Panama . . . . .	551	423	648
Denmark . . . . .	387	262	409	Sweden . . . . .	769	686	930
France(b) . . . . .	403	540	432	United Kingdom . . . . .	6,936	7,109	7,576
Germany, Federal Republic of . . . . .	710	590	454	United States of America . . . . .	260	296	265
Greece . . . . .	1,264	1,384	1,746	Other countries . . . . .	711	409	579
India . . . . .	373	289	296				
Hong Kong . . . . .	86	244	229				
Italy . . . . .	752	712	894				
Japan . . . . .	1,850	2,628	3,426	All countries—			
Liberia . . . . .	1,833	2,643	3,979	In cargo . . . . .	16,355	16,952	18,069
Netherlands . . . . .	1,122	1,020	1,135	Proportion of total % . . . . .	75.4	73.6	65.8
New Zealand . . . . .	378	375	375	In ballast . . . . .	5,334	6,090	9,375
Norway . . . . .	3,185	3,291	3,703	Proportion of total % . . . . .	24.6	26.4	34.2
				Grand total . . . . .	21,689	23,042	27,444

(a) Excludes vessels of 200 net tons and under.  
58 during 1966-67).

(b) Includes New Caledonia (40 during 1964-65, 27 during 1965-66,

Australian registered tonnage which entered Australian ports from overseas during the year 1966-67 represented 1.3 per cent of the total tonnage entered and was confined mainly to the New Zealand and Pacific Islands trade.

## Interstate shipping

**System of record**

*Interstate shipping* comprises two elements: (a) vessels engaged solely in interstate trade; and (b) vessels trading between Australia and overseas countries and in the course of their voyages proceeding from one State to another. (Overseas vessels may obtain Single Voyage Permits under section 286 of the Navigation Act to perform certain tasks on the Australian coast in cases where no 'licensed' vessel is available. At the present time orders in Council exist exempting certain trades from the provisions of the Navigation Act and it is not necessary for 'unlicensed' vessels to obtain a permit to engage in those trades.\*) No complexity enters into the record of those in category (a), but with regard to the method of recording the movements of the overseas vessels (b), some explanation is necessary. Each State desires that its shipping statistics should show in full its shipping communications with overseas countries, but at the same time it is necessary to avoid any duplication in the statistics of Australia as a whole. In order to meet these dual requirements, a vessel arriving in any State from an overseas country—say the United Kingdom—via another State, is recorded in the second State as from the United Kingdom 'Overseas via States', thus distinguishing the movement from a direct overseas entry. Continuing the voyage, the vessel is again recorded for the statistics of the third State as from the United Kingdom 'Overseas via States'. On an inward voyage, the clearance from the first State to the second State is a *clearance* interstate, and is included with interstate tonnage in conformity with the pre-federation practice of the States, and to preserve the continuity of State statistics. Thus, movements of ships which are, from the standpoint of Australia as a whole, purely coastal movements, must for the individual States be recorded as 'Overseas via States' or 'Interstate' according to the direction of the movement. The significance of the record of these movements will be seen more clearly from the following tabular presentation of the inward and outward voyages to and from Australia of an overseas vessel which, it is presumed, reaches Fremantle (Western Australia) and then proceeds to the terminal port of the voyage—Sydney (New South Wales)—via South Australia and Victoria. From the terminal port the vessel will commence the outward voyage, in this case retracing its inward track.

\* *Australian Shipping and Shipbuilding Statistics* published by the Department of Shipping and Transport. See also page 390 of this Year Book.

## ITINERARY OF AN OVERSEAS VESSEL ON THE AUSTRALIAN COAST

	<i>Recorded as—</i>		
	<i>For the State and for Australia</i>		<i>For the States</i>
	1.	2.	3.
<b>Inward voyage—</b>			
Enters Fremantle from United Kingdom . . .	Overseas direct		
Clears Fremantle for Adelaide . . .		Interstate direct	
Enters Adelaide from United Kingdom via Fremantle . . .			Overseas via States
Clears Adelaide for Melbourne . . .		Interstate direct	
Enters Melbourne from United Kingdom via Adelaide . . .			Overseas via States
Clears Melbourne for Sydney . . .		Interstate direct	
Enters Sydney from United Kingdom via Mel- bourne . . .			Overseas via States
<b>Outward voyage—</b>			
Clears Sydney for United Kingdom via Melbourne . . .			Overseas via States
Enters Melbourne from Sydney . . .		Interstate direct	
Clears Melbourne for United Kingdom via Adelaide . . .			Overseas via States
Enters Adelaide from Melbourne . . .		Interstate direct	
Clears Adelaide for United Kingdom via Fremantle . . .			Overseas via States
Enters Fremantle from Adelaide . . .		Interstate direct	
Clears Fremantle for United Kingdom . . .	Overseas direct		

From the method outlined above the requirements for Australia and for the individual States are ascertained as follows. (a) The aggregate of all ships recorded for each State as 'Overseas direct' gives the overseas shipping for Australia as a whole; (b) the aggregate for all ships recorded in any State as 'Overseas direct' plus those recorded as 'Overseas via States' gives the total *oversea shipping* for that State; and (c) the aggregate for all ships recorded as 'Overseas via States' may also be used, together with those recorded as 'Interstate direct' (including those engaged solely in interstate movement) to furnish figures showing the total *interstate movement* of shipping.

**Interstate movement**

*Interstate direct.* The following table shows the number of entrances and the net tonnage of vessels recorded into each State and the Northern Territory from any other State (including overseas vessels on interstate direct voyages as in column 2 above) during each of the years 1964-65 to 1966-67.

## INTERSTATE MOVEMENT: ENTRANCES OF VESSELS INTERSTATE DIRECT, STATES AND NORTHERN TERRITORY, 1964-65 TO 1966-67

<i>State or Territory</i>	<i>Number</i>			<i>Net tons ('000)</i>		
	1964-65	1965-66	1966-67 (a)	1964-65	1965-66	1966-67 (a)
New South Wales . . .	2,154	1,976	1,757	7,388	7,889	7,626
Victoria . . .	1,777	1,861	1,806	5,606	5,489	5,730
Queensland . . .	879	806	803	2,656	2,670	2,785
South Australia . . .	1,222	1,163	1,117	4,595	4,381	4,700
Western Australia . . .	700	735	683	3,413	3,827	3,699
Tasmania . . .	1,151	1,258	1,437	2,136	2,464	3,048
Northern Territory . . .	82	81	72	159	147	200
<b>Australia . . .</b>	<b>7,965</b>	<b>7,880</b>	<b>7,675</b>	<b>25,953</b>	<b>26,867</b>	<b>27,789</b>

(a) Excludes vessels of 200 net tons and under.

*Overseas via States.* The figures in the following table show the number of entrances and clearances of vessels to and from overseas countries via other Australian States as in column 3 in the table at the top of the page, and their aggregate net tonnage.

**INTERSTATE MOVEMENT: ENTRANCES AND CLEARANCES OF VESSELS OVERSEAS VIA  
OTHER AUSTRALIAN STATES AND NORTHERN TERRITORY, 1966-67(a)**

		<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>Aust.</i>
Entrances	number	818	1,034	320	420	105	160	4	2,861
	'000 net tons	4,095	6,732	1,392	1,973	558	715	18	15,483
Clearances	number	834	826	273	480	68	293	14	2,788
	'000 net tons	3,776	4,013	1,260	2,228	499	1,196	58	13,030

(a) Excludes vessels of 200 net tons and under.

*Total interstate movement.* To ascertain the aggregate movement of interstate shipping, including the interstate movement of overseas vessels, figures in the two preceding tables must be combined. The following table shows, for each State and the Northern Territory, the total number of entrances and clearances of vessels from and for other States (including the interstate movement of overseas vessels) during the year 1966-67 together with the aggregate net tonnage.

**INTERSTATE MOVEMENT: TOTAL ENTRANCES AND CLEARANCES  
STATES AND NORTHERN TERRITORY, 1966-67(a)**

		<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>Aust.</i>
Entrances	number	2,575	2,840	1,123	1,537	788	1,597	76	10,536
	'000 net tons	11,721	12,462	4,177	6,673	4,257	3,763	218	43,272
Clearances	number	2,749	2,781	962	1,589	706	1,656	99	10,542
	'000 net tons	12,320	10,534	3,615	8,472	4,117	4,075	265	43,398

(a) Excludes vessels of 200 net tons and under.

The following table shows the total interstate movement of shipping, including overseas vessels travelling overseas via States and interstate direct, for Australia for each of the years 1962-63 to 1966-67.

**INTERSTATE MOVEMENT: TOTAL ENTRANCES AND CLEARANCES  
AUSTRALIA, 1962-63 TO 1966-67**

		<i>1962-63</i>	<i>1963-64</i>	<i>1964-65</i>	<i>1965-66</i>	<i>1966-67</i> (a)
Entrances	number	10,552	11,040	11,172	11,113	10,536
	'000 net tons	37,428	40,747	42,569	43,644	43,272
Clearances	number	10,746	10,985	11,229	11,097	10,542
	'000 net tons	37,862	40,400	42,532	43,609	43,398

(a) Excludes vessels of 200 net tons and under.

**Shipping engaged solely in interstate trade**

The following table shows, for each State and the Northern Territory, the number of entrances direct from other States of vessels engaged solely in interstate trade (i.e. excluding overseas vessels in continuation of their overseas voyages) during the year 1966-67, together with the net tonnage.

**SHIPPING ENGAGED SOLELY IN INTERSTATE TRADE: ENTRANCES, STATES  
AND NORTHERN TERRITORY, 1966-67(a)**

		<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>Aust.</i>
Entrances	number	1,101	1,204	329	748	344	1,154	57	4,937
Net tons	'000	4,730	2,712	872	2,870	1,763	2,224	115	15,287

(a) Excludes vessels of 200 net tons and under.

**Australian trading vessels**

The following table shows particulars of all Australian trading vessels of 200 gross tons or more engaged in the regular overseas, interstate or coastal (intrastate) services at 31 December 1967.



**AUSTRALIAN TRADING VESSELS OF 200 GROSS TONS OR MORE  
31 DECEMBER 1967**

(Source: Department of Shipping and Transport)

<i>Vessels</i>	<i>Number</i>	<i>Dead-weight tons</i>	<i>Gross tons</i>
<b>Interstate vessels—</b>			
Australian-owned, Australian-registered . . . . .	87	676,419	512,674
Overseas-owned, Australian-registered, engaged in Australian coastal trade—New Zealand-owned . . . . .	9	25,737	22,898
Other . . . . .	9	156,222	105,513
Overseas-owned, overseas-registered, on charter, engaged in Australian coastal trade . . . . .	2	70,791	47,605
<b>Total interstate vessels . . . . .</b>	<b>107</b>	<b>929,169</b>	<b>688,690</b>
<b>Intrastate vessels . . . . .</b>	<b>21</b>	<b>28,931</b>	<b>24,220</b>
<b>Total coastal trading vessels . . . . .</b>	<b>128</b>	<b>958,100</b>	<b>712,910</b>
<b>Overseas trading vessels—</b>			
Australian-owned, Australian-registered operated mainly on overseas services . . . . .	7	55,142	43,277
Australian-owned, overseas-registered operated wholly on overseas services . . . . .	8	75,690	56,768
<b>Total overseas trading vessels . . . . .</b>	<b>15</b>	<b>130,832</b>	<b>100,045</b>
<b>Total Australian trading vessels . . . . .</b>	<b>143</b>	<b>1,088,932</b>	<b>812,955</b>

**Shipping at principal ports**

For details of Harbour Boards and Trusts in each State see the chapter Local Government.

The following table shows the total volume of shipping—overseas, interstate and coastal—which entered the principal ports of Australia during the years 1965–66 and 1966–67. The movements of warships and of other non-commercial vessels are excluded from the table.

**TOTAL SHIPPING: ENTRANCES AT PRINCIPAL PORTS, AUSTRALIA  
1965-66 AND 1966-67**

<i>Port of entry</i>	<i>1965-66</i>		<i>1966-67(a)</i>		<i>Port of entry</i>	<i>1965-66</i>		<i>1966-67</i>	
	<i>Num-ber</i>	<i>Net tons</i>	<i>Num-ber</i>	<i>Net tons</i>		<i>Num-ber</i>	<i>Net tons</i>	<i>Num-ber</i>	<i>Net tons</i>
		'000		'000			'000		'000
<b>New South Wales—</b>					<b>Western Australia—</b>				
Sydney(b) . . . . .	4,155	16,760	4,052	16,901	Fremantle(d) . . . . .	1,562	8,383	1,392	8,188
Newcastle . . . . .	1,818	5,845	1,810	6,241	Albany . . . . .	151	800	159	798
Port Kembla . . . . .	1,065	4,623	986	5,190	Bunbury . . . . .	168	727	157	757
<b>Victoria—</b>					Carnarvon . . . . .	41	43	15	22
Melbourne . . . . .	3,008	12,267	2,910	12,318	Geraldton . . . . .	138	566	159	688
Geelong . . . . .	637	3,614	583	3,648	Yampi . . . . .	208	1,190	185	1,267
<b>Queensland—</b>					<b>Tasmania—</b>				
Brisbane . . . . .	1,585	6,405	1,466	6,621	Hobart . . . . .	547	1,449	559	1,572
Bowen . . . . .	27	101	21	98	Burnie . . . . .	491	1,294	536	1,389
Cairns . . . . .	283	693	207	635	Devonport . . . . .	388	768	362	716
Gladstone . . . . .	138	1,017	160	1,319	Launceston . . . . .	548	1,194	430	1,368
Mackay . . . . .	167	675	156	654	<b>Northern Territory—</b>				
Rockhampton . . . . .	76	313	98	415	Darwin . . . . .	147	358	133	388
Townsville . . . . .	349	1,103	322	1,193					
<b>South Australia—</b>									
Adelaide(c) . . . . .	2,460	7,539	2,055	7,624					
Port Lincoln . . . . .	329	535	341	671					
Port Pirie . . . . .	413	916	435	937					
Rapid Bay . . . . .	90	283	71	248					
Wallaaroo . . . . .	48	177	38	194					
Whyalla . . . . .	479	1,988	399	2,011					

(a) Excludes vessels of 200 net tons and under except for South Australian ports. (b) Includes Botany Bay.  
(c) Includes Port Stanvac. (d) Includes Kwinana.

The following table shows the total shipping tonnage which entered the principal ports of Australia, New Zealand and the United Kingdom during 1966-67.

**TOTAL SHIPPING: ENTRANCES AT PORTS, AUSTRALIA, NEW ZEALAND AND THE UNITED KINGDOM, 1966-67**

('000 net tons)

Port	Net tonnage entered	Port	Net tonnage entered	Port	Net tonnage entered
<b>AUSTRALIA—</b>		<b>NEW ZEALAND—</b>		<b>ENGLAND AND WALES—</b>	
Sydney (N.S.W.)(a) . . . . .	16,901	Wellington . . . . .	5,369	<i>continued</i>	
Melbourne (Vic.) . . . . .	12,318	Auckland . . . . .	4,833	Manchester (including	
Fremantle (W.A.)(b) . . . . .	8,188	Lyttleton . . . . .	3,411	Runcorn) . . . . .	8,244
Adelaide (S.A.)(c) . . . . .	7,624	Whangarei . . . . .	2,406	Tyne Ports . . . . .	6,839
Brisbane (Qld) . . . . .	6,621	Otago . . . . .	1,349	Hull . . . . .	7,366
Newcastle (N.S.W.) . . . . .	6,241	Napier . . . . .	1,340	Middlesbrough . . . . .	6,157
Port Kembla (N.S.W.) . . . . .	5,190	Bluff . . . . .	1,011	Bristol . . . . .	5,919
Geelong (Vic.) . . . . .	3,648	Taranaki . . . . .	894	Swansea . . . . .	3,997
Whyalla (S.A.) . . . . .	2,011			Cardiff . . . . .	3,138
Hobart (Tas.) . . . . .	1,572	<b>ENGLAND AND WALES—</b>			
Burnie (Tas.) . . . . .	1,389	London . . . . .	47,966	<b>SCOTLAND—</b>	
Launceston (Tas.) . . . . .	1,368	Southampton . . . . .	26,679	Glasgow . . . . .	8,083
Gladstone (Qld) . . . . .	1,319	Liverpool (including			
Yampi (W.A.) . . . . .	1,267	Birkenhead) . . . . .	21,584	<b>NORTHERN IRELAND—</b>	
Townsville (Qld) . . . . .	1,193	Dover . . . . .	10,878	Belfast . . . . .	9,394

(a) Includes Botany Bay.

(b) Includes Kwinana.

(c) Includes Port Stanvac.

## Shipping cargo

### Overseas and interstate cargo

The table on page 400 shows the aggregate tonnage of overseas and interstate cargo discharged and shipped at Australian ports. Most cargo is recorded in terms of tons of 2,240 lb; the remainder, mainly bulky commodities, is shipped and recorded on the basis of forty cubic feet representing one ton measurement.

**CARGO DISCHARGED AND SHIPPED: AUSTRALIA, 1962-63 TO 1966-67**

('000 tons)

Year	Overseas cargo				Interstate cargo			
	Discharged		Shipped		Discharged		Shipped	
	Weight	Meas.	Weight	Meas.	Weight	Meas.	Weight	Meas.
1962-63 . . . . .	19,497	3,397	15,405	1,545	13,882	1,306	14,340	1,100
1963-64 . . . . .	20,788	3,942	19,744	1,861	15,321	1,453	15,632	1,208
1964-65 . . . . .	23,211	4,443	20,424	1,980	15,447	1,722	16,360	1,402
1965-66 . . . . .	24,156	4,119	21,749	2,043	15,349	1,942	16,172	1,484
1966-67 . . . . .	27,109	4,152	32,691	1,943	15,565	1,900	15,692	1,728

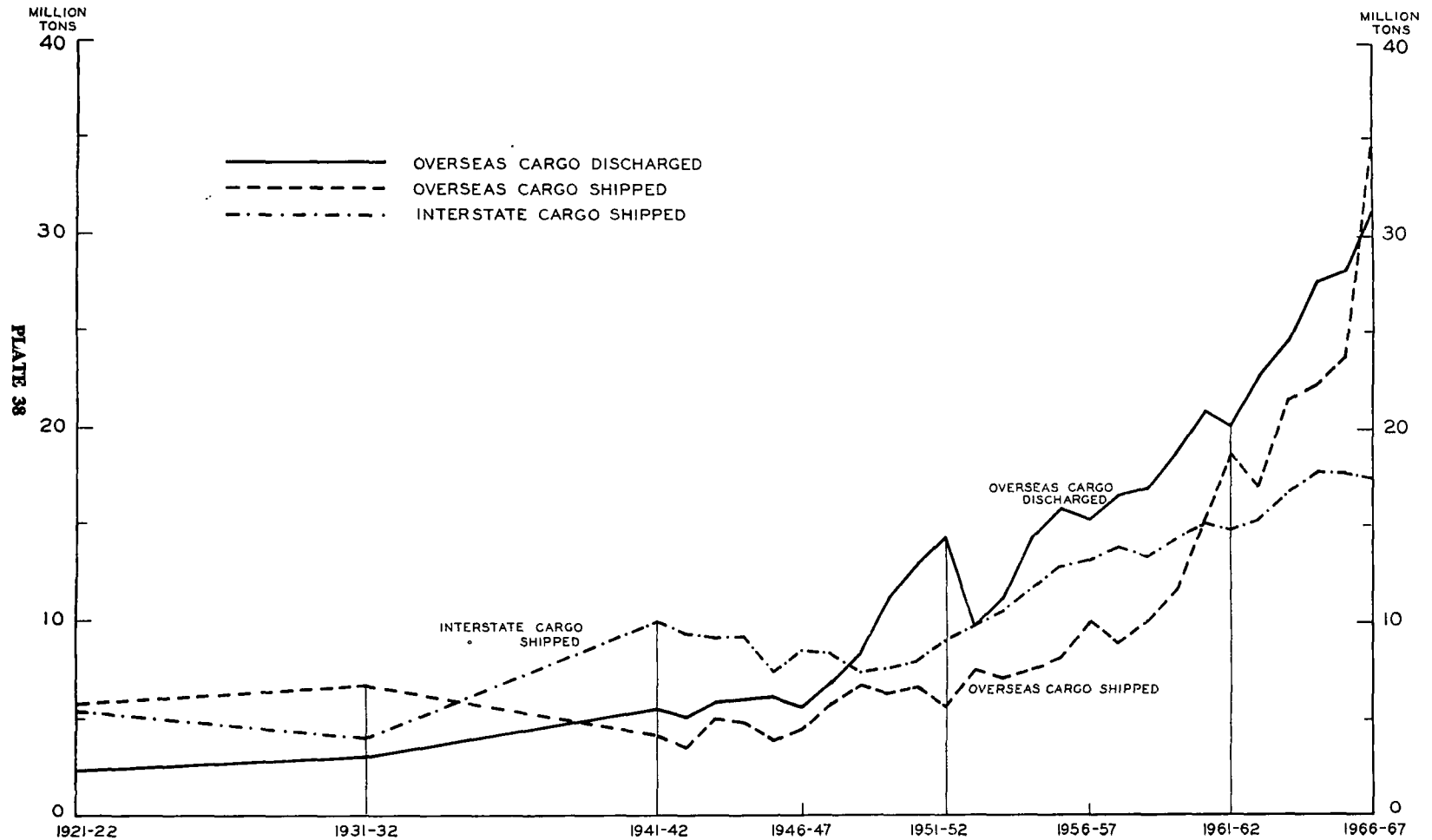
## CARGO DISCHARGED AND SHIPPED AT PRINCIPAL PORTS, 1966-67

('000 tons)

Port	Overseas cargo				Interstate cargo			
	Discharged		Shipped		Discharged		Shipped	
	Weight	Meas.	Weight	Meas.	Weight	Meas.	Weight	Meas.
New South Wales—								
Sydney . . . . .	2,531	1,726	4,037	576	1,065	122	356	188
Botany Bay . . . . .	4,043	..	88	..	89	..	235	..
Newcastle . . . . .	730	10	4,285	1	3,172	..	1,404	1
Port Kembla . . . . .	666	..	2,482	4	4,552	..	1,066	..
Other . . . . .	..	..	19	1	26	..	..	..
<i>Total, New South Wales.</i>	<i>7,970</i>	<i>1,737</i>	<i>10,912</i>	<i>582</i>	<i>8,905</i>	<i>122</i>	<i>3,061</i>	<i>189</i>
Victoria—								
Melbourne . . . . .	3,527	1,538	1,239	590	1,466	677	389	789
Geelong . . . . .	4,138	18	1,377	8	490	..	593	3
Portland . . . . .	12	1	165	1	88	..	1	..
Westernport . . . . .	1,223	..	100	..	57	..	389	..
<i>Total, Victoria</i>	<i>8,901</i>	<i>1,556</i>	<i>2,880</i>	<i>599</i>	<i>2,102</i>	<i>677</i>	<i>1,372</i>	<i>792</i>
Queensland—								
Brisbane . . . . .	2,389	266	1,112	123	301	26	149	18
Cairns . . . . .	64	..	319	1	24	5	3	3
Gladstone . . . . .	86	7	1,746	1	57	1	..	..
Mackay . . . . .	51	..	622	..	12	10	27	..
Townsville . . . . .	46	15	561	..	84	12	81	3
Other . . . . .	12	1	1,817	2	1	2	565	..
<i>Total, Queensland</i>	<i>2,647</i>	<i>289</i>	<i>6,176</i>	<i>127</i>	<i>480</i>	<i>56</i>	<i>826</i>	<i>24</i>
South Australia—								
Port Adelaide . . . . .	494	323	519	254	886	30	229	12
Ardrossan . . . . .	..	..	160	..	..	..	297	..
Port Lincoln . . . . .	112	..	468	..	16	..	256	..
Port Pirie . . . . .	1	..	563	..	125	..	244	..
Port Stanvac . . . . .	2,008	..	44	..	..	..	523	..
Rapid Bay . . . . .	..	..	..	..	..	..	346	..
Whyalla . . . . .	73	..	381	..	731	..	3,705	..
Other . . . . .	66	..	582	..	18	..	290	..
<i>Total, South Australia</i>	<i>2,754</i>	<i>323</i>	<i>2,717</i>	<i>254</i>	<i>1,776</i>	<i>30</i>	<i>5,891</i>	<i>12</i>
Western Australia—								
Fremantle . . . . .	730	194	2,130	143	652	157	221	36
Albany . . . . .	150	..	323	9	2	1	..	..
Bunbury . . . . .	154	..	614	39	..	..	41	..
Dampier . . . . .	24	..	2,458	..	3	..	..	..
Geraldton . . . . .	106	4	1,114	..	..	..	10	..
Kwinana . . . . .	3,022	..	410	..	43	..	631	..
Port Headland . . . . .	36	..	2,377	..	..	..	9	..
Yampi . . . . .	..	..	71	..	..	..	2,835	..
Other . . . . .	116	5	126	6	53	..	75	4
<i>Total, Western Australia</i>	<i>4,339</i>	<i>203</i>	<i>9,623</i>	<i>197</i>	<i>754</i>	<i>158</i>	<i>3,821</i>	<i>40</i>
Tasmania—								
Hobart . . . . .	202	15	112	118	549	179	320	110
Burnie . . . . .	67	12	61	12	216	172	66	143
Launceston . . . . .	98	10	41	40	570	149	135	103
Other . . . . .	6	4	6	15	149	337	99	314
<i>Total, Tasmania</i>	<i>373</i>	<i>41</i>	<i>220</i>	<i>184</i>	<i>1,483</i>	<i>838</i>	<i>620</i>	<i>670</i>
Northern Territory—								
Darwin . . . . .	126	4	50	..	66	20	3	1
Groote Island . . . . .	..	..	113	..	..	..	99	..
Other . . . . .	..	..	..	..	..	..	..	..
<i>Total, Northern Territory.</i>	<i>126</i>	<i>4</i>	<i>163</i>	<i>..</i>	<i>66</i>	<i>20</i>	<i>102</i>	<i>1</i>
<b>Australia</b>	<b>27,109</b>	<b>4,152</b>	<b>32,691</b>	<b>1,943</b>	<b>15,565</b>	<b>1,900</b>	<b>15,692</b>	<b>1,728</b>

# OVERSEAS AND INTERSTATE SHIPPING CARGO: AUSTRALIA

1921-22 TO 1966-67



**Overseas cargo according to major trade areas and type of service**

The tables on pages 402-5 show for the year 1966-67 particulars of the cargo loaded in Australia for discharge overseas, and of the cargo discharged in Australia from overseas, for each State and the Northern Territory, classified according to the major trade areas of the world, by type of shipping service (i.e. liner, or tramp, bulkship, and tanker). The year 1966-67 is the first for which this information is available. For information about the scope and nature of those statistics see System of record of shipping, page 393.

**CARGO LOADED IN AUSTRALIA FOR DISCHARGE OVERSEAS: MAJOR TRADE AREAS  
BY TYPE OF SERVICE: STATES AND NORTHERN TERRITORY, 1966-67  
(Tons)**

State or Territory of loading	Liners(a)		Tramps, bulk- ships, tankers		All vessels	
	Weight	Meas.	Weight	Meas.	Weight	Meas.
<b>NORTH AMERICA AND HAWAII</b>						
New South Wales . . .	140,436	21,534	199,452	744	339,888	22,278
Victoria . . .	139,089	41,054	624	857	139,713	41,911
Queensland . . .	165,923	11,514	771,220	307	937,143	11,821
South Australia . . .	52,980	14,559	26,050	551	79,030	15,110
Western Australia . . .	34,103	10,864	180,018	..	214,121	10,864
Tasmania . . .	42,627	2,405	11,699	..	54,326	2,405
Northern Territory . . .	4,285	6	5,517	..	9,802	6
<i>Australia . . .</i>	<i>579,443</i>	<i>101,936</i>	<i>1,194,580</i>	<i>2,459</i>	<i>1,774,023</i>	<i>104,395</i>
<b>SOUTH AMERICA</b>						
New South Wales . . .	9,431	1,235	170,553	412	179,984	1,647
Victoria . . .	14,218	1,816	1,167	412	15,385	2,228
Queensland . . .	4,420	443	30,065	62	34,485	505
South Australia . . .	631	1,280	3,582	120	4,213	1,400
Western Australia . . .	40	..	..	..	40	..
Tasmania . . .	..	..	..	..	..	..
Northern Territory . . .	..	..	..	..	..	..
<i>Australia . . .</i>	<i>28,740</i>	<i>4,774</i>	<i>205,367</i>	<i>1,006</i>	<i>234,107</i>	<i>5,780</i>
<b>EUROPE (INCLUDING U.S.S.R.)</b>						
New South Wales . . .	277,802	61,804	371,736	4	649,538	61,808
Victoria . . .	321,498	241,069	153,483	..	474,981	241,069
Queensland . . .	347,643	13,742	940,599	..	1,288,242	13,742
South Australia . . .	252,570	117,704	456,334	..	708,904	117,704
Western Australia . . .	142,923	80,513	1,185,911	233	1,328,834	80,746
Tasmania . . .	66,278	138,348	..	5,407	66,278	143,755
Northern Territory . . .	23	..	22,757	..	22,780	..
<i>Australia . . .</i>	<i>1,408,737</i>	<i>653,180</i>	<i>3,130,820</i>	<i>5,644</i>	<i>4,539,557</i>	<i>658,824</i>
<b>AFRICA</b>						
New South Wales . . .	28,447	9,315	95,795	..	124,242	9,315
Victoria . . .	51,433	24,385	42,401	..	93,834	24,385
Queensland . . .	22,889	381	130,501	..	153,390	381
South Australia . . .	23,036	15,412	151,069	..	174,105	15,412
Western Australia . . .	17,308	5,519	191,957	..	209,265	5,519
Tasmania . . .	3,831	3,195	..	..	3,831	3,195
Northern Territory . . .	80	..	..	..	80	..
<i>Australia . . .</i>	<i>147,024</i>	<i>58,207</i>	<i>611,723</i>	<i>..</i>	<i>758,747</i>	<i>58,207</i>

(a) Cargo and passenger liners.

CARGO LOADED IN AUSTRALIA FOR DISCHARGE OVERSEAS: MAJOR TRADE AREAS  
BY TYPE OF SERVICE, STATES AND NORTHERN TERRITORY, 1966-67—continued

(Tons)

State or Territory of loading	Liners(a)		Tramps, bulk- ships, tankers		All vesse's	
	Weight	Meas.	Weight	Meas.	Weight	Meas.
ASIA						
New South Wales	575,111	127,422	8,160,277	52,951	8,735,388	180,373
Victoria	622,912	149,690	1,295,375	851	1,918,287	150,541
Queensland	353,086	24,476	3,253,855	809	3,606,941	25,285
South Australia	379,052	52,350	1,161,937	6,633	1,540,989	58,983
Western Australia	542,089	71,831	7,091,949	19,426	7,634,038	91,257
Tasmania	87,761	29,970	2,710	..	90,471	29,970
Northern Territory	4,003	1	126,181	..	130,184	1
<i>Australia</i>	<i>2,564,014</i>	<i>455,740</i>	<i>21,092,284</i>	<i>80,670</i>	<i>23,656,298</i>	<i>536,410</i>
PAPUA AND NEW GUINEA, NEW ZEALAND AND PACIFIC ISLANDS						
New South Wales	552,990	304,204	329,432	1,249	882,422	305,453
Victoria	41,683	137,999	191,039	630	232,722	138,629
Queensland	54,578	70,606	101,061	4,800	155,639	75,406
South Australia	141,511	45,469	67,799	10	209,310	45,479
Western Australia	4,722	3,154	215,881	1	220,603	3,155
Tasmania	5,204	5,011	..	..	5,204	5,011
Northern Territory	1	..	..	..	1	..
<i>Australia</i>	<i>800,689</i>	<i>566,443</i>	<i>905,212</i>	<i>6,690</i>	<i>1,705,901</i>	<i>573,133</i>
INDIAN OCEAN ISLANDS AND ANTARCTIC AREA						
New South Wales	..	..	1,000	831	1,000	831
Victoria	598	..	4,354	..	4,952	..
Queensland	..	..	57	..	57	..
South Australia	..	..	85	2	85	2
Western Australia	52	1,142	16,244	4,456	16,296	5,598
Tasmania	59	..	..	..	59	..
Northern Territory	..	..	..	..	..	..
<i>Australia</i>	<i>709</i>	<i>1,142</i>	<i>21,740</i>	<i>5,289</i>	<i>22,449</i>	<i>6,431</i>
TOTAL						
New South Wales	1,584,217	525,514	9,328,245	56,191	10,912,462	581,705
Victoria	1,191,431	596,013	1,688,443	2,750	2,879,874	598,763
Queensland	948,539	121,162	5,227,358	5,978	6,175,897	127,140
South Australia	849,780	246,774	1,866,856	7,316	2,716,636	254,090
Western Australia	741,237	173,023	8,881,960	24,116	9,623,197	197,139
Tasmania	205,760	178,929	14,409	5,407	220,169	184,336
Northern Territory	8,392	7	154,455	..	162,847	7
<i>Australia</i>	<i>5,529,356</i>	<i>1,841,422</i>	<i>27,161,726</i>	<i>101,758</i>	<i>32,691,082</i>	<i>1,943,180</i>

(a) Cargo and passenger liners.

**CARGO DISCHARGED IN AUSTRALIA FROM OVERSEAS: MAJOR TRADE AREAS  
BY TYPE OF SERVICE, STATES AND NORTHERN TERRITORY, 1966-67**

(Tons)

<i>State or Territory of unloading</i>	<i>Liners(a)</i>		<i>Tramps, bulk- ships, tankers</i>		<i>All vessels</i>	
	<i>Weight</i>	<i>Meas.</i>	<i>Weight</i>	<i>Meas.</i>	<i>Weight</i>	<i>Meas.</i>
<b>NORTH AMERICA AND HAWAII</b>						
New South Wales . . . .	262,324	359,103	423,865	127,376	686,189	486,479
Victoria . . . . .	139,422	342,767	631,033	69,796	770,455	412,563
Queensland . . . . .	63,822	47,083	243,101	5,118	306,923	52,201
South Australia . . . .	59,845	84,887	105,629	47,458	165,474	132,345
Western Australia . . .	45,748	11,818	145,393	6,934	191,141	18,752
Tasmania . . . . .	40,648	3,692	74,394	257	115,042	3,949
Northern Territory . . .	2,557	10	..	..	2,557	10
<i>Australia . . . . .</i>	<i>614,366</i>	<i>849,360</i>	<i>1,623,415</i>	<i>256,939</i>	<i>2,237,781</i>	<i>1,106,299</i>
<b>SOUTH AMERICA</b>						
New South Wales . . . .	551	1,256	1,093	..	1,644	1,256
Victoria . . . . .	472	384	..	..	472	384
Queensland . . . . .	4,392	..	..	..	4,392	..
South Australia . . . .	522	..	..	..	522	..
Western Australia . . .	..	..	..	..	..	..
Tasmania . . . . .	..	..	..	..	..	..
Northern Territory . . .	..	..	..	..	..	..
<i>Australia . . . . .</i>	<i>5,937</i>	<i>1,640</i>	<i>1,093</i>	<i>..</i>	<i>7,030</i>	<i>1,640</i>
<b>EUROPE (INCLUDING U.S.S.R.)</b>						
New South Wales . . . .	294,802	623,876	4,057	3,680	298,859	627,556
Victoria . . . . .	236,552	628,726	5,770	2,777	242,322	631,503
Queensland . . . . .	76,245	64,663	6,134	1,048	82,379	65,711
South Australia . . . .	61,382	96,839	3,602	..	64,984	96,839
Western Australia . . .	40,424	92,426	30,440	1,332	70,864	93,758
Tasmania . . . . .	52,940	15,287	..	..	52,940	15,287
Northern Territory . . .	297	..	..	..	297	..
<i>Australia . . . . .</i>	<i>762,642</i>	<i>1,521,817</i>	<i>50,003</i>	<i>8,837</i>	<i>812,645</i>	<i>1,530,654</i>
<b>AFRICA</b>						
New South Wales . . . .	57,194	20,025	..	..	57,194	20,025
Victoria . . . . .	25,745	29,362	32,280	..	58,025	29,362
Queensland . . . . .	11,564	774	..	..	11,564	774
South Australia . . . .	4,677	6,678	..	..	4,677	6,678
Western Australia . . .	3,316	5,291	286,068	..	289,384	5,291
Tasmania . . . . .	16,123	90	..	..	16,123	90
Northern Territory . . .	..	..	..	..	..	..
<i>Australia . . . . .</i>	<i>118,619</i>	<i>62,220</i>	<i>318,348</i>	<i>..</i>	<i>436,967</i>	<i>62,220</i>

(a) Cargo and passenger liners.

CARGO DISCHARGED IN AUSTRALIA FROM OVERSEAS: MAJOR TRADE AREAS  
BY TYPE OF SERVICE, STATES AND NORTHERN TERRITORY, 1966-67—*continued*

(Tons)

State or Territory of unloading	Liners(a)		Tramps, bulk- ships, tankers		All vessels	
	Weight	Meas.	Weight	Meas.	Weight	Meas.
ASIA						
New South Wales . . .	191,751	483,168	5,852,124	10,711	6,043,875	493,879
Victoria . . .	178,278	386,239	6,746,842	7,107	6,925,120	393,346
Queensland . . .	60,008	139,148	2,070,998	1,844	2,131,006	140,992
South Australia . . .	49,190	81,079	2,119,570	1,515	2,168,760	82,594
Western Australia . . .	59,951	79,094	3,106,034	2,855	3,165,985	81,949
Tasmania . . .	7,567	13,932	56,100	4,965	63,667	18,897
Northern Territory . . .	20,904	3,668	101,426	..	122,330	3,668
<i>Australia . . .</i>	<i>567,649</i>	<i>1,186,328</i>	<i>20,053,094</i>	<i>28,997</i>	<i>20,620,743</i>	<i>1,215,325</i>

## PAPUA AND NEW GUINEA, NEW ZEALAND AND PACIFIC ISLANDS

New South Wales . . .	168,590	106,425	539,873	1,068	708,463	107,493
Victoria . . .	17,901	88,613	585,444	177	603,345	88,790
Queensland . . .	10,027	28,838	67,102	30	77,129	28,868
South Australia . . .	13,123	4,978	235,374	..	248,497	4,978
Western Australia . . .	10,885	1,010	409,495	6	420,380	1,016
Tasmania . . .	29,683	2,655	63,177	..	92,860	2,655
Northern Territory . . .	44	35	460	..	504	35
<i>Australia . . .</i>	<i>250,253</i>	<i>232,554</i>	<i>1,900,925</i>	<i>1,281</i>	<i>2,151,178</i>	<i>233,835</i>

## INDIAN OCEAN ISLANDS AND ANTARCTIC AREA

New South Wales . . .	..	..	173,708	51	173,708	51
Victoria . . .	55	..	300,833	126	300,888	126
Queensland . . .	..	..	33,596	..	33,596	..
South Australia . . .	..	..	101,152	..	101,152	..
Western Australia . . .	..	..	200,947	1,982	200,947	1,982
Tasmania . . .	..	..	32,116	..	32,116	..
Northern Territory . . .	..	..	..	..	..	..
<i>Australia . . .</i>	<i>55</i>	<i>..</i>	<i>842,352</i>	<i>2,159</i>	<i>842,407</i>	<i>2,159</i>

## TOTAL

New South Wales . . .	975,212	1,593,853	6,994,720	142,886	7,969,932	1,736,739
Victoria . . .	598,425	1,476,091	8,302,202	79,983	8,900,627	1,556,074
Queensland . . .	226,058	280,506	2,420,931	8,040	2,646,989	288,546
South Australia . . .	188,739	274,461	2,565,327	48,973	2,754,066	323,434
Western Australia . . .	160,324	189,639	4,178,377	13,109	4,338,701	202,748
Tasmania . . .	146,961	35,656	225,787	5,222	372,748	40,878
Northern Territory . . .	23,802	3,713	101,886	..	125,688	3,713
<i>Australia . . .</i>	<i>2,319,521</i>	<i>3,853,919</i>	<i>24,789,230</i>	<i>298,213</i>	<i>27,108,751</i>	<i>4,152,132</i>

(a) Cargo and passenger liners.



**Overseas cargo according to country of registration of vessels**

The following table shows the total overseas cargo, discharged and shipped combined, according to the country in which the vessels were registered, during each of the years 1964-65 to 1966-67.

**OVERSEAS CARGO DISCHARGED AND SHIPPED, BY COUNTRY OF REGISTRATION OF VESSELS: AUSTRALIA, 1964-65 TO 1966-67**  
(<sup>'000 tons</sup>)

<i>Vessels registered at ports in—</i>	<i>1964-65</i>		<i>1965-66</i>		<i>1966-67</i>	
	<i>Weight</i>	<i>Meas.</i>	<i>Weight</i>	<i>Meas.</i>	<i>Weight</i>	<i>Meas.</i>
Australia . . . . .	156	128	231	125	714	144
Denmark . . . . .	872	82	519	66	799	93
France and New Caledonia . . . . .	748	110	1,089	97	891	108
Germany, Federal Republic of . . . . .	1,542	352	1,393	316	843	349
Greece . . . . .	2,647	88	2,700	85	3,772	103
Hong Kong . . . . .	807	101	621	139	634	108
India . . . . .	202	39	479	42	497	38
Italy . . . . .	779	55	560	60	771	36
Japan . . . . .	3,852	450	5,803	434	9,076	539
Liberia . . . . .	4,407	57	6,045	85	9,854	76
Netherlands . . . . .	2,278	445	2,003	385	2,518	355
New Zealand . . . . .	548	529	675	464	668	440
Norway . . . . .	8,279	425	8,129	364	10,023	354
Panama . . . . .	1,047	18	908	48	1,567	24
Sweden . . . . .	1,886	361	1,632	351	2,136	412
United Kingdom . . . . .	12,099	2,916	12,090	2,937	13,674	2,626
United States of America . . . . .	206	114	204	94	232	130
Other . . . . .	1,280	153	824	70	1,131	160
<b>Grand total . . . . .</b>	<b>43,635</b>	<b>6,423</b>	<b>45,905</b>	<b>6,162</b>	<b>59,800</b>	<b>6,095</b>

**World shipping tonnage**

At 1 July 1967 the total number of steamships and motorships 100 gross tons and upwards throughout the world was 44,375 with a gross tonnage of 182,099,644. Of those totals, steamships numbered 9,800 for 74,811,671 gross tons, and motorships 34,575 for 107,287,973 gross tons. This includes 5,527 oil tankers of 100 gross tons and upwards with a gross tonnage of 64,197,988. Australian steamships and motorships, 307 for 803,027 gross tons, constituted 0.69 per cent and 0.44 per cent respectively of the total number and tonnage. This information has been derived from *Lloyd's Register of Shipping*.

**Vessels registered in Australia**

The following table shows the number and gross tonnage of trading vessels of 200 tons and over registered in Australia at 30 June 1967, classified according to: (i) year of construction, 1964 to 1967 and 1963 and earlier years, (ii) type of trade in which the vessels were engaged, and (iii) vessels built in Australian or in overseas shipyards.

**AUSTRALIAN-REGISTERED TRADING VESSELS, 31 DECEMBER 1967(a)**

(Source: Department of Shipping and Transport)

<i>Year of construction</i>	<i>Overseas and interstate vessels</i>		<i>Intrastate vessels</i>		<i>Built in Australian yards</i>		<i>Built overseas</i>		<i>Total</i>	
	<i>No.</i>	<i>Gross tons</i>	<i>No.</i>	<i>Gross tons</i>	<i>No.</i>	<i>Gross tons</i>	<i>No.</i>	<i>Gross tons</i>	<i>No.</i>	<i>Gross tons</i>
1963 and earlier . . . . .	100	537,106	18	21,571	60	332,717	58	225,960	118	558,677
1964 . . . . .	5	32,555	..	..	5	32,555	..	..	5	32,555
1965 . . . . .	4	33,906	..	..	3	29,716	1	4,190	4	33,906
1966 . . . . .	1	33,774	2	2,445	3	36,219	..	..	3	36,219
1967 . . . . .	2	47,021	1	204	3	47,225	..	..	3	47,225
<b>Total registered in Australia</b>	<b>112</b>	<b>684,362</b>	<b>21</b>	<b>24,220</b>	<b>74</b>	<b>478,432</b>	<b>59</b>	<b>230,150</b>	<b>133</b>	<b>708,582</b>

(a) 200 gross tons and over.

## Miscellaneous

## Shipping freight rates

The *Quarterly Summary of Australian Statistics* shows a list of the current freight rates for general merchandise in respect of both overseas and interstate shipments. The following table shows the freight rates from Australia to various countries for certain important commodities at 31 December 1967.

**OVERSEAS SHIPPING FREIGHT RATES FROM AUSTRALIA TO VARIOUS COUNTRIES**  
**31 DECEMBER 1967(a)**

(1 ton measurement = 40 cubic feet)

<i>Country and article</i>	<i>Unit for which freight rate is quoted</i>	<i>Freight rate quoted</i>
<b>CANADA—EAST COAST AND ST LAWRENCE PORTS TO</b>		
<b>MONTREAL—</b>		<i>Canadian dollars</i>
Fruit—		
Canned . . . . .	40 cu ft	44.00
Dried . . . . .	40 cu ft	36.50
Preserved . . . . .	40 cu ft	47.50
Wine . . . . .	Ton measurement	52.30
Wool—greasy . . . . .	100 lb	5.80
General cargo . . . . .	Ton weight or measurement	55.00
<b>CEYLON—</b>		
Flour, wheaten . . . . .	Ton weight	21.45
Milk and cream—		
Malted, milk (in cases, cartons) . . . . .	Ton measurement	30.03
General cargo . . . . .	Ton weight or measurement	36.66
<b>CHINA—</b>		
Flour in bags . . . . .	2,000 lb	16.50
Wheat in bags . . . . .	Ton (net)	16.50
Wool—		
Greasy . . . . .	100 lb	2.50
Scoured, etc. . . . .	100 lb	2.91
General cargo . . . . .	Ton weight or measurement	27.50
<b>CONTINENTAL EUROPE—See UNITED KINGDOM, ETC.</b>		
<b>HONG KONG—</b>		
Sugar, refined, in bags . . . . .	20 cwt	24.50
Wheat, in bags . . . . .	20 cwt (net)	16.50
Wool—		
Greasy . . . . .	100 lb	2.50
Scoured, etc. . . . .	100 lb	2.91
General cargo . . . . .	Ton weight or measurement	27.50
<b>INDIA—</b>		
Milk products in cases, cartons, etc. . . . .	Ton measurement	<i>Australian dollars and cents</i> \$29.01
Wheat in bags . . . . .	Ton weight	\$21.86
Wool—		
Greasy . . . . .	lb	3.753 cents
Scoured, etc. . . . .	lb	4.808 cents
Zinc bars . . . . .	Ton weight	\$17.54
General cargo . . . . .	Ton weight or measurement	\$34.07
<b>INDONESIA—</b>		
Flour—		<i>Australian dollars</i>
From eastern Australian ports . . . . .	2,000 lb	17.00
From Western Australian ports . . . . .	2,000 lb	17.00
General cargo—		
From eastern Australian ports . . . . .	Ton weight or measurement	28.20
From Western Australian ports . . . . .	Ton weight or measurement	26.20

(a) Rates for commodities shipped in chartered vessels and bulkships not included.

OVERSEAS SHIPPING FREIGHT RATES FROM AUSTRALIA TO VARIOUS COUNTRIES  
31 DECEMBER 1967(a)—continued

<i>Country and article</i>	<i>Unit for which freight rate is quoted</i>	<i>Freight rate quoted</i>
		<i>Australian dollars</i>
<b>JAPAN—</b>		
Cattle hides . . . . .	20 cwt	27.50
Coal, in bags . . . . .	20 cwt	23.50
Concentrates (copper, lead and zinc)—		
Parcels(b) . . . . .	20 cwt	18.00
Bulk(c) . . . . .	20 cwt	F.I.T.(e) 13.00
Iron and steel scrap—		
Loose . . . . .	20 cwt	24.00
4-cwt drums . . . . .	20 cwt	21.00
Over 4-cwt drums . . . . .	20 cwt	18.50
Ore, copper ex North Queensland—Bulk . . . . .	20 cwt	F.I.O.T.(f) 11.50
Sugar, refined, in bags . . . . .	20 cwt (net)	24.50
Wheat, in bags . . . . .	20 cwt (net)	16.50
Wool—		
Greasy . . . . .	100 lb	2.77
Scoured, etc. . . . .	100 lb	3.22
General cargo . . . . .	Ton weight or measurement	27.50
<b>MALAYSIA—</b>		
Milk products—		
Condensed—		
From eastern Australian ports . . . . .	Ton weight	26.35
From Western Australian ports . . . . .	Ton weight	24.35
Powdered (in bags)—		
From eastern Australian ports . . . . .	Ton measurement	32.80
From Western Australian ports . . . . .	Ton measurement	30.80
Powdered in cases or cartons—		
From eastern Australian ports . . . . .	Ton weight or measurement	26.90
From Western Australian ports . . . . .	Ton weight or measurement	24.90
Flour (plain-bagged)—		
From eastern Australian ports . . . . .	2,000 lb	17.75
From Western Australian ports . . . . .	2,000 lb	16.75
General cargo—		
From eastern Australian ports . . . . .	Ton weight or measurement	28.20
From Western Australian ports . . . . .	Ton weight or measurement	26.20
<b>NEW ZEALAND(d)—</b>		<i>New Zealand dollars</i>
Fruit—		
Dried . . . . .	40 cu ft	21.20
Fresh—Oranges (per case 1 ft 7 in) . . . . .	Per case	0.98
Textiles, yarns—		
Piecegoods . . . . .	40 cu ft/20 cwt	21.20
Iron and steel—		
Bars, rods, angles, tees (up to 30 ft long) . . . . .	20 cwt	19.80
Pipes and tubes (up to 20 ft long) . . . . .	20 cwt	17.25
Plate (up to 20 ft long) . . . . .	20 cwt	19.80
Sheet (bundles) . . . . .	20 cwt	16.05
Wire, lattice . . . . .	40 cu ft	21.20
Lead oxide . . . . .	20 cwt	20.30
Zinc oxide . . . . .	20 cwt	20.30
Copper—		
Bars and rods (up to 30 ft long) . . . . .	20 cwt	19.80
Sheets in bundles . . . . .	20 cwt	16.05
Pipes and tubes (up to 20 ft long) . . . . .	20 cwt	17.25
Plates (up to 20 ft long) . . . . .	20 cwt	19.80
Motor vehicles—		
Assembled . . . . .	40 cu ft	13.65
Unassembled . . . . .	40 cu ft	21.20
Parts . . . . .	40 cu ft	21.20

(a) Rates for commodities shipped in chartered vessels and bulkships not included. (b) Loaded and trimmed at no cost to shipping company. (c) Loaded, trimmed and unloaded at no cost to shipping company. (d) Rates quoted are from Melbourne, Sydney, Newcastle and Port Kembla to New Zealand main ports, except Bluff which is an additional NZ\$5c per ton. (e) Free in and trimmed. (f) Free in and out and trimmed.

OVERSEAS SHIPPING FREIGHT RATES FROM AUSTRALIA TO VARIOUS COUNTRIES  
31 DECEMBER 1967(a)—continued

<i>Country and article</i>	<i>Unit for which freight rate is quoted</i>	<i>Freight rate quoted</i>
<i>New Zealand—continued</i>		
<i>New Zealand dollars</i>		
Household machines . . . . .	40 cu ft/20 cwt	21.20
Timber (up to 20 ft long) . . . . .	100 super ft	5.45
Books and periodicals . . . . .	40 cu ft/20 cwt	21.20
Drugs and medicinal preparations . . . . .	40 cu ft/20 cwt	21.20
Sodium pentachlorophenate . . . . .	40 cu ft/20 cwt	22.30
Fertilisers—		
Manure . . . . .	20 cwt	20.65
Plastic foam . . . . .	40 cu ft	18.50
General cargo . . . . .	40 cu ft/20 cwt	21.20
<i>Australian dollars</i>		
<i>SOUTH AFRICA—</i>		
Butter . . . . .	56 lb box	1.68
Beef (carcases, sundries in bags) . . . . .	lb	4.22
Cattle hides, wet salted (loose, bags, etc.) . . . . .	lb	2.28
Wool, greasy (dumped) . . . . .	lb (gross)	4.22
Inedible tallow (in drums or casks) . . . . .	Ton weight	34.70
Malt in bags or drums . . . . .	Ton weight	30.75
Medical and pharmaceutical products . . . . .	Ton weight or measurement	32.50
Motor vehicles—		
Passenger motor cars, assembled or C.K.D. . . . .	Ton weight or measurement	29.05
Motor vehicle components . . . . .	Ton weight or measurement	32.50
Motor vehicle replacement parts . . . . .	Ton weight or measurement	32.50
Timber—		
Railway or tramway sleepers (up to 30 ft) . . . . .	Per load of 50 cu ft	33.10
Sawn jarrah timber (up to 40 ft) . . . . .	Per load of 50 cu ft	39.55
Zinc (ingots) . . . . .	Ton weight	20.00
General cargo . . . . .	Ton weight or measurement	32.50
<i>UNITED KINGDOM AND CONTINENTAL EUROPE—</i>		
<i>Sterling</i>		
Butter (refrigerated) . . . . .	Box 56 lb	£0.75
Cheese (refrigerated) . . . . .	Ton weight	£31.15
Eggs in shell . . . . .	Ton measurement	£21.40
Meats, preserved by cold process—		
Beef, refrigerated . . . . .	lb	4.62d
Lamb . . . . .	lb	5.72d
Mutton . . . . .	lb	4.62d
Beef, carton . . . . .	lb	3.34d
Lamb, carton . . . . .	lb	3.34d
Mutton, carton . . . . .	lb	3.34d
Rabbits . . . . .	Ton measurement	£17.65
Sausage casings in casks (refrigerated) . . . . .	Ton measurement	£23.30
Sausage casings (not refrigerated) . . . . .	Ton measurement	£14.00
Meats, not frozen . . . . .	Ton weight	£14.00
Milk and cream condensed . . . . .	Ton measurement	£14.00
Fruit—		
Canned . . . . .	Ton measurement	£11.10
Dried . . . . .	Ton measurement	£11.10
Fresh—		
Apples . . . . .	Standard bushel case	£0.748
Citrus . . . . .	Standard bushel case	£0.792
Pears . . . . .	Standard bushel case	£0.748
Pears . . . . .	$\frac{1}{2}$ bushel case	£0.684
Grapes, grapefruit, oranges, lemons and plums . . . . .	Standard bushel case	£0.792
	$\frac{1}{2}$ bushel case	£0.738
	$\frac{1}{2}$ bushel case	£0.528
	$\frac{1}{2}$ bushel carton	£0.494
Grain and pulse, unprepared—		
Barley, in bags . . . . .	Ton weight	£7.735
Wheat, parcels—		
Bagged . . . . .	Ton weight	£7.595
Bulk . . . . .	Ton weight	£6.470

(a) Rates for commodities shipped in chartered vessels and bulkships not included.

OVERSEAS SHIPPING FREIGHT RATES FROM AUSTRALIA TO VARIOUS COUNTRIES  
31 DECEMBER 1967(a)—continued

<i>Country and article</i>	<i>Unit for which freight rate is quoted</i>	<i>Freight rate quoted</i>
<b>UNITED KINGDOM AND CONTINENTAL EUROPE—continued</b>		<i>Sterling</i>
Grain and pulse, unprepared— <i>continued</i>		
Oats, in bags . . . . .	Ton weight	£8.295
Rice, paddy, unhusked . . . . .	Ton weight	£11.70
Grain and pulse, prepared—		
Bran . . . . .	Ton weight	£11.15
Pollard . . . . .	Ton weight	£11.15
Flour, wheaten . . . . .	Ton weight	£10.25
Rice, clean, husked . . . . .	Ton weight	£10.50
Jams . . . . .	Ton measurement	£11.10
Wine . . . . .	Ton measurement	£13.35
Hides and skins—		
Calf . . . . .	Ton weight	£21.10
Cattle . . . . .	Ton weight	£63.70
Fox . . . . .	Ton weight	
Kangaroo . . . . .	Ton weight	
Opossum . . . . .	Ton weight	
Rabbit and hare . . . . .	Ton weight	
Wallaby . . . . .	Ton weight	3.35d
Sheep, dumped . . . . .	lb	
Other . . . . .	Ton weight	£63.70
Pearlshell . . . . .	Ton measurement	£14.00
Trochus and green snail shell, bags or cases . . . . .	Ton weight	£21.05
Wool—		
Greasy, dumped . . . . .	lb	4.67d
Scoured and washed, dumped . . . . .	lb	5.85d
Tops . . . . .	lb	5.58d
Bark, tanning . . . . .	Ton weight	£14.00
Sandalwood, in bags . . . . .	Ton measurement	£14.00
Apparel and attire, effects . . . . .	Ton weight or measurement	£21.95
Oils—		
Eucalyptus . . . . .	Ton measurement	£15.85
Coconut . . . . .	Ton weight	£15.85
Whale . . . . .	Ton weight	£15.85
Other . . . . .	Ton measurement	£15.85
Stearine . . . . .	Ton weight	£15.85
Tallow, unrefined, in drums . . . . .	Ton weight	£15.85
Ore in casks, bags or drums, n.e.i. . . . .	Ton weight	£8.50
Zinc—		
Ex Risdon . . . . .	Ton weight	£4.75
Other than above . . . . .	Ton weight	£6.85
Dust in tins, sealed cases or new lined drums . . . . .	Ton weight	£19.90
Copper . . . . .	Ton weight	£6.85
Lead . . . . .	Ton weight	£6.85
Steel billets—		
Up to 20 feet . . . . .	Ton weight	£8.70
Over 20 feet and up to 30 feet . . . . .	Ton weight	£9.35
Tin clippings, hydraulically pressed . . . . .	Ton weight	£7.30
Leather . . . . .	Ton weight	£30.85
Timber—		
Logs—		
Up to 40 feet . . . . .	100 super feet	£4.90
Over 40 feet and up to 50 feet . . . . .	100 super feet	£5.25
Over 50 feet and up to 60 feet . . . . .	100 super feet	£5.65
Sawn undressed up to 30 feet—shipment of less than 50 tons . . . . .	100 super feet	£2.60
Toilet paper . . . . .	Ton measurement	£14.95
Stationery—		
Note paper and or envelopes . . . . .	Ton measurement	£23.05
Other than above . . . . .	Ton measurement	£23.95
Casein . . . . .	Ton weight	£18.35
Fertilisers . . . . .	Ton measurement	£17.90
Soap . . . . .	Ton measurement	£14.00
Gold and silver specie . . . . .	<i>Ad valorem</i>	£0.750%

(a) Rates for commodities shipped in chartered vessels and bulkships not included.

**OVERSEAS SHIPPING FREIGHT RATES FROM AUSTRALIA TO VARIOUS COUNTRIES**  
**31 DECEMBER 1967(a)—continued**

<i>Country and article</i>	<i>Unit for which freight rate is quoted</i>	<i>Freight rate quoted</i>
<b>UNITED STATES OF AMERICA—ATLANTIC AND GULF PORTS—</b>		<i>U.S. dollars</i>
Beef, preserved by cold process—		
Quarters, etc. . . . .	100 lb	5.12
Cartons . . . . .	100 lb net weight	4.57
Casein . . . . .	20 cwt	51.70
Fish, preserved by cold process—		
Loose . . . . .	20 cwt	90.80
Cartons . . . . .	100 lb net weight	4.95
Lead—		
Ores and concentrates . . . . .	20 cwt	30.00
Mutton, preserved by cold process—		
Carcases . . . . .	100 lb	5.50
Cuts in cartons . . . . .	100 lb	4.75
Pipes and tubes of iron and steel . . . . .	20 cwt or 40 cu ft	36.30
Wool—		
Greasy . . . . .	100 lb	5.80
Scoured, etc. . . . .	100 lb	6.95
General cargo . . . . .	20 cwt or 40 cu ft	55.00

(a) Rates for commodities shipped in chartered vessels and bulkships not included.

Interstate rates per ton weight or measurement for general cargo at 31 December 1967 (expressed in Australian dollars) were: Sydney-Melbourne, \$16.20; Sydney-Brisbane, \$15.20; Sydney-Adelaide, \$21.40; Sydney-Fremantle, \$30.20; Sydney-Hobart, \$17.35; Sydney-Darwin, \$25.85.

#### **Shipping casualties**

Courts of Marine Inquiry are constituted by a magistrate assisted by skilled assessors, and, when necessary, are held at the principal port in each State and at Launceston (Tasmania). Such courts have power to deal with the certificates of officers who are found at fault. Particulars of shipping losses and casualties reported on or near the coast during each of the years 1962–63 to 1966–67 are shown in the table below.

**SHIPPING CASUALTIES TO OVERSEAS AND INTERSTATE STEAM AND MOTOR VESSELS(a)**  
**AUSTRALIA, 1962-63 TO 1966-67**

<i>Year</i>	<i>Shipping losses</i>			<i>Other shipping casualties</i>			<i>Total shipping casualties</i>		
	<i>Vessels</i>	<i>Net tons</i>	<i>Lives lost</i>	<i>Vessels</i>	<i>Net tons</i>	<i>Lives lost</i>	<i>Vessels</i>	<i>Net tons</i>	<i>Lives lost</i>
1962–63 . . . . .	..	..	..	122	468,326	..	122	468,326	..
1963–64 . . . . .	..	..	..	109	362,798	..	109	362,798	..
1964–65 . . . . .	..	..	..	87	315,762	..	87	315,762	..
1965–66 . . . . .	1	287	13	87	375,161	..	88	375,448	13
1966–67 . . . . .	..	..	..	104	545,927	..	104	545,927	..

(a) Vessels over 50 net tons.

#### **Lighthouses; distances by sea; depth of water and tides at main ports; ferry passenger services**

A list of the principal lighthouses on the coast of Australia, giving details of the location, number, colour, character, period, candle-power and visibility of each light so far as particulars are available, will be found in *Transport and Communication*, Bulletin No. 46.

The distances by sea between principal ports of Australia and some important ports in other countries which trade with Australia were published in Year Book No. 48, page 525.

A table showing the depths of water available and tides at principal ports of Australia is published in the annual bulletin, *Transport and Communication*. For some major ports information is given in the chapter Local Government.

## RAILWAYS

## Government railways

Government railways in Australia operate in all States and Territories and provide an important means of transportation. In 1966-67 a total of 68.5 million tons of freight were carried, an increase of 81.2 per cent over the 37.8 million tons carried in 1946-47. However, in the same twenty-year period the number of passengers carried (mostly within the suburban areas of Sydney and Melbourne) declined by 9.6 per cent from 503.2 millions in 1946-47 to 454.7 millions in 1966-67. The number of train miles run during 1966-67 (93.7 million) was only 9.6 per cent greater than in 1946-47, which is an indication of the trend towards heavier train loads with the more powerful motive power now available. Since the introduction of the first mainline diesel-electric locomotives in 1950 their numbers have increased greatly until at 30 June 1967 there were 975 throughout Australia. Diesel-electric locomotives during 1966-67 hauled 49 million train-miles, while steam locomotives hauled only 10 million train-miles.

## Railway development

The first steam-operated railway in Australia ran between Melbourne and Port Melbourne, a distance of two miles, and was opened on 12 September 1854. It was owned and operated by the Melbourne and Hobson's Bay Railway. Within a short time privately-owned railways opened in other States, but owing to the small volume of traffic available they were soon in financial difficulties and all were taken over by the respective State Governments. Under the policy of Government ownership and control the railway networks expanded until at 30 June 1941 there were 27,234 route-miles open for traffic in Australia. This was the greatest mileage ever recorded. Since the 1939-45 War many uneconomic branch lines have been closed. From 1 July 1947 to 30 June 1967, 2,954 miles have been closed, the greatest lengths being in Western Australia (997 miles), Queensland (842 miles), and Victoria (556 miles). During this same period 792 miles of new railway were added to the networks. The following table sets out the route-miles of government railways in each State and Territory at various dates since 1855.

GOVERNMENT RAILWAYS: ROUTE-MILEAGE OPEN, STATES AND TERRITORIES  
1855 TO 1967

	(Miles)								
30 June—	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
1855(a)	14	2	..	7	..	..	..	..	23
1861(a)	73	114	..	56	..	..	..	..	243
1871(a)	358	276	218	133	..	45	..	..	1,030
1881(a)	996	1,247	800	832	92	45	..	..	4,012
1891	2,182	2,763	2,195	1,666	198	351	145	..	9,500
1901	2,846	3,237	2,801	1,736	1,355	457	145	..	12,577
1911	3,762	3,523	3,868	1,935	2,376	470	145	..	16,079
1921	5,043	4,267	5,752	3,408	3,992	630	199	5	23,296
1931	6,247	4,514	6,529	3,725	4,634	665	317	5	26,636
1941	6,368	4,518	6,567	3,809	4,835	642	490	5	27,234
1951	6,354	4,445	6,560	3,805	4,682	613	490	5	26,954
1961	6,303	4,050	6,324	3,836	4,577	517	490	5	26,102
1965	6,259	4,007	5,785	3,800	4,187	500	490	5	25,033
1966	6,259	3,984	5,785	3,781	4,201	500	490	5	25,005
1967	6,259	4,027	5,730	3,779	4,269	500	490	5	25,059

(a) At 31 December.

One feature of the Australian government railways is the variety of gauges to which they are built. There are three principal gauges, 'broad' (5ft 3in), 'standard' (4ft 8½in), and 'narrow' (3ft 6in). Extensive route-mileages of 3ft 6in gauge railway were built in areas where traffic volumes were initially known to be small and where it was imperative to minimise the costs of construction. The following table shows the mileages open in each State and Territory at 30 June 1967 according to gauge.

**GOVERNMENT RAILWAYS: ROUTE-MILEAGE OPEN, BY GAUGE  
STATES AND TERRITORIES, 30 JUNE 1967**

(Miles)

<i>Gauge</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
5ft 3in . . . .	(a)204	(b)3,816	..	1,651	..	..	..	..	5,671
4ft 8½in . . . .	6,055	202	69	(c)871	(d)767	..	..	(e)5	7,969
3ft 6in . . . .	..	..	5,631	(f)1,257	(g)3,502	500	(h)490	..	11,380
2ft 6in . . . .	..	9	..	..	..	..	..	..	9
2ft 0in . . . .	..	..	30	..	..	..	..	..	30
<b>Total . . . .</b>	<b>6,259</b>	<b>4,027</b>	<b>5,730</b>	<b>3,779</b>	<b>4,269</b>	<b>500</b>	<b>490</b>	<b>5</b>	<b>25,059</b>
Per 1,000 of population	1.45	1.23	3.37	3.40	4.87	1.33	8.26	0.05	2.12
Per 1,000 square miles .	20.23	45.82	8.59	9.94	4.37	18.95	0.94	5.32	8.44

(a) Portion of Victorian Railway system. (b) Excludes 202 route-miles of 5ft 3in gauge which almost parallel the 4ft 8½in gauge line between Melbourne and the Murray River. (c) Comprises 654 miles of Trans-Australian and 217 miles of the Central Australia Railway systems. (d) Includes 454 miles of the Trans-Australian Railway system. (e) Australian Capital Territory Railway system. (f) Includes 428 miles of the Central Australia Railway system. (g) Excludes 192 miles of 3ft 6in gauge line which parallel the 4ft 8½in gauge line and 66 miles of 3ft 6in/4ft 8½in dual gauge line which are included in the 4ft 8½in gauge line. (h) Comprises 173 miles of the Central Australia and 317 miles of the North Australia Railway systems.

**Government railway systems**

There are six separate State Government railway systems and one Commonwealth railway system. As the Commonwealth system includes mileages in South Australia and Western Australia, and the Victorian system extends into New South Wales, the system route-mileages shown in the following table do not represent mileages within each State and Territory. These are shown in the previous table. The route-mileage of each system open for traffic, according to gauge, at 30 June 1967 is shown in the following table.

**GOVERNMENT RAILWAYS: ROUTE-MILEAGE OPEN, BY GAUGE AND SYSTEM  
30 JUNE 1967**

(Miles)

<i>System</i>	<i>Gauge</i>					<i>Total</i>
	<i>5ft 3in</i>	<i>4ft 8½in</i>	<i>3ft 6in</i>	<i>2ft 6in</i>	<i>2ft 0in</i>	
New South Wales . . . .	..	(a)6,055	..	..	..	6,055
Victoria . . . . .	(b)4,020	202	..	9	..	4,231
Queensland . . . . .	..	69	5,631	..	30	5,730
South Australia . . . .	1,651	..	829	..	..	2,480
Western Australia . . . .	..	313	(c)3,502	..	..	3,815
Tasmania . . . . .	..	..	500	..	..	500
Commonwealth . . . . .	..	1,330	918	..	..	2,248
<b>Australia . . . . .</b>	<b>5,671</b>	<b>7,969</b>	<b>11,380</b>	<b>9</b>	<b>30</b>	<b>25,059</b>

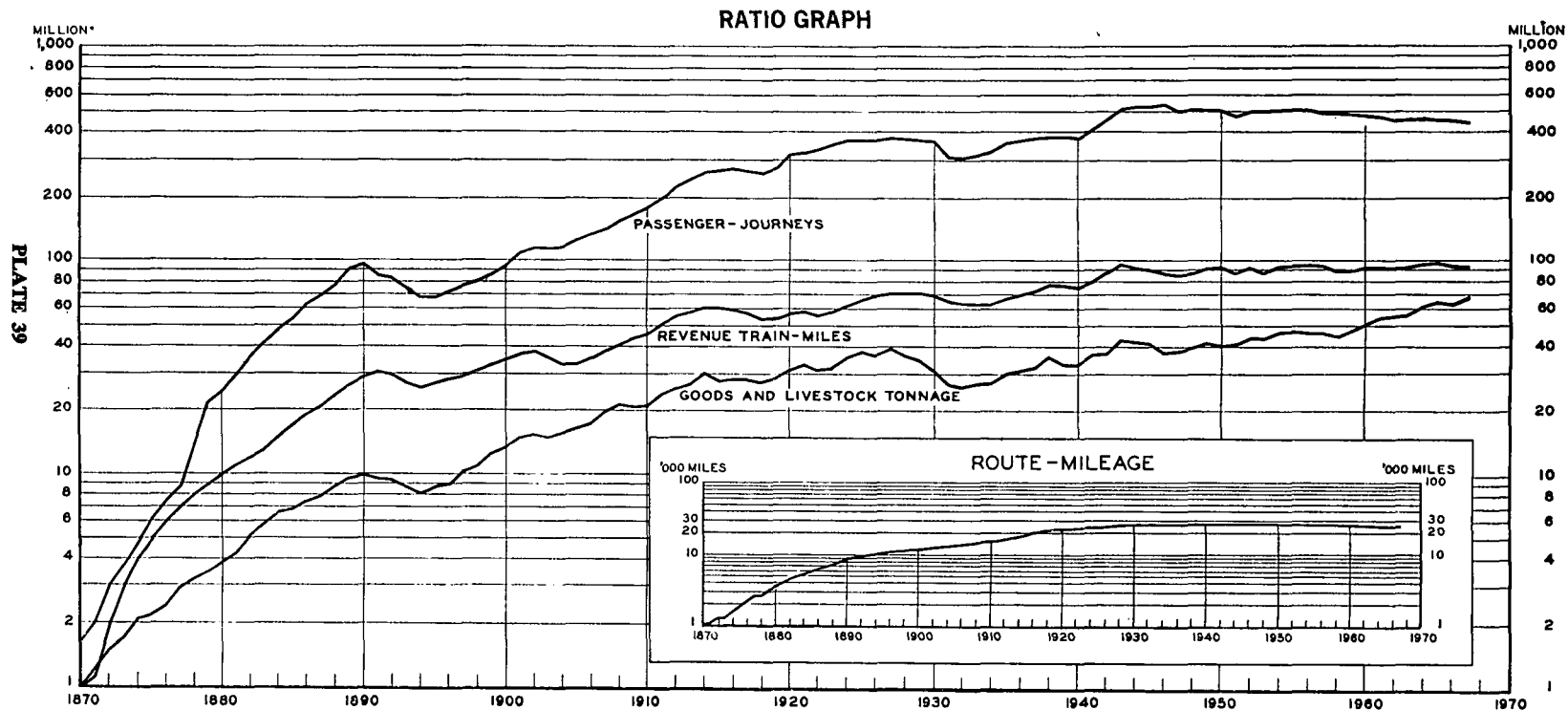
(a) Includes 234 route-miles which are electrified. (b) Excludes 202 route-miles of 5ft 3in gauge line which almost parallel the 4ft 8½in gauge line between Melbourne and the Murray River. Includes 263 route-miles which are electrified. (c) Excludes 192 miles of 3ft 6in gauge line which parallel the 4ft 8½in gauge line and 66 miles of 3ft 6in/4ft 8½in dual gauge line which are included in the 4ft 8½in gauge line.

The New South Wales system is based on Sydney and extends throughout the State. The Victorian system based on Melbourne radiates throughout the State, extending into areas of southern New South Wales. The Queensland system extends along the coast from Brisbane to Cairns in the north, while branch lines extend inland from Brisbane and the larger coastal cities of Rockhampton and Townsville. The main South Australian system is in the south-east of the State, but an isolated narrow-gauge system operates in the Eyre Peninsula area. The railway system in Western Australia is established in the south-western section of the State, but extends north to Meekathara and east to Kalgoorlie and Esperance. In Tasmania the main line connects Hobart and Launceston, and there are branch lines along the northern coast.



# GOVERNMENT RAILWAYS: AUSTRALIA, 1870 TO 1966-67

## ROUTE MILEAGE AND TRAFFIC



The Commonwealth Railways comprises four separate railways. The Trans-Australian Railway, extending from Port Pirie to Kalgoorlie, is of 4ft 8½in gauge, as is that part of the Central Australia Railway from Port Augusta (Sterling North) to Maree. A further extension of this railway from Maree to Alice Springs is of 3ft 6in gauge, as is the North Australia Railway from Darwin to Birdum. The Australian Capital Territory Railway from Queanbeyan to Canberra is of 4ft 8½in gauge. In this chapter particulars of the four Commonwealth railways are combined; however, particulars for each railway are shown separately in the annual bulletin *Transport and Communication*.

A graph showing the route-mileages and traffic of all Government railways from 1870 to 1967 appears on plate 39 opposite.

#### Standardisation of railway gauges

A number of specific programmes for the standardisation of railways in Australia have been arranged on the basis of mutual agreement and collaboration between the Commonwealth and State Governments with the ratification of the Parliaments concerned. Under various Commonwealth-State Standardisation Agreements approximately 730 route-miles of standard (4ft 8½in) gauge track have been completed since 1956, and a further 380 route-miles are expected to be completed early in 1969. A special article setting out the history of rail standardisation in Australia is given in Year Book No. 53, pages 440-445.

The first step towards standardisation of existing broken gauge lines between capital cities was effected in 1930 with the construction of a 4ft 8½in gauge line from Kyogle (New South Wales) to Brisbane. In 1957 a new standard gauge railway between Port Augusta and Maree was completed. This line replaced the former narrow-gauge line and followed a new alignment between Port Augusta and Brachina (87 miles) whence it followed the old route to Maree. The narrow-gauge line from Port Augusta to Hawker was retained and that from Hawker to Brachina was demolished. In 1962 the opening of a standard gauge line between Albury and Melbourne completed the standard gauge link between Melbourne and Brisbane. Bogie exchange facilities have been installed at Melbourne and Port Pirie (South Australia) to eliminate much of the physical transfer of goods between the rolling stock of the standard gauge and that of the 5ft 3in gauge systems serving Victoria and a large part of South Australia.

Standardisation projects (4ft 8½in) gauge now proceeding are designed to link Sydney with Perth and Fremantle through Broken Hill, Port Pirie, and Kalgoorlie. At present, lines of this gauge exist between Sydney and Broken Hill (New South Wales Government Railways) and between Port Pirie and Kalgoorlie (Commonwealth Railways). The replacement of existing 3ft 6in gauge lines with new standard gauge construction is now proceeding on the Western Australian Government Railways' line between Fremantle and Kalgoorlie and the South Australian Government Railways' line between Port Pirie and Cockburn on the New South Wales-South Australian border. Construction of a new line between Cockburn and Broken Hill to replace the existing Silverton Tramway Company's line between these centres will begin shortly. The overall length of the Sydney-Perth railway, to be opened towards the end of 1969, is 2,442 miles. The total cost of the new work, including new rolling stock and substantial new facilities, is expected to be about \$210 million.

#### Private railways

In addition to the Government railway systems there are a number of important private railways in Australia. Most of these were constructed for the prime purpose of hauling minerals, although some of them also carry passengers and general traffic. Private railways hauling iron ore operate from Iron Knob and Iron Baron to Whyalla (South Australia), from Mount Tom Price to Dampier (Western Australia), and from Mount Goldsworthy to Finucane Island, near Port Hedland. Lines from Yallourn to Morwell (Victoria) and from Maitland to Cessnock (New South Wales) carry coal, while lines from Broken Hill to Cockburn on the South Australian border (New South Wales) and from Rosebery to Burnie (Tasmania) carry base metal concentrates. There are numerous other short lengths of private railways in Australia. Many of these are narrow-gauge lines, mainly on the Queensland coast, which carry sugar cane to the mills during the crushing season.

#### Operations of Government railway systems

Particulars of train-mileages, passenger-journeys, passenger-miles, freight tons carried, and freight ton-miles included in this section refer only to operations for which revenue is received.

## Summary of operations

## GOVERNMENT RAILWAYS: SUMMARY OF OPERATIONS, SYSTEMS, 1966-67

	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>Cwlth</i>	<i>Aust.</i>
<b>Train-mileage</b>								
('000)(a)—								
Suburban passenger	10,782	8,504	1,864	2,028	1,280	125	..	24,583
Country passenger	10,280	4,798	3,823	1,897	941	221	768	22,728
Goods(b)	16,576	6,733	11,188	2,659	6,094	929	2,190	46,369
<i>Total</i>	<i>37,638</i>	<i>20,035</i>	<i>16,876</i>	<i>6,584</i>	<i>8,316</i>	<i>1,275</i>	<i>2,958</i>	<i>93,682</i>
<b>Passenger-journeys</b>								
('000)(c)—								
Suburban	239,986	141,593	23,703	14,608	9,468	973	..	430,331
Country(d)	15,298	4,674	2,668	824	343	224	371	24,402
<i>Total</i>	<i>255,284</i>	<i>146,268</i>	<i>26,372</i>	<i>15,432</i>	<i>9,811</i>	<i>1,197</i>	<i>371</i>	<i>454,735</i>
<b>Passenger-miles</b>								
('000)(e)—								
Suburban	n.a.	1,256,759	n.a.	121,549	n.a.	6,306	..	n.a.
Country	n.a.	393,121	n.a.	96,331	67,897	14,843	129,764	n.a.
<i>Total</i>	<i>n.a.</i>	<i>1,649,880</i>	<i>n.a.</i>	<i>217,880</i>	<i>n.a.</i>	<i>21,149</i>	<i>129,764</i>	<i>n.a.</i>
<b>Freight—</b>								
Tons carried('000)(d)	29,275	12,075	10,185	4,876	7,873	1,079	3,121	68,484
Net ton-miles								
(million)(f)	4,554.8	1,937.4	2,003.6	739.4	1,244.1	118.2	919.2	11,516.7

(a) One train (i.e. a complete unit of locomotive and vehicles, electric train set, or rail motor) travelling one mile for revenue purposes. (b) Includes mixed train-mileage. (c) Based on ticket sales making allowances for periodical tickets. Tickets sold at concession rates are counted as full journeys. (d) Inter-system traffic is included in the total for each system (including each Commonwealth railway) over which it passes. (e) One passenger travelling one mile. (f) One ton carried one mile.

## Rolling stock

## GOVERNMENT RAILWAYS: ROLLING STOCK INCLUDED IN CAPITAL ACCOUNT

System and date	Locomotives					Coaching stock (b)	Goods stock	Service stock
	Steam	Diesel-electric	Electric	Other (a)	Total			
30 June 1967—								
New South Wales . . .	331	309	41	26	707	(c)3,494	(c)20,285	2,298
Victoria . . .	132	199	35	70	436	(c)2,430	(c)20,956	(c)1,625
Queensland . . .	500	213	..	11	724	1,341	21,913	1,865
South Australia . . .	116	120	..	..	236	(c)548	7,539	(c)471
Western Australia . . .	237	109	..	20	366	503	12,020	1,041
Tasmania . . .	20	37	..	20	77	133	2,337	175
Commonwealth . . .	1	67	..	9	77	165	1,821	444
Australia . . .	1,337	1,054	76	156	2,623	(d)8,727	(d)86,887	(d)7,920
30 June—								
1966 . . .	1,591	925	76	150	2,742	8,748	88,205	7,987
1965 . . .	1,782	821	76	147	2,826	8,777	88,781	8,144
1964 . . .	1,981	694	76	140	2,891	8,829	88,929	7,944
1963 . . .	2,215	608	76	132	3,031	8,969	90,020	7,960
1962 . . .	2,456	541	76	123	3,196	9,177	91,094	7,976

(a) Includes non-passenger-carrying diesel power vans. (b) Includes all brake vans and non-powered electric train stock. (c) Excludes stock jointly-owned with other systems. (d) Includes jointly-owned stock.

## Train-mileage

GOVERNMENT RAILWAYS: TRAIN-MILEAGE, BY TYPE OF SERVICE, SYSTEMS  
1962-63 TO 1966-67

('000 miles)

<i>Year</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>Cwlth</i>	<i>Aust.</i>
SUBURBAN PASSENGER								
1962-63 .	10,915	8,303	1,706	1,941	1,334	135	..	24,334
1963-64 .	10,939	8,369	1,742	1,967	1,368	137	..	24,522
1964-65 .	10,888	8,480	1,778	1,951	1,375	136	..	24,608
1965-66 .	10,788	8,458	1,820	1,950	1,328	135	..	24,479
1966-67 .	10,782	8,504	1,864	2,028	1,280	125	..	24,583
COUNTRY PASSENGER								
1962-63 .	10,201	4,829	4,489	1,983	1,121	234	880	23,737
1963-64 .	10,308	4,835	4,416	1,932	982	246	814	23,533
1964-65 .	10,263	4,837	3,914	1,922	984	226	818	22,964
1965-66 .	10,208	4,738	3,901	1,900	966	230	811	22,754
1966-67 .	10,280	4,798	3,823	1,897	941	221	768	22,728
GOODS(a)								
1962-63 .	16,245	6,345	11,757	2,803	5,095	953	1,669	44,867
1963-64 .	17,831	6,909	13,003	2,767	5,156	939	1,854	48,459
1964-65 .	19,043	7,172	11,913	2,709	5,203	910	2,096	49,046
1965-66 .	16,699	6,949	11,918	2,642	5,749	918	2,144	47,019
1966-67 .	16,576	6,733	11,188	2,659	6,094	929	2,190	46,369
TOTAL								
1962-63 .	37,361	19,477	17,952	6,727	7,550	1,322	2,549	92,938
1963-64 .	39,078	20,113	19,161	6,666	7,506	1,322	2,668	96,514
1964-65 .	40,194	20,489	17,605	6,582	7,562	1,272	2,914	96,618
1965-66 .	37,694	20,145	17,640	6,492	8,043	1,283	2,955	94,252
1966-67 .	37,638	20,035	16,876	6,584	8,316	1,275	2,958	93,682

(a) Includes mixed train-miles.

**GOVERNMENT RAILWAYS: TRAIN-MILEAGE, BY TYPE OF MOTIVE POWER, SYSTEMS  
1962-63 TO 1966-67**

('000 miles)

<i>Year</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>Cwlth</i>	<i>Aust.</i>
<b>HAULED BY DIESEL-ELECTRIC LOCOMOTIVES</b>								
1962-63 .	11,903	6,489	7,033	2,391	2,949	1,139	2,344	34,248
1963-64 .	13,578	6,831	8,586	2,984	3,124	1,162	2,576	38,841
1964-65 .	15,490	7,426	9,474	3,047	3,443	1,100	2,815	42,795
1965-66 .	15,495	7,928	10,752	3,108	4,062	1,093	2,857	45,295
1966-67 .	17,108	8,367	12,080	3,188	4,420	1,108	2,863	49,134
<b>HAULED BY STEAM LOCOMOTIVES</b>								
1962-63 .	9,938	1,913	8,522	1,067	3,222	38	5	24,705
1963-64 .	9,320	2,074	8,139	429	3,014	12	5	22,993
1964-65 .	8,318	1,800	6,011	290	2,744	12	7	19,182
1965-66 .	6,026	1,074	4,721	162	2,665	4	5	14,657
1966-67 .	4,167	480	2,692	89	2,643	2	5	10,078
<b>HAULED BY ELECTRIC AND OTHER LOCOMOTIVES</b>								
1962-63 .	2,204	1,071	85	..	..	..	..	3,360
1963-64 .	2,394	1,139	80	..	..	..	..	3,613
1964-65 .	2,459	1,120	72	..	..	..	..	3,651
1965-66 .	2,158	1,092	71	..	..	21	..	3,342
1966-67 .	2,214	1,069	73	..	..	19	..	3,375
<b>POWERED COACHING STOCK</b>								
1962-63 .	13,316	10,004	2,312	3,269	1,379	145	200	30,625
1963-64 .	13,786	10,069	2,356	3,253	1,368	148	87	31,067
1964-65 .	13,927	10,143	2,048	3,245	1,375	160	92	30,990
1965-66 .	14,016	10,051	2,097	3,222	1,316	166	93	30,961
1966-67 .	14,149	10,118	2,030	3,307	1,254	146	90	31,094

## Passenger traffic

## Passenger-journeys

GOVERNMENT RAILWAYS: PASSENGER-JOURNEYS(a), SYSTEMS, 1962-63 TO 1966-67  
(<sup>'000</sup>)

Year	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	Cwlth	Aust.
SUBURBAN								
1962-63	(b)221,960	147,587	22,413	13,978	10,937	1,347	..	(b)418,222
1963-64	(b)227,319	148,314	22,512	14,332	10,298	1,229	..	(b)424,004
1964-65	(b)225,420	144,846	22,254	14,326	9,911	1,135	..	(b)417,892
1965-66	242,216	144,332	23,227	14,671	9,748	1,097	..	435,291
1966-67	239,986	141,593	23,703	14,608	9,468	973	..	430,331
COUNTRY(c)								
1962-63	(b)13,209	5,140	3,668	944	600	211	334	(b)24,106
1963-64	(b)13,358	5,082	3,391	895	516	197	338	(b)23,777
1964-65	(b)13,312	4,907	2,961	870	484	205	347	(b)23,086
1965-66	15,352	4,793	2,752	840	419	207	342	24,705
1966-67	15,298	4,674	2,668	824	343	224	371	24,402
TOTAL								
1962-63	257,756	152,727	26,081	14,922	11,537	1,558	334	464,915
1963-64	263,796	153,396	25,903	15,227	10,814	1,426	338	470,900
1964-65	261,681	149,753	25,215	15,196	10,395	1,340	347	463,927
1965-66	257,568	149,125	25,979	15,511	10,168	1,304	342	459,997
1966-67	255,284	146,268	26,372	15,432	9,811	1,197	371	454,735

(a) Based on ticket sales making allowance for periodical tickets. Tickets sold at concession rates are counted as full journeys. (b) Excludes some passenger-journeys in New South Wales for which a dissection between suburban and country is not available. (c) Inter-system traffic is included in the total for each system (including each Commonwealth railway) over which it passes.

## Passenger-miles

GOVERNMENT RAILWAYS: PASSENGER-MILES(a), SYSTEMS, 1962-63 TO 1966-67  
(<sup>'000</sup>)

Year	Vic.	S.A.	W.A.	Tas.	Cwlth
SUBURBAN					
1962-63	1,302,094	115,219	76,312	8,385	..
1963-64	1,315,105	120,110	71,468	7,664	..
1964-65	1,279,320	119,232	69,824	7,208	..
1965-66	1,273,380	122,720	67,826	7,062	..
1966-67	1,256,759	121,549	n.a.	6,306	..
COUNTRY					
1962-63	418,887	99,761	75,684	12,255	107,991
1963-64	410,830	96,877	66,753	11,380	107,005
1964-65	403,640	96,835	68,064	12,355	120,977
1965-66	396,226	95,410	66,968	11,132	121,351
1966-67	393,121	96,331	67,897	14,843	129,764
TOTAL					
1962-63	1,720,981	214,980	151,996	20,640	107,991
1963-64	1,725,935	216,987	138,221	19,044	107,005
1964-65	1,682,960	216,067	137,888	19,563	120,977
1965-66	1,669,606	218,130	134,794	18,194	121,351
1966-67	1,649,880	217,880	n.a.	21,149	129,764

(a) Particulars for New South Wales and Queensland, and in consequence the totals for Australia, are not available.

## Freight traffic

## Freight carried

## GOVERNMENT RAILWAYS: FREIGHT CARRIED(a), SYSTEMS

('000 ton)

Commodity and year	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	Cwlth	Aust.
1966-67—								
Wheat . . . . .	2,844	1,869	727	735	2,338	..	(b)	8,513
Other agricultural produce . . . . .	889	1,197	2,719	335	403	55	25	5,623
Coal, coke and briquettes . . . . .	13,214	2,063	3,102	7	591	64	2,042	21,083
Other minerals(c) . . . . .	2,755	151	827	1,514	2,264	24	136	7,671
Wool . . . . .	204	141	37	23	109	3	3	520
Fertilisers and manure . . . . .	645	1,171	95	443	664	138	6	3,162
Cement . . . . .	1,020	807	136	117	(d)	100	98	2,278
Timber . . . . .	306	376	129	74	364	351	30	1,630
Livestock . . . . .	285	158	570	87	97	20	77	1,294
All other commodities . . . . .	7,112	4,141	1,845	1,539	(e)1,043	322	707	16,708
<b>Total . . . . .</b>	<b>29,275</b>	<b>12,075</b>	<b>10,185</b>	<b>4,876</b>	<b>7,873</b>	<b>1,079</b>	<b>3,121</b>	<b>68,484</b>
1965-66 . . . . .	27,004	12,156	10,049	4,789	6,384	1,072	2,976	64,430
1964-65 . . . . .	27,889	12,596	10,031	5,089	5,229	1,091	2,919	64,844
1963-64 . . . . .	25,814	12,132	9,796	5,179	5,187	1,155	2,478	61,741
1962-63 . . . . .	23,641	10,841	8,736	4,503	4,793	1,165	2,230	55,909
1961-62 . . . . .	24,050	10,350	8,153	4,616	5,342	1,096	1,958	55,565

(a) Inter-system traffic is included in the total for each system (including each Commonwealth railway) over which it passes. (b) Less than 500 tons. (c) Includes sand and gravel. (d) Cement included with 'All other commodities'. (e) Includes cement.

## Freight net ton-miles

## GOVERNMENT RAILWAYS: FREIGHT NET TON-MILES, SYSTEMS

(Million)

Commodity and year	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	Cwlth	Aust.
1966-67—								
Wheat . . . . .	774.8	352.6	(a)	73.1	415.2	..	(b)	n.a.
Other agricultural produce . . . . .	355.0	223.3	(a)	40.3	68.7	5.6	18.1	n.a.
Coal, coke and briquettes . . . . .	485.9	178.3	(a)	1.3	41.2	7.7	316.9	n.a.
Other minerals(c) . . . . .	344.3	15.1	(a)	221.2	240.0	0.9	36.1	n.a.
Wool . . . . .	50.2	18.8	(a)	4.2	27.0	0.3	1.3	n.a.
Fertilisers and manure . . . . .	195.6	202.2	(a)	80.2	106.7	22.4	5.4	n.a.
Cement . . . . .	159.7	53.4	(a)	13.7	(d)	12.5	5.6	n.a.
Timber . . . . .	105.5	67.3	(a)	14.3	75.2	17.9	27.8	n.a.
Livestock . . . . .	87.5	29.4	149.5	13.3	18.4	2.8	31.3	332.2
All other commodities . . . . .	1,996.4	796.9	1,854.1	278.0	(e)251.7	48.1	476.8	5,702.0
<b>Total . . . . .</b>	<b>4,554.8</b>	<b>1,937.4</b>	<b>2,003.6</b>	<b>739.4</b>	<b>1,244.1</b>	<b>118.2</b>	<b>919.2</b>	<b>11,516.7</b>
1965-66 . . . . .	4,281.8	1,989.5	2,002.0	749.3	1,020.8	113.4	881.4	11,038.2
1964-65 . . . . .	4,706.0	2,028.2	1,800.9	765.4	842.1	116.6	885.8	11,145.0
1963-64 . . . . .	4,282.1	1,905.6	1,887.1	754.1	813.3	113.9	744.4	10,500.5
1962-63 . . . . .	3,743.3	1,693.2	1,599.7	679.4	762.3	111.8	663.6	9,253.3
1961-62 . . . . .	3,575.7	1,581.0	1,496.6	650.1	831.1	107.0	581.3	8,822.8

(a) Not available separately, included with 'All other commodities'. (b) Less than 50,000 net ton-miles. (c) Includes sand and gravel. (d) Cement included with 'All other commodities'. (e) Includes cement.

## Finance

GOVERNMENT RAILWAYS: GROSS EARNINGS(a), SYSTEMS, 1966-67  
(\$'000)

	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	Cwlth	Aust.
Coaching—								
Suburban passenger .	28,318	22,227	2,244	1,908	1,140	79	..	55,917
Country passenger .	15,595	7,871	4,388	1,771	1,535	149	2,438	33,747
Other .	6,585	4,221	3,153	998	1,331	172	543	17,003
<i>Total, coaching</i> (b)(c)	52,063	34,319	9,784	4,677	4,006	401	2,982	108,232 (d)
Freight (goods and live-stock)—								
Wheat .	(e)	11,399	6,175	2,987	12,461	..	(f)	n.a.
Other agricultural produce .	(e)	6,707	12,109	1,337	2,372	318	233	n.a.
Coal, coke and briquettes .	(e)	6,617	10,912	24	1,970	278	2,340	n.a.
Other minerals(g) .	(e)	431	6,502	7,582	4,114	51	548	n.a.
Wool .	(e)	1,252	1,428	194	1,580	30	46	n.a.
Fertilisers and manure .	(e)	4,341	745	1,350	3,205	919	39	n.a.
Cement .	(e)	2,590	1,266	365	(h)	693	128	n.a.
Timber .	(e)	2,494	1,550	324	2,470	868	290	n.a.
Livestock .	3,141	1,026	7,126	673	801	134	544	13,445
All other commodities	146,288	26,466	27,649	8,247	(i)13,381	2,646	10,868	235,545
<i>Total, freight</i> (b)	149,429	63,323	75,461	23,084	42,353	5,938	15,037	374,625
Miscellaneous .	(b)11,843	6,835	2,618	2,458	1,649	249	1,410	27,062
<b>Grand total</b> (b)	213,335	104,477	87,864	30,220	48,008	6,588	19,428	509,920

(a) Excludes Government Grants. (b) Includes State Co-ordination Tax Contribution. (c) Includes earnings which cannot be allocated among suburban, country or other coaching earnings. (d) See footnote (c). (e) Not available separately, included with 'All other commodities'. (f) Less than \$500. (g) Includes sand and gravel. (h) Cement included with 'All other commodities'. (i) Includes cement.

GOVERNMENT RAILWAYS: WORKING EXPENSES, SYSTEMS, 1966-67  
(\$'000)

	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.(a)	Cwlth	Aust.
Maintenance of way and works .	31,450	19,940	23,646	(a)7,832	(a)10,766	2,098	6,437	102,169
Motive power(b) .	61,663	28,740	34,029	(a)12,142	(a)18,098	2,890	5,044	162,606
Traffic .	46,392	29,947	21,481	(a)9,447	10,778	2,312	3,173	123,530
Other charges .	45,487	24,797	5,139	4,541	4,870	1,024	(a)4,757	90,615
<b>Total</b> .	184,992	103,423	84,295	(a)33,962	(a)44,513	8,325	(a)19,411	478,921

(a) Includes provision of reserves for depreciation. (b) Includes maintenance of rolling stock.



## GOVERNMENT RAILWAYS: GROSS EARNINGS, WORKING EXPENSES, AND NET EARNINGS SYSTEMS, 1962-63 TO 1966-67

(\$'000)

Year	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	Cwlth	Aust.
GROSS EARNINGS								
1962-63	182,482	86,878	75,244	27,672	32,920	5,598	13,958	424,752
1963-64	202,488	92,778	84,260	29,496	34,602	5,668	15,194	464,486
1964-65	213,258	100,225	81,321	29,764	35,715	5,581	17,419	483,283
1965-66	195,336	99,519	84,178	28,947	42,571	5,985	18,091	474,627
1966-67	213,335	104,477	87,864	30,220	48,008	6,588	19,428	509,920
WORKING EXPENSES								
1962-63	158,652	87,000	75,436	(a) 30,984	(a) 34,606	(a) 6,670	(a) 13,286	406,634
1963-64	177,416	91,512	78,288	30,910	35,802	6,894	14,218	435,040
1964-65	187,240	99,337	80,513	31,713	36,529	7,219	15,967	458,518
1965-66	179,792	101,006	84,126	32,388	39,730	7,547	17,316	461,905
1966-67	184,992	103,423	84,295	33,962	44,513	8,325	19,411	478,921
NET EARNINGS(b)								
1962-63	23,830	-122	-192	-3,312	-1,686	-1,072	672	18,118
1963-64	25,072	1,266	5,972	-1,414	-1,200	-1,226	976	29,446
1964-65	26,018	888	808	-1,949	-814	-1,638	1,452	24,765
1965-66	15,544	-1,486	52	-3,441	2,841	-1,561	775	12,724
1966-67	28,343	1,054	3,569	-3,742	3,496	-1,737	17	31,000

(a) Includes provision of reserves for depreciation.  
in this table.

(b) Excess of gross earnings over working expenses as shown

## GOVERNMENT RAILWAYS: SURPLUS OR DEFICIT, SYSTEMS, 30 JUNE 1967

(\$'000)

System	Net earnings—excess of gross earnings over working expenses	Plus grants and other earnings payable to railways			Less other expenses charged to railways					Surplus (+) or deficit (-)
		State Government grants	Road motor earnings	Other	Total	Interest and exchange	Sinking fund	Road motor expenses (a)	Other	Total
New South Wales	28,343	(b)4,300	..	..	4,300	26,091	5,732	..	(c)629	32,452
Victoria	1,054	(d)32	70	..	102	4,678	213	137	..	5,028
Queensland	3,569	..	..	..	..	(e)16,901	(f)73	..	(g)632	17,606
South Australia	-3,742	(f)8,000	197	..	8,197	5,477	..	204	(j)353	6,034
Western Australia	3,496	..	1,112	..	1,112	8,026	..	1,040	..	9,066
Tasmania	-1,737	..	..	(k)27	27	1,007	..	..	..	1,007
Commonwealth	17	..	..	..	..	..	..	..	..	..
Australia	31,000	12,332	1,379	27	13,738	62,180	6,018	1,381	1,614	71,193
										-26,456

(a) Includes interest and exchange. (b) Grants to meet losses on country developmental lines, to subsidise payments due from superannuation account and to cover cost of deferring increase in wheat freight rates. (c) Loan management and loan floatation expenses. (d) Kerang-Koondrook tramway recoup from Treasury. (e) Interest on opened and unopened lines, interest and redemption Mount Isa project fund, and interest on the Queensland 4 ft 8½ in gauge system. (f) Queensland 4 ft 8½ in gauge system only. (g) Demolished assets written off. (h) Includes deficit (\$669,421) on the Queensland 4 ft 8½ in gauge system. (i) Grants towards working expenses and debt charges. (j) Interest and repayment under Railway Standardisation and Railway Equipment Agreements. (k) Miscellaneous goods revenue from rail-ferry goods not carried by rail.

## Employment, salaries and wages

## GOVERNMENT RAILWAYS: AVERAGE NUMBER OF EMPLOYEES, AND SALARIES AND WAGES PAID, SYSTEMS, 1966-67

	N.S.W.	Vic.	Qld(a)	S.A.	W.A.	Tas.	Cwlth	Aust.
Average number of employees—								
Operating staff—								
Salaried . . .	9,327	(b)5,344	4,253	1,821	2,035	386	512	23,678
Wages . . .	36,162	(b)22,251	20,494	6,306	9,384	1,854	2,712	99,163
Construction staff—								
Salaried . . .	..	(c)	..	32	..	30	..	62
Wages . . .	..	(c)	78	1,092	..	140	..	1,310
Total staff . . .	45,489	27,595	24,825	9,251	11,419	2,410	3,224	124,213
Total salaries and wages paid (\$'000)	132,595	79,240	66,718	26,371	32,271	6,107	10,147	353,449
Average earnings per employee (\$)	2,915	2,872	2,688	2,851	2,826	2,534	3,147	2,846

(a) Excludes Queensland 4 ft 8½ in gauge system. (b) Includes construction staff. (c) Included with operating staff.

## Accidents

## GOVERNMENT RAILWAYS: ACCIDENTS—PERSONS (EXCLUDING EMPLOYEES) KILLED AND INJURED, 1966-67

	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	Cwlth	Aust.
Persons killed . . .	85	43	17	26	8	3	..	182
Persons injured . . .	617	600	141	52	74	3	31	1,518

## Consumption of coal, oil, and petrol

## GOVERNMENT RAILWAYS: VALUE OF COAL, OIL AND PETROL CONSUMED, SYSTEMS 1966-67 (\$'000)

	N.S.W.(a)	Vic.	Qld(a)	S.A.	W.A.	Tas.	Cwlth	Aust.
Coal used—								
In locomotives . . .	n.a.	311	986	79	910	4	(b)	n.a.
For other purposes . . .	n.a.	40	29	30	14	1	1	n.a.
Oil used—								
In diesel engines of locomotives and rail cars . . .	2,666	1,045	1,949	776	571	184	672	7,864
In furnaces of steam locomotives . . .	21	226	..	28	12	..	..	287
For lubrication . . .	457	227	55	n.a.	236	29	96	n.a.
For other purposes . . .	312	189	281	n.a.	202	17	81	n.a.
Petrol used in rail cars . . .	..	..	..	(b)	8	..	..	8

(a) Queensland 4 ft 8½ in gauge system included with New South Wales. (b) Less than \$500.

## TRAMWAY, TROLLEY-BUS, OMNIBUS, AND FERRY SERVICES

## Systems in operation

*Tramway and trolley-bus.* Since 1 April 1947 all systems have been operated by government or municipal authorities. During the year 1966-67, tramway systems were in operation in the following cities: Melbourne, Bendigo, and Ballarat, Victoria; Brisbane, Queensland; and Adelaide, South Australia. Trolley-bus services operated in Brisbane, Queensland; Perth, Western Australia; and Hobart and Launceston, Tasmania. All systems were electric.

In many parts of Australia private lines used for special purposes in connection with the timber, mining, sugar, or other industries are often called tramways, but they are more properly railways, and the traffic on them has nothing in common with that of the street tramways used for the conveyance of passengers, which are dealt with in this section.

**Motor omnibus.** Services are operated by government or municipal authorities and private operators. Statistics are collected for government and municipal omnibus services located in all State capital cities; Canberra, Australian Capital Territory; Newcastle, New South Wales; Maryborough and Rockhampton, Queensland; Fremantle and the Eastern Goldfields area, Western Australia; Launceston and Burnie, Tasmania; Darwin, Northern Territory; and for country road services operated by the Western Australian Government Railways and the Tasmanian Transport Commission. In Sydney the Government tramway system has been replaced by omnibus services, and in Perth the Metropolitan (Perth) Passenger Transport Trust has replaced privately owned services in the metropolitan area. In Hobart the Government trolley-bus and omnibus services have replaced the Government tramway service. Particulars of motor omnibus services under the control of private operators for the States of New South Wales, Victoria, Queensland, South Australia, and Western Australia are given in previous issues of this Year Book and in the annual bulletin *Transport and Communication*.

**Ferry.** Ferry passenger services are operated in the following States: New South Wales, at Sydney and Newcastle; Western Australia, on the Swan River at Perth; Tasmania, on the Mersey River at Devonport. Control is exercised by both governmental authorities and private operators. Particulars of the operations of these services are given in previous issues of this Year Book and in the annual bulletin *Transport and Communication*. In Victoria and Queensland the services operated are not extensive. There are no ferry passenger services in South Australia.

#### Government and municipal tramway, trolley-bus and omnibus services

Because of the development in recent years of the various forms of public road transport under the control of single authorities, and the gradual replacement of tramway services by motor omnibus services, it is not possible to obtain separate statistics for all phases of the activities of each form of transport, particularly financial operations. The two following tables present combined statistics of public tramway, trolley-bus and motor omnibus services with separate details shown for each form of transport where possible.

TRAMWAY, TROLLEY-BUS AND OMNIBUS SERVICES: GOVERNMENT  
AND MUNICIPAL, STATES AND TERRITORIES, 1966-67

	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
<b>Route-miles at 30 June—</b>									
Tram(a) . . . . . miles	..	156	59	7	17	28	..	..	222
Trolley-bus . . . . . "	..	20	20	..	..	65	..	..	65
Omnibus . . . . . "	604	126	332	142	4,263	748	42	72	6,329
<b>Vehicle-miles—</b>									
Tram . . . . . '000	..	17,407	5,432	471	650	1,052	..	..	23,310
Trolley-bus . . . . . "	..	892	892	..	..	..	..	..	2,594
Omnibus . . . . . "	45,307	6,931	7,187	10,772	20,188	5,272	688	2,186	98,531
<b>Rolling stock at 30 June—</b>									
Tram . . . . . number	..	739	237	28	50	63	..	..	1,004
Trolley-bus . . . . . "	..	36	36	..	..	..	..	..	149
Omnibus . . . . . "	1,460	225	381	350	679	251	19	104	3,469
<b>Passenger-journeys—</b>									
Tram . . . . . '000	..	135,737	48,525	2,084	..	..	..	..	186,346
Trolley-bus . . . . . "	..	4,832	4,832	..	2,800	(b)	..	..	..
Omnibus . . . . . "	246,509	25,107	26,976	47,651	51,247	22,582	1,161	6,189	435,054
<b>Gross revenue(c)—</b>									
Tram, trolley-bus and omnibus	\$'000	26,869	19,518	8,761	6,270	7,647	2,520	178	599
Working expenses(d)—									
Tram, trolley-bus and omnibus	\$'000	30,555	19,998	8,423	5,947	7,846	3,266	176	867
Net revenue—									
Tram, trolley-bus and omnibus	\$'000	—3,686	—480	338	323	—199	—746	2	—268
Employees at 30 June—									
Tram, trolley-bus and omnibus	number	7,507	4,746	2,362	1,421	1,915	709	32	151
<b>Accidents—</b>									
Tram, trolley-bus and omnibus(e)—									
Persons killed . . . . . number	9	19	7	1	1	..	..	..	37
Persons injured . . . . . "	1,125	645	33	142	301	42	..	15	2,303

(a) Gauge 4 ft 8½ in throughout. (b) Included with omnibus services. (c) Excludes government grants.  
(d) Includes provision of reserves for depreciation, etc., where possible. (e) Excludes accidents to employees.  
Minus sign (—) denotes deficit.

**TRAMWAY, TROLLEY-BUS AND OMNIBUS SERVICES: GOVERNMENT AND MUNICIPAL  
AUSTRALIA, 1962-63 TO 1966-67**

	1962-63	1963-64	1964-65	1965-66	1966-67
Route-miles at 30 June—					
Tram . . . . . miles	223	227	222	222	222
Trolley-bus . . . . . "	88	65	65	65	65
Omnibus . . . . . "	5,735	5,921	6,460	6,533	6,329
Vehicle miles—					
Tram . . . . . '000	26,363	25,689	24,552	23,878	23,310
Trolley-bus . . . . . " }	94,883	96,272	98,201	2,891	2,594
Omnibus . . . . . " }				96,430	98,531
Rolling stock at 30 June—					
Tram . . . . . number	1,124	1,101	1,099	1,071	1,004
Trolley-bus . . . . . "	208	152	152	152	149
Omnibus . . . . . "	3,474	3,540	3,680	3,776	3,469
Passenger-journeys—					
Tram . . . . . '000	237,929	231,348	218,086	203,179	186,346
Trolley-bus and omnibus . . . . . "	474,194	471,085	466,524	450,015	435,054
Gross revenue(a)—					
Tram, trolley-bus and omnibus \$000	63,394	63,688	65,110	66,700	72,362
Working expenses(b)—					
Tram, trolley-bus and omnibus \$000	67,344	67,890	70,519	73,444	77,078
Net revenue—					
Tram, trolley-bus and omnibus \$000	-3,950	-4,202	-5,409	-6,744	-4,716
Employees at 30 June—					
Tram, trolley-bus and omnibus number	19,986	19,346	18,841	19,007	18,843
Accidents—					
Tram, trolley-bus and omnibus(c)—					
Persons killed . . . . . number	32	38	44	28	37
Persons injured . . . . . "	2,915	2,839	2,606	2,474	2,303

(a) Excludes government grants.  
(c) Excludes accidents to employees.

(b) Includes provision of reserves for depreciation, etc., where possible.

Minus sign (-) denotes deficit.

## MOTOR VEHICLES

The arrangements for the registration of motor vehicles and the licensing of drivers and riders are not uniform throughout Australia, since they are the function of a separate authority, or authorities, in each State and Territory. Particulars of registration, licences, fees payable, etc., in each State and Territory at 30 June 1960 were given in Year Book No. 47, pages 553-6, and at 30 June 1963 in *Transport and Communication*, Bulletin No. 54, 1962-63.

Tables in this section include vehicles owned by private individuals, local government authorities, State Governments, and the Commonwealth Government (excluding those belonging to the defence services).

### Motor vehicles on register

Details of motor vehicles on the register are compiled by up-dating motor vehicle census data from information made available by the various motor vehicle registration authorities in the States and Territories. Censuses of motor vehicles are taken periodically, and at these census dates considerably greater information concerning the particulars shown in the tables following is available. Particulars of the 1962 Census are shown in Year Book No. 53, 1967, *Transport and Communication*, Bulletin No. 54, 1962-63, and in special census publications.

## MOTOR VEHICLES ON THE REGISTER, BY TYPE OF VEHICLE(a)

State or Territory and year	Motor cars	Station wagons	Other motor vehicles							Motor cycles	Total
			Total	Utilities	Panel vans	Trucks	Other truck- types	Omni- buses	Total		
31 December 1967—											
New South Wales	960,488	194,428	1,154,916	126,652	61,146	102,128	3,702	6,336	299,964	27,743	1,482,623
Victoria	763,585	159,915	923,500	91,615	35,300	87,000	3,606	4,266	221,787	13,601	1,158,888
Queensland	n.a.	n.a.	435,453(b)	101,399	(b)	(c) 53,697	(c)	2,816	157,912	13,838	607,203
South Australia	276,415	47,536	323,951	38,013	11,503	33,254	1,510	2,030	86,310	12,509	422,770
Western Australia	206,109	45,622	251,731	43,325	12,689	(c) 33,008	(c)	1,840	90,862	9,268	351,861
Tasmania	89,282	15,370	104,652	13,101	7,280	10,052	319	1,156	31,908	1,833	138,393
Northern Territory	7,452	3,597	11,049	3,994	823	1,808	80	111	6,816	596	18,461
Australian Capital Territory	29,487	6,744	36,231	2,559	1,465	1,348	112	175	5,659	805	42,695
Australia	n.a.	n.a.	3,241,483	n.a.	n.a.	n.a.	n.a.	18,730	901,218	80,193	4,222,894
31 December—											
1966	n.a.	n.a.	3,060,578	n.a.	n.a.	n.a.	n.a.	17,934	888,418	68,913	4,017,909
1965	n.a.	n.a.	2,895,891	n.a.	n.a.	n.a.	n.a.	17,018	873,656	67,339	3,836,886
1964	n.a.	n.a.	2,708,741	n.a.	n.a.	n.a.	n.a.	n.a.	863,318	69,429	3,641,488
1963	n.a.	n.a.	2,499,868	n.a.	n.a.	n.a.	n.a.	15,199	844,878	74,612	3,419,358
1962(d)	2,068,698	231,436	2,300,134	414,156	119,897	270,881	8,091	14,319	827,344	81,859	3,209,337

(a) All figures after December 1962 are subject to revision. (b) Panel vans included with utilities. (c) Other truck-types included with trucks. (d) Census figures.

MOTOR VEHICLES(a) ON REGISTER PER 1,000 OF POPULATION  
STATES AND TERRITORIES, 1962 TO 1967

31 December—	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
1962(b)	280	301	286	339	326	293	229	316	296
1964(c)	308	325	320	360	347	324	261	354	323
1965(c)	319	334	333	364	361	339	267	367	333
1966(c)	329	341	344	371	379	355	279	381	343
1967(c)	341	351	353	378	394	365	304	395	354

(a) Excludes tractors, trailers, plant and equipment, etc. (b) Census figures. (c) Subject to revision.

## Registrations of new motor vehicles

Particulars of registrations of new motor vehicles are shown by type and make of vehicle in the annual bulletin *Transport and Communication*, and by type, make, and horsepower of vehicle in monthly and annual bulletins of New Motor Vehicle Registrations.

In these statistics 'registrations' means registrations processed by the motor vehicle registration authorities in the States and Territories during the period.

## REGISTRATIONS OF NEW MOTOR VEHICLES, BY TYPE OF VEHICLE

State or Territory and year	Motor cars	Station wagons	Ambulances and hearses	Utilities	Panel vans	Trucks	Other truck-types	Omni-buses	Motor cycles	Total
1967—										
New South Wales	104,365	20,601	89	11,828	6,477	7,859	341	446	8,566	160,572
Victoria	76,077	16,270	77	7,242	4,290	5,266	324	326	2,322	112,194
Queensland	32,105	9,064	68	5,546	1,421	5,159	2	246	2,490	56,101
South Australia	25,339	4,811	46	2,866	949	1,882	93	137	1,595	37,718
Western Australia	23,383	6,394	30	4,975	1,607	3,096	85	207	1,319	41,096
Tasmania	9,543	1,619	9	1,243	499	784	18	79	575	14,369
Northern Territory	867	502	6	739	87	334	1	1	183	2,720
Australian Capital Territory	3,915	686	4	287	216	210	7	28	256	5,609
Australia	275,594	59,947	329	34,726	15,546	24,590	871	1,470	17,306	430,379
1966	245,175	61,513	349	33,154	13,351	22,970	837	1,399	9,738	388,486
1965	258,082	73,673	346	32,948	14,177	25,373	886	1,544	8,056	415,085
1964	250,050	82,973	336	32,983	14,598	25,360	805	1,384	6,488	414,977
1963	233,125	74,303	338	31,741	12,321	20,668	618	1,177	5,273	379,564
1962	205,623	61,378	277	27,010	11,712	15,911	557	989	5,391	328,848

**Drivers' and riders' licences**

At 30 June 1967 the numbers of licences in force to drive or ride motor vehicles were: New South Wales, 1,722,600; Victoria, 1,313,291; South Australia, 474,721; Western Australia, 363,511; Tasmania, 152,733; Australian Capital Territory, 58,758. Particulars are not available for Queensland and the Northern Territory.

**ROAD TRAFFIC ACCIDENTS****Accidents involving casualties, persons killed, persons injured**

**ROAD TRAFFIC ACCIDENTS INVOLVING CASUALTIES(a): NUMBER OF  
ACCIDENTS, PERSONS KILLED OR INJURED  
STATES AND TERRITORIES, 1966**

State or Territory	Number of accidents	Persons killed	Persons injured	Per 100,000 of mean population			Per 10,000 motor vehicles registered(b)		
				Number of accidents	Persons killed	Persons injured	Number of accidents	Persons killed	Persons injured
New South Wales	20,919	1,143	28,981	493	27	683	152	8	211
Victoria	14,084	955	20,160	437	30	626	129	9	185
Queensland	6,878	466	9,936	411	28	593	121	8	175
South Australia(c)	7,031	270	9,369	642	25	856	175	7	233
Western Australia	4,346	253	5,997	512	30	706	138	8	190
Tasmania	1,377	104	2,092	371	28	563	107	8	162
Northern Territory	310	34	446	547	60	787	200	22	288
Australian Capital Territory	593	17	856	614	18	887	164	5	237
<b>Australia</b>	<b>55,538</b>	<b>3,242</b>	<b>77,837</b>	<b>479</b>	<b>28</b>	<b>671</b>	<b>141</b>	<b>8</b>	<b>198</b>

(a) Accidents reported to the police which occurred in public thoroughfares and which resulted in death within thirty days or in bodily injury to an extent requiring surgical or medical treatment. (b) Average number of motor vehicles on register. (c) Includes accidents in which the injured persons did not require surgical or medical treatment and the number of persons injured in accidents who did not require surgical or medical treatment.

**ROAD TRAFFIC ACCIDENTS INVOLVING CASUALTIES(a): NUMBER OF  
ACCIDENTS, PERSONS KILLED OR INJURED  
STATES AND TERRITORIES, 1962 TO 1966**

Year	N.S.W.	Vic.	Qld	S.A. (b)	W.A.	Tas.	N.T.	A.C.T.	Total		
									Num- ber	Per 100,000 of mean popu- lation	Per 10,000 motor vehicles regis- tered (c)
Accidents involving casualties—											
1962	16,076	12,026	6,310	6,491	3,685	833	n.a.	348	45,769	428	147
1963	18,101	12,590	6,724	6,299	4,057	1,051	218	425	49,465	452	149
1964	19,399	13,991	7,220	6,998	4,062	1,184	224	476	53,554	480	152
1965	21,052	14,336	7,134	7,267	4,170	1,206	232	535	55,932	491	150
1966	20,919	14,084	6,878	7,031	4,346	1,377	310	593	55,538	479	141
Persons killed—											
1962	876	808	403	194	177	61	n.a.	8	2,527	24	8
1963	900	780	398	223	198	75	16	8	2,598	24	8
1964	1,010	904	461	238	222	89	25	17	2,966	27	8
1965	1,151	929	467	243	252	93	14	15	3,164	28	8
1966	1,143	955	466	270	253	104	34	17	3,242	28	8
Persons injured—											
1962	21,468	16,781	8,703	8,321	5,077	1,158	n.a.	498	62,006	580	200
1963	24,652	17,577	9,445	8,271	5,399	1,595	313	628	67,880	620	205
1964	26,631	19,836	10,383	9,222	5,450	1,709	297	730	74,258	665	210
1965	29,157	20,446	10,078	9,491	5,638	1,815	329	769	77,723	682	208
1966	28,981	20,160	9,936	9,369	5,997	2,092	446	856	77,837	671	198

(a) See footnote (a) to previous table. (b) See footnote (c) to previous table. (c) See footnote (b) to previous table.

**Types of road user killed or injured**

Responsibility for cause of accident is not indicated by this classification.

**ROAD TRAFFIC ACCIDENTS INVOLVING CASUALTIES(a): PERSONS KILLED OR INJURED  
TYPES OF ROAD USER INVOLVED, STATES AND TERRITORIES, 1966**

Type of road user	N.S.W.	Vic.	Qld	S.A. (b)	W.A.	Tas.	N.T.	A.C.T.	Total
<b>PERSONS KILLED</b>									
Drivers of motor vehicles	428	361	181	96	101	33	18	11	1,229
Motor cyclists	32	15	20	6	3	1	1	..	78
Pedal cyclists	16	38	20	14	10	6	..	..	104
Passengers (all types)(c)	323	282	142	86	88	44	13	4	982
Pedestrians	341	257	102	68	51	20	2	2	843
Other classes(d)	3	2	1	..	..	..	..	..	6
<b>Total</b>	<b>1,143</b>	<b>955</b>	<b>466</b>	<b>270</b>	<b>253</b>	<b>104</b>	<b>34</b>	<b>17</b>	<b>3,242</b>
<b>PERSONS INJURED</b>									
Drivers of motor vehicles	11,183	8,029	3,898	3,822	2,348	848	188	352	30,668
Motor cyclists	1,020	366	469	627	327	54	20	33	2,916
Pedal cyclists	858	907	473	669	362	50	9	51	3,379
Passengers (all types)(c)	11,765	8,263	4,223	3,311	2,239	896	194	340	31,231
Pedestrians	4,111	2,539	857	939	713	244	35	78	9,516
Other classes(d)	44	56	16	1	8	..	..	2	127
<b>Total</b>	<b>28,981</b>	<b>20,160</b>	<b>9,936</b>	<b>9,369</b>	<b>5,997</b>	<b>2,092</b>	<b>446</b>	<b>856</b>	<b>77,837</b>

(a) Accidents reported to the police which occurred in public thoroughfares and which resulted in death within thirty days or in bodily injury to an extent requiring surgical or medical treatment. (b) Includes accidents in which the injured persons did not require surgical or medical treatment and the number of persons injured in accidents who did not require surgical or medical treatment. (c) Includes pillion riders. (d) Includes tram drivers, riders of horses and drivers of animal-drawn vehicles.

**Age groups of persons killed or injured**
**ROAD TRAFFIC ACCIDENTS INVOLVING CASUALTIES(a): PERSONS KILLED OR INJURED  
BY AGE GROUP, STATES AND TERRITORIES, 1966**

Age group (years)	N.S.W.	Vic.	Qld	S.A. (b)	W.A.	Tas.	N.T.	A.C.T.	Aust.
<b>PERSONS KILLED</b>									
Under 5	37	31	17	12	9	2	1	..	109
5 and under 7	12	12	6	5	1	1	1	..	38
7 " " 17	73	70	46	25	29	16	..	1	260
17 " " 21	198	151	82	40	34	22	5	..	532
21 " " 30	203	184	82	39	52	21	9	6	596
30 " " 40	127	108	55	25	25	7	12	6	365
40 " " 50	93	98	50	37	19	10	4	3	314
50 " " 60	142	104	43	28	47	11	1	1	377
60 and over	258	195	85	55	37	14	1	..	645
Not stated	..	2	..	4	..	..	..	..	6
<b>Total</b>	<b>1,143</b>	<b>955</b>	<b>466</b>	<b>270</b>	<b>253</b>	<b>104</b>	<b>34</b>	<b>17</b>	<b>3,242</b>
<b>PERSONS INJURED</b>									
Under 5	957	702	361	279	212	69	10	37	2,627
5 and under 7	556	396	188	178	130	48	10	18	1,524
7 " " 17	3,348	2,267	1,295	1,227	784	261	37	110	9,329
17 " " 21	6,291	4,159	2,290	1,826	1,342	526	79	216	16,729
21 " " 30	6,181	4,366	2,008	1,559	1,034	389	147	179	15,863
30 " " 40	3,511	2,548	1,116	991	618	182	86	130	9,182
40 " " 50	3,148	2,200	942	917	547	148	52	85	8,039
50 " " 60	2,473	1,650	755	699	460	143	17	46	6,243
60 and over	2,177	1,529	719	626	403	124	3	24	5,605
Not stated	339	343	262	1,067	467	202	5	11	2,696
<b>Total</b>	<b>28,981</b>	<b>20,160</b>	<b>9,936</b>	<b>9,369</b>	<b>5,997</b>	<b>2,092</b>	<b>446</b>	<b>856</b>	<b>77,837</b>

(a) See footnote (a) to table above.

(b) See footnote (b) to table above.

## Types of accidents

## ROAD TRAFFIC ACCIDENTS INVOLVING CASUALTIES(a): NUMBER OF ACCIDENTS AND PERSONS KILLED OR INJURED, BY TYPE OF ACCIDENT, STATES AND TERRITORIES, 1966

Type of accident	N.S.W.	Vic.	Qld	S.A. (b)	W.A.	Tas.	N.T.	A.C.T.	Aust.
NUMBER OF ACCIDENTS									
Collisions between vehicles . . .	10,815	7,626	3,045	4,403	2,240	671	98	379	29,277
Vehicle overturning or leaving road . . .	3,325	1,908	2,534	909	1,134	379	158	84	10,431
Vehicle colliding with pedestrian . . .	4,146	2,666	932	872	742	252	35	78	9,723
Vehicle colliding with fixed object(c) . . .	2,334	1,610	213	786	135	58	9	37	5,182
Passenger accidents . . .	157	113	57	31	32	12	5	6	413
Vehicle colliding with animal . . .	137	79	76	28	35	5	2	3	365
Other . . .	5	82	21	2	28	..	3	6	147
<b>Total . . .</b>	<b>20,919</b>	<b>14,084</b>	<b>6,878</b>	<b>7,031</b>	<b>4,346</b>	<b>1,377</b>	<b>310</b>	<b>593</b>	<b>55,538</b>
PERSONS KILLED									
Collisions between vehicles . . .	443	409	165	120	104	41	11	9	1,302
Vehicle overturning or leaving road . . .	227	176	180	47	89	42	20	2	783
Vehicle colliding with pedestrian . . .	337	257	104	67	51	20	2	2	840
Vehicle colliding with fixed object(c) . . .	130	104	10	36	1	..	1	4	286
Passenger accidents . . .	3	5	3	..	3	1	..	..	15
Vehicle colliding with animal . . .	2	1	4	..	2	..	..	..	9
Other . . .	1	3	..	..	3	..	..	..	7
<b>Total . . .</b>	<b>1,143</b>	<b>955</b>	<b>466</b>	<b>270</b>	<b>253</b>	<b>104</b>	<b>34</b>	<b>17</b>	<b>3,242</b>
PERSONS INJURED									
Collisions between vehicles . . .	16,659	12,241	4,919	6,124	3,329	1,148	159	604	45,183
Vehicle overturning or leaving road . . .	4,659	2,865	3,679	1,304	1,653	601	228	105	15,094
Vehicle colliding with pedestrian . . .	4,052	2,554	889	835	722	247	35	78	9,412
Vehicle colliding with fixed object(c) . . .	3,256	2,202	277	1,042	179	75	13	51	7,095
Passenger accidents . . .	175	117	61	34	33	11	6	6	443
Vehicle colliding with animal . . .	176	99	89	28	42	10	2	5	451
Other . . .	4	82	22	2	39	..	3	7	159
<b>Total . . .</b>	<b>28,981</b>	<b>20,160</b>	<b>9,936</b>	<b>9,369</b>	<b>5,997</b>	<b>2,092</b>	<b>446</b>	<b>856</b>	<b>77,837</b>

(a) Accidents reported to the police which occurred in public thoroughfares and which resulted in death within thirty days or in bodily injury to an extent requiring surgical or medical treatment. (b) Includes accidents in which the injured persons did not require surgical or medical treatment and the number of persons injured in accidents who did not require surgical or medical treatment. (c) Includes parked vehicles.



## ROADS

## Summary of roads used for general traffic

*Proclaimed or declared roads.* The table following is a summary of the roads proclaimed or declared under the Acts of the several States relative to the operations of the central road authorities, and shows the lengths of various classes proclaimed or declared as at 30 June 1967. The central road authority in each State assumes responsibility under the Act for the whole, or a proportion, of the cost of construction and or maintenance of these roads, the extent varying from State to State and with the class and locality of the roads. Before proclamation of a main road, consideration is given, in general, to the following points: availability of funds; whether the road is, or will be, within one of several classes of main trunk routes; the value of the roads as connecting links between centres of population or business; whether the district is, or will be, sufficiently served by railways. Provision is also made in some States for the declaration of roads other than main roads. The absence of a particular class in any State does not necessarily imply that there are no roads within that State that might be so classified; the classes are restricted only to roads proclaimed or declared under the Acts. A further point to make is that, through various causes, e.g. insufficiency of funds, man-power or materials, etc., construction or maintenance may not keep pace with gazettals of mileages, and, therefore, the condition of a road may not match its status.

PROCLAIMED OR DECLARED ROADS: LENGTHS, STATES, 30 JUNE 1967  
(Miles)

<i>Class of road</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>Total</i>
State highways . . .	6,548	4,460	6,254	8,193	3,435	1,205	60,859
Trunk roads . . .	4,232	9,093	5,151				
Ordinary main roads . .	11,629						
<i>Total main roads . .</i>	<i>22,409</i>	<i>13,553</i>	<i>11,405</i>	<i>8,193</i>	<i>3,435</i>	<i>1,864</i>	<i>60,859</i>
Secondary roads . . .	(a)157	..	(b)8,833	..	7,958	197	17,145
Developmental roads . .	2,736	..	4,391	..	(c)43,930	..	51,057
Tourist roads . . .	196	445	..	..	..	47	688
Other roads . . .	..	(d)501	..	..	(e)74	(f)144	719
<i>Total other roads . .</i>	<i>3,089</i>	<i>946</i>	<i>13,224</i>	<i>..</i>	<i>51,962</i>	<i>388</i>	<i>69,609</i>
<b>Grand total . . .</b>	<b>25,498</b>	<b>14,499</b>	<b>24,629</b>	<b>8,193</b>	<b>55,397</b>	<b>2,252</b>	<b>130,468</b>

(a) Metropolitan only. (b) Includes mining access roads, farmers' roads and tourist tracks. (c) Maintenance of these roads is the responsibility of the several local authorities. (d) Forest roads and by-pass roads. (e) Gazetted as controlled access roadway but not constructed. (f) Subsidised roads.

*Total roads.* The following table represents an attempt to classify all the roads open for general traffic in Australia, at the latest dates available, according to States and Territories and to certain broad surface groups. The figures in the table for the States are obtained from the Deputy Commonwealth Statistician in each State, and are derived mainly from local government sources.

'Total' figures and 'cleared only' figures for South Australia in the table show considerable reductions compared with those for previous years. This is due to the results of a recent investigation of road mileages by the Commissioner of Highways.

ALL ROADS OPEN FOR GENERAL TRAFFIC: LENGTHS,  
STATES AND TERRITORIES, 30 JUNE 1967  
(Miles)

Surface of roads	N.S.W. (a)	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Total
Bitumen or concrete	28,621	28,220	16,876	8,220	13,806	3,170	1,640	491	101,044
Gravel, crushed stone or other improved surface . . .	44,645	29,692	19,290	15,758	23,193	8,657	1,005	225	142,465
Formed only . . .	26,944	20,775	41,701	10,515	45,746	1,368	1,888	91	320,343
Cleared only . . .	31,089	22,277	43,591	40,553	26,362		7,443	..	
<b>Total . . .</b>	<b>131,299</b>	<b>100,964</b>	<b>121,458</b>	<b>75,046</b>	<b>109,107</b>	<b>13,195</b>	<b>11,976</b>	<b>807</b>	<b>563,852</b>

(a) 30 June 1966.

Further information on roads, including financial particulars, is included in Chapter 20, Local Government.

#### **Australian Road Research Board**

The Australian Road Research Board was established by the road authorities of the Commonwealth and State Governments in 1960 as a national centre for road research. The Board was incorporated in January 1965 as a public company by guarantee, memorandums and articles of association being drafted in general conformity with the constitution which had been accepted in 1960. The company members are the Commonwealth of Australia, the commissioners of the central road authorities in New South Wales, Queensland, South Australia, and Western Australia, the Department of Public Works, Tasmania, and the Country Roads Board, Victoria. The Director-General of the Commonwealth Department of Public Works and the departmental heads of the other road authorities constitute the Board, which controls all policy and activities. Finance for all activities has been provided by the company members on an agreed basis.

The objectives of A.R.R.B. include planning an adequate programme of research and development, arranging for individual projects to be carried out directly and by co-operating organisations, and providing conferences and publications to bring these and other advances to everyone interested in roads. The following list of possible subjects indicates the range of studies provided for in the original constitution: road planning, location, design, safety, materials, construction, maintenance, structures, equipment, traffic and transport, economics, administration, financing, management, accounting, and any other matters affecting the provision, upkeep, use, protection, and development of roads. In planning a creative programme the Board continues to look for those subjects which seem to offer the highest profit to road engineers and the community.

The work on research projects is carried out either directly by the Board's own staff, in many cases acting in co-operation with the road authorities of the various governments, or through co-operative projects established with departments of universities in Adelaide, Brisbane, Melbourne, Perth, and Sydney. The Board has endeavoured to provide or sustain the additional staff required for these external projects, but university staff members furnish advice and co-operation in all parts of these studies.

As with most research organisations, the Board has made very full use of systematic consultation through various advisory groups. Members of these groups have been recruited from persons with the ability to contribute, who were prepared to serve as individuals and not as representatives of particular organisations. In an attempt to secure completely unfettered counsel, most of the members of the advisory groups were drawn from outside the Board and its staff. The various committees include a general Advisory Council and several particular types of specialist committees. In addition, the technical committees of the National Association of Australian State Road Authorities have, from the initiation of A.R.R.B., been a continuing and valuable source of advice and consultation. In this way, therefore, exceedingly valuable advice has been obtained from individuals drawn from the State road authorities, local authorities, C.S.I.R.O., Australian universities, several Commonwealth departments, and from private companies and consultants.

## **CIVIL AVIATION**

### **Department of Civil Aviation**

Control of civil aviation in Australia is exercised by the Department of Civil Aviation, which was established in 1939 to take over from the Civil Aviation Board the regulation of civil aviation in Australia. The Department's jurisdiction covers not only Australia but also Papua, New Guinea and areas of the Indian and Pacific Oceans. Year Books Nos 16, 19 and 38 trace the establishment of civil aviation control in Australia and the appropriate Acts of Parliament and Regulations under which this control is exercised. The present functions of the Department are shown in Year Book No. 51, pages 578-9, and further details about its operations are given in the annual reports to the Commonwealth Parliament by the Minister for Civil Aviation.

### **Regular air services within Australia**

*Interstate services.* Scheduled interstate services with passenger and all-freight aircraft are provided by two airlines only, the private enterprise airline Ansett-A.N.A. (a subsidiary of Ansett Transport Industries) and the Commonwealth-owned Trans-Australia Airlines. All principal routes are competitive, with both airlines providing equal capacities in accord with legislation passed by the Commonwealth Parliament. The two principal Acts which establish the legislative basis of this controlled competition are the *Airlines Agreement Act 1952-1961* and the *Airlines Equipment Act 1958*. The Airlines Equipment Act established the machinery for the achievement and maintenance of comparable, but not necessarily identical, aircraft fleets between T.A.A. and Ansett-A.N.A., and is

designed to prevent the provision of excess aircraft capacity. The Airlines Agreement Act established the basis of control of the two-airline competitive system and extended this machinery to 1977.

In addition to purely interstate services, both Ansett-A.N.A. and Trans-Australia Airlines operate routes to New Guinea and non-competitive intra-state routes in Australia. The Ansett-A.N.A. non-competitive routes radiate mainly from Melbourne, while those of Trans-Australia Airlines are located mainly within Queensland and Tasmania. In addition, Trans-Australia Airlines operate services within Papua-New Guinea in competition with another Ansett subsidiary, Ansett-M.A.L., and the independent Papuan Airlines.

At 30 October 1967 the Ansett-A.N.A. fleet included four Boeing 727's, three DC-9's, three Electras, seven Viscounts, nine Friendships, two Carvairs, a number of DC-4's and DC-3's, nine helicopters, and smaller aircraft. At the same date Trans-Australia Airlines operated a fleet of four Boeing 727's, three DC-9's, three Electras, nine Viscounts, eight Friendships, a number of DC-4's and DC-3's, one helicopter, and smaller aircraft.

*Intra-state services.* In addition to the intra-state services operated by Ansett-A.N.A. and Trans-Australia Airlines there are a number of smaller regional airlines operating from Sydney (Airlines of New South Wales and East-West Airlines), Adelaide (Airlines of South Australia), Perth (MacRobertson Miller Airlines), and Alice Springs (Connellan Airways). With the exception of Connellan Airways, which provides regular service to outback homesteads and communities, all of these are concerned primarily with traffic moving to and from the respective capital city. With the exception of the independently owned East-West Airlines and Connellan Airways, all regional airlines are subsidiaries of Ansett Transport Industries. The largest aircraft used by these regional airlines are DC-4's, Convairs and Friendships, supported by DC-3's. Connellan Airways uses smaller aircraft types.

*Commuter services.* These are not airline services but regular flights by charter firms with small single and twin-engined aircraft operating to fixed and published timetables. They provide regular air links between many centres, towns and country areas which are either not served by the major airlines or have no direct air service with their capital or nearest major provincial city. The first commuter service approved was for Opal Air Pty Ltd, of Coober Pedy (S.A.), to operate between Adelaide and the South Australian opal fields. At 30 November 1967 twelve charter operators were authorised to operate commuter services. Details of the operations of these commuter services are excluded from the statistics shown in this section.

*Internal operations.* Particulars of the revenue operations of all regular internal air services during each of the years 1962-63 to 1966-67 are set out in the next table.

**CIVIL AVIATION: OPERATIONS OF REGULAR INTERNAL SERVICES  
AUSTRALIA(a), 1962-63 TO 1966-67**

		1962-63 (b)	1963-64 (b)	1964-65 (b)	1965-66	1966-67
Hours flown . . . . .	number	217,897	244,517	256,231	261,535	255,510
Miles flown . . . . .	'000	43,700	48,971	52,323	55,020	56,759
<b>Passengers—</b>						
Embarkations . . . . .	number	2,832,934	3,256,937	3,763,936	4,157,873	4,424,652
Passenger-miles . . . . .	'000	1,221,178	1,408,317	1,639,087	1,831,360	1,972,469
<b>Freight—</b>						
Tons uplifted . . . . .	short tons	59,373	63,161	69,959	76,079	82,056
Ton-miles(c) . . . . .	'000	28,270	30,491	33,891	37,577	40,148
<b>Mail—</b>						
Tons uplifted . . . . .	short tons	6,467	7,082	7,736	8,633	9,587
Ton-miles(c) . . . . .	'000	3,324	3,741	4,074	4,587	5,144

(a) Includes flights of all Australian-owned airlines with the exception of those of Qantas Airways Limited between airports located within the Commonwealth. (b) Excludes, for flights between Australia and Papua-New Guinea, operations between airports located within the Commonwealth. (c) In terms of short tons.

*Internal passenger embarkations and disembarkations*

The figures in the following table show embarkations on, and disembarkations from, each airline flight at the airports specified. Movements to and from Papua and New Guinea and Norfolk Island are included.

**INTERNAL AIRWAYS PASSENGER EMBARKATIONS AND DISEMBARKATIONS AT  
PRINCIPAL AUSTRALIAN AIRPORTS, 1962-63 TO 1966-67**

<i>Airport</i>	<i>1962-63</i>	<i>1963-64</i>	<i>1964-65</i>	<i>1965-66</i>	<i>1966-67</i>
Sydney . . . . .	1,566,778	1,802,618	2,086,571	2,244,218	2,435,284
Melbourne . . . . .	1,210,093	1,393,227	1,587,833	1,748,478	1,880,860
Brisbane . . . . .	548,044	635,468	754,296	814,097	854,370
Adelaide . . . . .	468,576	526,764	618,101	738,402	770,408
Canberra . . . . .	221,810	263,331	318,882	331,203	341,058
Perth . . . . .	158,606	175,351	209,972	257,406	278,662
Hobart . . . . .	128,412	143,066	158,287	167,077	178,314
Launceston . . . . .	131,021	142,490	152,175	155,057	159,402
Townsville . . . . .	95,227	111,207	137,079	152,384	145,161
Coolangatta . . . . .	54,387	61,949	76,720	88,456	97,343
Cairns . . . . .	62,720	69,914	83,503	83,996	86,598
Mackay . . . . .	38,270	45,310	61,071	72,411	72,407
Rockhampton . . . . .	41,623	46,524	55,809	63,250	65,777
Darwin . . . . .	29,721	34,159	38,804	49,131	57,557
Devonport . . . . .	35,971	39,377	45,401	48,089	55,213
Wagga . . . . .	36,836	41,135	43,404	46,179	53,273
Wynyard . . . . .	29,715	32,020	34,966	40,617	51,932
Dubbo . . . . .	36,423	40,791	34,904	41,903	44,852
Kingscote . . . . .	30,792	32,821	40,591	42,197	44,764
Cooma . . . . .	40,733	46,864	50,757	44,098	44,060
Port Lincoln . . . . .	32,057	33,859	38,858	41,024	42,643
Tamworth . . . . .	31,592	36,869	40,253	37,589	38,141

**International activity**

*International organisations.* A full report of the formation of the International Civil Aviation Organization, the Commonwealth Air Transport Council, and the South Pacific Air Transport Council appeared in Year Book No. 37, and particulars of subsequent activity in the international field were included in No. 38. The International Civil Aviation Organization had a membership of 114 nations in June 1967. Australia has continued its position as a member of the Council, which it had held since I.C.A.O. was established in 1947. Further details will be found in Year Book No. 40 and earlier issues.

*International agreements.* Australia had air services agreements with twenty-one countries by 30 June 1967. They were Austria, Britain, Canada, Ceylon, France, Federal Republic of Germany, India, Iran, Ireland, Italy, Japan, Lebanon, Malaysia, Netherlands, New Zealand, Pakistan, Singapore, South Africa, Thailand, United Arab Republic, and the United States of America. Under these agreements Australia is granted rights to operate services between Australia to and through the countries in question. These rights are exercised by Australia's international airline Qantas. The designated airline of the signatory country is also granted reciprocal rights. Australia also had air services arrangements with thirteen other countries at 30 June 1967. These were Burma, the Republic of China, Greece, Indonesia, Iraq, Laos, Mexico, the Philippines, Portugal, Saudi Arabia, Turkey, the Republic of Vietnam, and Yugoslavia. Qantas also operates services to and through most of these countries under these arrangements.

*International air services.* In November 1967 fourteen overseas international airlines were operating regular scheduled services to Australia. These included: Air-India (India), Air New Zealand (New Zealand), Alitalia (Italy), British Overseas Airways Corporation (United Kingdom), Canadian Pacific Air Lines (Canada), Deutsche Lufthansa (Federal Republic of Germany), K.L.M. Royal Dutch Airlines (Netherlands), Malaysia-Singapore Airlines (Malaysia and Singapore), Pan-American World Airways (United States of America), Philippine Air Lines (Philippines), South African Airways (South Africa), and Union de Transports Aeriens (France). The Indonesian airline, P.N. Merpati Nusantara, operates services between Sukarnapura in West Irian and Lae in New Guinea, and Trans-Australia Airlines operates between Darwin and Portuguese Timor under charter to Transportes Aereos de Timor. In November 1967 Qantas, Australia's international airline, was

operating nine Boeing 707-138B jet aircraft, eleven larger Boeing 707-338C jet aircraft, and one Lockheed Electra aircraft. Qantas has on order another ten Boeing 707-338C aircraft for delivery between December 1967 and September 1968, and intends disposing of its nine smaller Boeing 707-138B's, giving it a fleet of twenty-one Boeing 707-338C's. All the shares in Qantas Airways Limited are owned by the Commonwealth Government. The name of the Company was changed on 1 August 1967 from Qantas Empire Airways to Qantas Airways Limited.

*International operations.* The table following shows particulars of international airline traffic during 1966-67 moving into and out of an area which embraces the Commonwealth of Australia, Papua-New Guinea, and Norfolk Island. These figures do not include traffic between Australia and Papua-New Guinea and Norfolk Island.

**CIVIL AVIATION: INTERNATIONAL AIRLINE TRAFFIC  
TO AND FROM AUSTRALIA(a), 1966-67**

<i>Type of traffic</i>	<i>Aircraft movements</i>	<i>Passengers</i>	<i>Freight</i>	<i>Mail</i>
			short tons	short tons
Traffic to Australia—				
Qantas Airways Limited . . . . .	2,281	140,661	4,825	1,077
Other airlines . . . . .	2,832	177,822	4,122	1,367
<i>All airlines . . . . .</i>	<i>5,113</i>	<i>318,483</i>	<i>8,947</i>	<i>2,444</i>
Traffic from Australia—				
Qantas Airways Limited . . . . .	2,279	129,966	3,270	762
Other airlines . . . . .	2,840	166,589	2,679	851
<i>All airlines . . . . .</i>	<i>5,119</i>	<i>296,555</i>	<i>5,949</i>	<i>1,613</i>

(a) Australian mainland and adjacent Territories (Papua-New Guinea and Norfolk Island).

Particulars of revenue operations of Australian regular overseas services are shown in the following table. These operations include all stages of Qantas flights linking Australia with external territories and overseas countries, and stages external to the Commonwealth for flights of other Australian-owned airlines; they exclude flights over stages located within Papua-New Guinea (see footnote (a) to table following for years prior to 1965-66).

**CIVIL AVIATION: OPERATIONS OF AUSTRALIAN REGULAR OVERSEAS SERVICES  
1962-63 TO 1966-67**

	1962-63 (a)	1963-64 (a)	1964-65 (a)	1965-66	1966-67
Hours flown . . . . . number	48,669	53,792	68,028	68,405	66,840
Miles flown . . . . . '000	20,343	22,357	28,126	29,635	29,201
Passengers—					
Embarkations . . . . . number	294,908	352,442	443,665	448,623	466,849
Passenger-miles . . . . . '000	1,014,867	1,185,981	1,527,039	1,569,513	1,608,868
Freight—					
Tons uplifted . . . . . short tons	6,756	8,071	10,293	11,451	12,259
Ton-miles(b) . . . . . '000	33,135	38,633	51,826	61,836	62,939
Mail—					
Tons uplifted . . . . . short tons	2,468	2,654	3,124	3,252	2,697
Ton-miles(b) . . . . . '000	15,191	16,057	19,891	20,914	16,500

(a) Includes, for flights between Australia and Papua-New Guinea, operations over stages located within the Commonwealth and within Papua-New Guinea. (b) In terms of short tons.

**General aviation**

General aviation activity, which covers all non-airline operations such as charter, aerial work and private flying, has grown rapidly throughout Australia in the post-war period so that now it is an important sector of the Australian aviation industry. In 1966, hours flown totalled 844,960 compared with 345,975 hours flown by Australian airline aircraft. At 30 June 1967, aircraft employed in general aviation numbered 2,737.

### Government aid to flying training

The Commonwealth Government has subsidised flying training in Australia since 1926. The aid is distributed through the aero clubs and, in more recent years, the commercial flying training schools. In 1966 the Government reviewed the level of its assistance to the Australian flying training movement and decided to:

- continue the Australian Flying Scholarship Scheme for another five years with a subsidy of \$100,000 a year;
- propose a partnership with commercial airlines in subsidising additional scholarships on a dollar for dollar basis up to \$75,000 a year;
- grant another \$150,000 in subsidies to the aero clubs and commercial flying schools for 1966-67;
- assist country aero clubs to buy new training aircraft;
- make secretariat grants of \$18,000 and \$3,000 respectively to the Aero Club Federation and the Association of Commercial Flying Organisations; and
- make an annual grant of \$15,000 to the Gliding Federation for each of the next five years.

The Australian Flying Scholarship Scheme is designed to help young Australians train as career pilots for Australia's rapidly expanding commercial aviation industry. The scholarships provide financial aid in much the same way as Commonwealth scholarships provide for students undertaking other professions. They enable scholarship winners to train as commercial pilots, instructors and agricultural pilots. Since the scheme started in 1962, 1,077 scholarships have been awarded.

During 1966-67, pupils of the Australian flying training organisations (aero clubs and commercial flying schools) received 525 private licences, 255 commercial licences and 105 instructor ratings. Subsidised hours flown by aero clubs and flying schools totalled 211,095 hours out of a total of 270,487 hours flown, and their subsidy earnings totalled \$283,169. A limit placed on the subsidy restricted the total payment to \$150,000. During the year clubs were also assisted with the purchase of thirty-two aircraft. The value of this assistance under the Aircraft Replacement Fund was \$20,000. The permanent secretariats of the Royal Federation of Aero Clubs and the Commercial Flying Schools also received \$18,000 and \$3,000 respectively during 1966-67 as additional financial assistance.

Fifty-seven clubs were affiliated with the Gliding Federation of Australia in 1966-67 and there were more than 1,800 members. During 1966-67 the Commonwealth assisted gliding clubs to the extent of \$15,000. The total of all subsidy payments and financial assistance to flying training organisations and the gliding movement during 1966-67 was \$381,000.

### Aerodromes

The number of aerodromes throughout Australia and its Territories at 30 June 1967 was 649. One hundred and eighteen were owned by the Commonwealth Government and 531 by local authorities and private interests. Capital expenditure on aerodrome construction increased from \$14.7 million in 1965-66 to \$20.3 million in 1966-67. Maintenance expenditure on Commonwealth-owned aerodromes during 1966-67 was \$5.4 million, and development grants to licensed aerodromes participating in the Local Ownership Plan totalled \$920,000. The two major projects at Melbourne and Sydney included in the current five-year airports programme, which ends in 1967-68, are proceeding satisfactorily. The work at Sydney, which involves a major runway extension and a new international terminal, is estimated to cost \$50 million. The new Melbourne airport is to cost \$50 million including site acquisition. The projects as a whole are expected to be completed in 1970, but progressive use is being made of the facilities as they become available. Total estimated cost of the Commonwealth's current airport expansion programme is \$125 million.

### Airways facilities

Concurrently with the five-year aerodrome development programme, the Commonwealth Government has approved major extensions and improvements to Australia's air navigation and communications system. New long-range radar units have been installed at Sydney, Melbourne, Brisbane and Adelaide to assist air traffic control, and other units are being established at Perth, Canberra and in northern New South Wales. Total cost of this radar programme is approximately \$8 million.

Further progress has been made with the programme, started in 1961, of increasing the number of laterally spaced air routes in heavy traffic areas throughout Australia and improving the network of radio navigational aids defining them. A further twelve navigational aids were put into operation during 1966-67. The number of navigational aids operating throughout the Commonwealth at 30 June 1967 totalled 309. These included 86 distance measuring equipment (DME) beacons, 28 visual aural ranges (VAR), 168 non-directional beacons (NDB), 14 VHF omni radio ranges (VOR), and 13 instrument landing systems (ILS).

## Aircraft on the Australian register

## CIVIL AVIATION: AIRCRAFT ON AUSTRALIAN REGISTER, 30 JUNE 1967

Type of aircraft	Number of engines				Total aircraft
	One	Two	Three	Four	
Fixed-wing powered aircraft—					
Turbo-jet . . . . .	..	7	8	19	34
Turbo-prop . . . . .	2	46	..	30	78
Piston-engined 20,000 lb and over maximum take-off weight . . . . .	..	78	..	18	96
Piston-engined under 20,000 lb maximum take-off weight . . . . .	2,425	259	6	4	2,694
Helicopters . . . . .	67	1	..	..	68
Total powered aircraft . . . . .	2,494	391	14	71	2,970
Gliders . . . . .	..	..	..	..	204

Particulars of powered aircraft according to manufacturer and air navigation class in which registered, and further details of gliders, may be found in the bulletin *Transport and Communication*, No. 58, 1966-67.

## Civil aviation registrations, licences, etc., in force in Australia

CIVIL AVIATION: REGISTRATIONS, LICENCES, ETC., AUSTRALIA(a)  
1963 TO 1967

	30 June—				
	1963	1964	1965	1966	1967
Registered aircraft owners . . . . .	1,006	1,167	1,293	1,481	1,685
Registered aircraft(b) . . . . .	1,787	1,936	2,207	2,605	2,970
Pilots' licences—					
Private . . . . .	4,066	4,720	5,382	6,365	7,828
Private helicopter . . . . .	3	6	6	7	10
Commercial . . . . .	1,159	1,263	1,411	1,616	1,938
Senior commercial . . . . .	176	189	192	192	224
Commercial helicopter . . . . .	42	53	59	83	127
Senior commercial helicopter . . . . .	..	..	5	6	9
Student . . . . .	4,845	5,676	6,907	8,109	9,921
Student helicopter . . . . .	15	41	66	96	123
1st class airline transport . . . . .	684	670	750	807	819
2nd class airline transport . . . . .	464	603	725	822	838
Flight navigators' licences . . . . .	135	137	154	208	222
1st class flight radio-telegraph operators' licences . . . . .	20	19	18	19	19
Flight radio-telephone operators' licences . . . . .	6,552	7,956	9,102	10,831	13,157
Flight engineers' licences . . . . .	168	215	429	495	563
Aircraft maintenance engineers' licences . . . . .	2,521	2,553	2,779	2,879	2,954
Aerodromes—					
Government(c) . . . . .	122	113	110	110	107
Licensed(d) . . . . .	380	381	386	385	377
Flying-boat bases(e) . . . . .	13	13	13	13	13

(a) Except for aerodromes and flying-boat bases, includes the Territory of Papua-New Guinea. (b) Excludes gliders. At 30 June 1967 there were 204 gliders registered. (c) Under the control and management of the Department of Civil Aviation. (d) Under the control and management of a municipality, shire, station owner, private individual, etc. Includes emergency aerodromes. (e) Includes alighting areas.

## Accidents and casualties

## CIVIL AVIATION: AUSTRALIAN AIRCRAFT(a)—ACCIDENTS INVOLVING CASUALTIES(b), 1962-63 TO 1966-67

	1962-63	1963-64	1964-65	1965-66	1966-67
Number . . . . .	32	33	21	41	47
Persons killed . . . . .	16	24	21	32	76
Persons injured . . . . .	26	26	7	28	27

(a) Aircraft on Australian register and gliders irrespective of location of accident.

(b) Includes parachutists killed.

## POSTS; INTERNAL AND OVERSEAS TELECOMMUNICATION SERVICES; RADIOCOMMUNICATION STATIONS

In this division particulars for the Australian Capital Territory are included with those for New South Wales, and the South Australian figures include particulars for the Northern Territory, unless otherwise indicated. The Central Office of the Postmaster-General's Department is located in Melbourne, Victoria.

## Postmaster-General's Department—General

Under the provisions of the *Post and Telegraph Act* 1901-1966 the Postmaster-General's Department is responsible for the control and operation of postal, telegraphic and telephonic services throughout Australia. The Postmaster-General's Department is also responsible for the provision and operation of the transmitters and technical facilities required for broadcasting and television services by the Australian Broadcasting Commission (*see* pages 447-9), and, in conjunction with the Overseas Telecommunications Commission (*see* pages 445-6), with whom there is close co-operation, provides facilities for communication with overseas countries. Subsidiary to its major activities, the Postmaster-General's Department performs a number of important functions for other Commonwealth and State departments, including the payment of pensions, child endowment and military allotments, the provision of banking facilities on behalf of the Commonwealth Savings Bank, the sale of tax and duty stamps, and the collection of land tax.

## Postal facilities

The following table shows the number of post offices, the area in square miles and the number of inhabitants to each post office (including non-official offices), and the number of inhabitants to each 100 square miles in each State and in Australia at 30 June 1967.

POSTAL FACILITIES: RELATION TO AREA AND POPULATION, STATES  
30 JUNE 1967

	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	Aust.
Post offices—							
Official . . . . .	524	332	237	174	153	55	1,475
Non-official . . . . .	1,862	1,712	964	747	477	421	6,183
<i>Total post offices</i> . . . . .	2,386	2,044	1,201	921	630	476	7,658
Square miles of territory per office	130	43	555	978	1,549	55	388
Inhabitants per office . . . . .	1,849	1,602	1,417	1,271	1,391	791	1,542
Inhabitants per 100 square miles . . . . .	1,421	3,726	255	130	90	1,427	398



**Employees**

The number of employees and mail contractors in the Central Office and in each of the States at 30 June 1967 is given in the following table.

**POSTAL EMPLOYEES: CENTRAL OFFICE AND STATES, 30 JUNE 1967**

<i>Employees</i>	<i>Central Office</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>Aust.</i>
Full-time(a)—								
Permanent officers . . . . .	1,675	24,349	16,571	10,529	7,335	5,344	2,593	68,396
Temporary and exempt officers . . . . .	279	12,708	9,990	2,809	2,252	1,600	852	30,490
<i>Total, full-time</i> . . . . .	<i>1,954</i>	<i>37,057</i>	<i>26,561</i>	<i>13,338</i>	<i>9,587</i>	<i>6,944</i>	<i>3,445</i>	<i>98,886</i>
Other(b)—								
Non-official and semi-official postmasters . . . . .	..	1,869	1,694	982	748	479	423	6,195
Persons exclusive of postmasters at non-official offices . . . . .	..	477	647	275	201	58	38	1,696
Telephone office-keepers . . . . .	..	237	92	371	99	224	13	1,036
Mail contractors (including persons employed to drive vehicles) . . . . .	..	2,059	1,021	1,232	336	329	202	5,179
<i>Total, other</i> . . . . .	<i>..</i>	<i>4,642</i>	<i>3,454</i>	<i>2,860</i>	<i>1,384</i>	<i>1,090</i>	<i>676</i>	<i>14,106</i>

(a) Persons directly under the control of the Department. Excludes 3,123 part-time staff. (b) Persons not directly under the control of the Department. Includes persons employed, either full-time or part-time, under contract or in return for payments appropriate to work performed.

**Cash revenue, branches—Postmaster-General's Department**

The cash revenue represents actual departmental collections by source as recorded for Treasury purposes. The earnings of the Department, which include revenue earned but not actually received, are shown in the profit and loss statement on page 440.

**POSTMASTER-GENERAL'S DEPARTMENT: CASH REVENUE, BY SOURCE  
CENTRAL OFFICE AND STATES, 1966-67  
(\$'000)**

<i>Source</i>	<i>Central Office</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>Aust.</i>
Postal . . . . .	7,161	46,198	31,732	14,084	9,939	7,376	2,779	119,270
Telephone . . . . .	495	114,774	82,709	37,372	26,990	18,897	7,883	289,120
Telegraph . . . . .	2,179	6,998	4,537	3,264	2,521	1,787	509	21,796
Miscellaneous . . . . .	1	148	89	43	179	9	38	505
<b>Total</b> . . . . .	<b>9,837</b>	<b>168,118</b>	<b>119,066</b>	<b>54,762</b>	<b>39,629</b>	<b>28,069</b>	<b>11,209</b>	<b>430,690</b>

**POSTMASTER-GENERAL'S DEPARTMENT: CASH REVENUE  
BY SOURCE, AUSTRALIA, 1962-63 TO 1966-67  
(\$'000)**

<i>Source</i>	<i>1962-63</i>	<i>1963-64</i>	<i>1964-65</i>	<i>1965-66</i>	<i>1966-67</i>
Postal . . . . .	98,854	105,954	112,182	116,187	119,270
Telephone . . . . .	184,630	205,564	240,641	264,560	289,120
Telegraph . . . . .	15,838	17,254	19,352	20,429	21,796
Miscellaneous . . . . .	350	506	473	320	505
<b>Total</b> . . . . .	<b>299,672</b>	<b>329,278</b>	<b>372,648</b>	<b>401,496</b>	<b>430,690</b>

**Cash expenditure, Postmaster-General's Department**

The following tables show, as far as possible, the distribution of cash expenditure (actual payments during each year as recorded for Treasury purposes) in each State and Central Office. The tables must not be regarded as statements of the working expenses of the Department, since items relating to new works, etc., are included therein.

**POSTMASTER-GENERAL'S DEPARTMENT: CASH EXPENDITURE**  
**CENTRAL OFFICE AND STATES, 1966-67**  
 (\$'000)

	<i>Central Office</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>Aust.</i>
<b>Expenditure from ordinary services votes—</b>								
Salaries and payments in the nature of a salary . . . . .	2,671	54,403	38,654	21,109	13,557	9,502	4,691	144,586
Administrative . . . . .	1,382	5,212	4,093	2,085	1,470	1,062	544	15,848
Stores and material . . . . .	272	3,763	3,061	977	898	551	219	9,742
Mail services . . . . .	17,857	4,620	2,670	2,096	1,076	626	281	29,227
Engineering services (other than new works) . . . . .	3,954	37,535	27,427	13,450	9,615	7,469	3,532	102,983
Other services . . . . .	366	..	..	..	..	..	..	366
<i>Total, ordinary services votes</i> . . . . .	<i>26,503</i>	<i>105,533</i>	<i>75,905</i>	<i>39,718</i>	<i>26,616</i>	<i>19,210</i>	<i>9,267</i>	<i>302,752</i>
Rent, repairs, maintenance . . . . .	..	2,359	2,194	658	608	484	143	6,445
Furniture and fittings . . . . .	..	227	241	122	52	81	26	749
<b>Capital works and services—</b>								
Plant and equipment . . . . .	2,454	78,383	48,845	21,258	16,736	15,254	7,561	190,490
Buildings, sites and properties . . . . .	..	5,328	4,296	1,771	1,457	1,300	436	14,588
<b>Grand total</b> . . . . .	<b>28,957</b>	<b>191,830</b>	<b>131,481</b>	<b>63,527</b>	<b>45,469</b>	<b>36,329</b>	<b>17,433</b>	<b>515,024</b>

**POSTMASTER-GENERAL'S DEPARTMENT: CASH EXPENDITURE**  
**AUSTRALIA, 1962-63 TO 1966-67**  
 (\$'000)

	<i>1962-63</i>	<i>1963-64</i>	<i>1964-65</i>	<i>1965-66</i>	<i>1966-67</i>
<b>Expenditure from ordinary services votes—</b>					
Salaries and payments in the nature of a salary . . . . .	102,256	107,964	118,490	127,579	144,586
Administrative . . . . .	12,302	14,588	16,380	18,986	15,848
Stores and material . . . . .	3,594	3,308	3,455	4,629	9,742
Mail services . . . . .	23,036	24,152	25,226	28,407	29,227
Engineering services (other than new works) . . . . .	68,812	77,350	85,553	92,693	102,983
Other services . . . . .	280	280	319	328	366
<i>Total, ordinary services votes</i> . . . . .	<i>210,280</i>	<i>227,642</i>	<i>249,423</i>	<i>272,623</i>	<i>302,752</i>
Rent, repairs, maintenance . . . . .	3,526	4,206	4,900	5,775	6,445
Furniture and fittings . . . . .	..	..	..	(a)697	749
<b>Capital works and services—</b>					
Plant and equipment . . . . .	111,594	122,406	144,802	164,682	190,490
Buildings, sites and properties . . . . .	11,886	14,716	15,086	(b)14,471	14,588
<b>Grand total</b> . . . . .	<b>337,286</b>	<b>368,970</b>	<b>414,211</b>	<b>458,248</b>	<b>515,024</b>

(a) Previously included in capital works.  
 with building expenditure.

(b) Excludes expenditure on furniture and fittings, previously included

**Profit or loss, Postmaster-General's Department**

The foregoing tables of cash revenue and expenditure represent actual collections and payments made, and cannot be taken to represent the actual results of the working of the Department for the year. The net results after providing for working expenses (including superannuation, furlough and depreciation) and interest charges (including exchange) are shown in the following table for the year 1966-67 together with summarised particulars for the year 1965-66.

**POSTMASTER-GENERAL'S DEPARTMENT: CONSOLIDATED STATEMENT  
OF PROFIT AND LOSS, 1965-66 AND 1966-67**  
(£'000)

	1966-67		1965-66	
	Postal service	Telecom- munications service	All services	All services
<i>Earnings</i> . . . . .	119,988	311,500	431,488	401,274
Working expenses—				
Operating and general cost . . . . .	94,189	83,154	177,343	158,187
Maintenance of plant and equipment . . . . .	1,586	74,063	75,649	67,621
Carriage of mails . . . . .	32,395	..	32,395	31,143
Depreciation . . . . .	2,789	74,077	76,867	69,004
Superannuation and furlough liability . . . . .	8,388	13,320	21,707	15,126
<i>Total working expenses</i> . . . . .	139,347	244,614	383,961	341,081
Profit or loss before interest . . . . .	—19,359	66,886	47,527	60,193
Interest . . . . .	4,221	64,808	69,029	60,316
Profit or loss after interest . . . . .	—23,580	2,078	—21,502	—124

Minus sign (—) denotes loss.

**Fixed assets, Postmaster-General's Department**

**POSTMASTER-GENERAL'S DEPARTMENT: TRANSACTIONS AFFECTING  
FIXED ASSETS, 1966-67**  
(£'000)

<i>Class of plant</i>	<i>Value at 1 July 1966</i>	<i>Adjust- ments to values</i>	<i>Additions during year</i>	<i>Instal- ments of plant written out</i>	<i>Value at 30 June 1967</i>
Telecommunications plant . . . . .	1,544,163	..	200,971	12,543	(a)1,732,591
Postal plant . . . . .	12,134	..	2,700	49	14,785
Engineers' moveable plant . . . . .	34,438	..	4,420	1,881	36,978
Motor vehicles . . . . .	25,342	..	7,377	4,225	28,494
Other plant and equipment . . . . .	33,296	—868	3,967	758	35,637
Buildings . . . . .	175,495	..	15,890	..	(b)191,385
Land . . . . .	19,443	..	824	..	20,268
<i>Total</i> . . . . .	1,844,311	—868	236,151	19,455	2,060,139

(a) Includes plant under construction valued at \$77,187,000.

(b) Includes buildings under construction valued at \$7,647,000.

Minus sign (—) denotes reduction in values of assets.

# Postal services

## Mail delivery points

### MAIL DELIVERY POINTS: STATES, 30 JUNE 1967

<i>State</i>	<i>Postmen's delivery</i>	<i>Roadside delivery</i>	<i>Private boxes</i>	<i>Private mail bag services</i>
New South Wales . . . . .	1,279,864	52,051	72,871	6,456
Victoria . . . . .	837,440	33,568	43,300	6,351
Queensland . . . . .	421,744	27,921	35,560	4,718
South Australia . . . . .	327,601	1,030	25,720	2,940
Western Australia . . . . .	203,926	17,966	19,548	760
Tasmania . . . . .	77,489	1,255	7,938	1,762
<b>Australia . . . . .</b>	<b>3,148,064</b>	<b>133,791</b>	<b>204,937</b>	<b>22,987</b>

## Postal articles handled

The following two tables show the number of postal articles handled by the Australian Post Office. Mail matter posted in Australia for delivery therein is necessarily handled at least twice, but only the number of distinct articles handled is included in the following tables.

### POSTAL ARTICLES HANDLED(a): STATES, 1966-67 (<sup>'000</sup>)

<i>State</i>	<i>Postmarked for delivery within Australia</i>				<i>Postmarked for delivery overseas</i>			
	<i>Letters (b)</i>	<i>News- papers and parcels (c)</i>	<i>Parcels (d)</i>	<i>Regis- tered articles (e)</i>	<i>Letters (b)</i>	<i>News- papers and parcels (c)</i>	<i>Parcels (d)</i>	<i>Regis- tered articles (e)</i>
New South Wales . . . . .	734,365	156,308	6,540	3,769	51,107	12,601	363	930
Victoria . . . . .	604,213	104,711	5,168	2,475	29,933	5,520	235	519
Queensland . . . . .	271,864	32,337	2,343	1,464	10,207	1,167	40	34
South Australia . . . . .	169,756	18,245	1,404	788	8,270	1,302	62	62
Western Australia . . . . .	153,082	13,861	1,149	663	6,827	1,050	32	60
Tasmania . . . . .	53,009	8,264	281	372	618	90	14	4
<b>Australia . . . . .</b>	<b>1,986,289</b>	<b>333,726</b>	<b>16,885</b>	<b>9,531</b>	<b>106,962</b>	<b>21,730</b>	<b>745</b>	<b>1,609</b>
<i>Received from overseas</i>				<i>Total postal matter dealt with</i>				
New South Wales . . . . .	66,354	33,238	734	1,249	851,826	202,147	7,637	5,949
Victoria . . . . .	52,933	10,617	436	568	687,079	120,848	5,840	3,562
Queensland . . . . .	7,251	4,966	181	54	289,322	38,470	2,563	1,552
South Australia . . . . .	5,912	4,873	114	32	183,938	24,420	1,580	882
Western Australia . . . . .	5,213	6,653	93	50	165,122	21,564	1,275	773
Tasmania . . . . .	1,967	2,177	8	4	55,594	10,531	302	379
<b>Australia . . . . .</b>	<b>139,630</b>	<b>62,524</b>	<b>1,566</b>	<b>1,957</b>	<b>2,232,881</b>	<b>417,980</b>	<b>19,196</b>	<b>13,097</b>

(a) Number of distinct articles handled. (b) Includes letters, cards and other postal articles enclosed in envelopes and sorted with letters. (c) Includes newspapers and postal articles not included in letter mail. (d) Includes registered, cash on delivery and duty parcels. (e) Includes registered articles other than parcels.

**POSTAL ARTICLES HANDLED(a): AUSTRALIA, 1962-63 TO 1966-67**  
(<sup>'000</sup>)

<i>Year</i>	<i>Letters (b)</i>	<i>Newspapers and packets (c)</i>	<i>Parcels (d)</i>	<i>Registered articles (e)</i>	<i>Total postal articles handled</i>
1962-63 .	1,835,869	337,644	16,545	12,339	2,202,397
1963-64 .	1,952,029	360,510	17,010	12,315	2,341,864
1964-65 .	2,032,287	380,178	18,156	12,190	2,442,811
1965-66 .	2,123,338	401,578	18,327	12,886	2,556,128
1966-67 .	2,232,881	417,980	19,196	13,097	2,683,154

For footnotes see previous table.

During 1966-67 the total amounts paid for the carriage of mails, as disclosed by the Profit and Loss Account of the Postal Service, were as follows: road, \$10,054,873; railway, \$3,959,423; sea, \$679,088; air—internal, \$3,878,041, overseas, \$13,823,973; grand total, \$32,395,398.

**Money orders and postal orders**

The issue of money orders and postal orders is regulated by sections 74-9 of the *Post and Telegraph Act* 1901-1966. The maximum amount for which a single money order payable within Australia may be obtained is \$80, but additional orders will be issued upon request when larger amounts are to be remitted. The maximum amount permitted to be sent by any one person to a person or persons outside Australia is \$50 a week. A postal order is not available for a sum larger than four dollars. The following table shows the number and value of money orders and postal orders issued in Australia in each of the years 1962-63 to 1966-67 and the income therefrom which has accrued to the Post Office.

**MONEY ORDERS AND POSTAL ORDERS(a): TRANSACTIONS, AUSTRALIA**  
1962-63 TO 1966-67

<i>Year</i>	<i>Money orders(b)</i>			<i>Postal orders(a)</i>		
	<i>Issued(c)</i>		<i>Total commission received</i>	<i>Issued</i>		<i>Fee</i>
	<i>Number</i>	<i>Value</i>		<i>Number</i>	<i>Value</i>	
	<sup>'000</sup>	<sup>\$'000</sup>	<sup>\$'000</sup>	<sup>'000</sup>	<sup>\$'000</sup>	<sup>\$'000</sup>
1962-63 .	11,076	306,866	1,858	16,330	17,240	642
1963-64 .	11,838	338,674	2,004	15,987	17,234	634
1964-65 .	12,176	376,356	2,103	15,338	16,737	618
1965-66 .	12,634	407,275	2,200	15,010	16,184	604
1966-67 .	12,594	434,942	2,332	13,499	18,454	629

(a) Postal orders replaced postal notes on 1 June 1966. (b) Money orders issued for payment in Australia and Papua and New Guinea. (c) Includes official money orders used in bringing to account telephone accounts and collections on War Service Homes repayments.

Of the total money orders issued in Australia during 1966-67, 12,106,884 valued at \$431,713,947 were payable in Australia, and 487,216 valued at \$3,227,959 were payable overseas. Of the total money orders paid in Australia during 1966-67, 12,070,351 (\$431,523,787) were issued in Australia, and 208,214 (\$3,378,661) were issued overseas.

Of the total postal orders paid in Australia during 1966-67 (13,761,620 valued at \$18,809,517), 9,278,815 (\$13,520,492) were paid in the State in which issued, and 4,482,805 (\$5,289,025) were paid in States other than those in which issued.

### Internal telecommunication services

A review of the development of telegraph services in Australia up to 1921 appeared in Year Book No. 15, page 625, and subsequent developments of importance have been dealt with in later issues. Internal telecommunication operations now comprise telephone, telegraph, and telegraph exchange (telex) services.

#### Wire and pole mileages

At 30 June 1967 there were 16,975,000 single wire miles of cable and 1,251,000 miles of aerial wire used for telecommunication purposes in Australia. The aerial wires were mounted on 116,652 miles of pole routes, and joint use is made of these poles for both power and telecommunication reticulation.

#### Telephone services in operation

The following table shows the number of services in operation in each State at 30 June 1967 classified according to type of service, type of exchange to which connected, and location. Telephone services connected to exchanges located within fifteen miles of the Sydney and Melbourne and ten miles of the Brisbane, Adelaide, Perth, and Hobart General Post Offices are defined as being within a metropolitan area.

TELEPHONE SERVICES IN OPERATION: STATES, 30 JUNE 1967

	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>Aust.</i>
Type of service—							
Ordinary exchange services . . . . .	732,690	623,118	246,158	179,271	121,314	59,036	1,961,587
Duplex services . . . . .	17,715	2,072	116	694	223	206	21,026
Party line services . . . . .	4,875	2,411	2,881	1,452	1,301	260	13,180
Private branch exchange services . . . . .	93,939	58,189	22,057	19,091	12,759	4,172	210,207
Public telephones . . . . .	10,960	7,344	4,462	2,683	2,092	1,162	28,703
Connected to—							
Automatic exchanges . . . . .	741,289	610,485	217,089	171,173	113,851	53,285	1,907,172
Manual exchanges . . . . .	118,890	82,649	58,585	32,018	23,838	11,551	327,531
Located in—							
Metropolitan areas . . . . .	543,035	458,502	133,019	131,684	93,528	23,707	1,383,475
Country areas . . . . .	317,144	234,632	142,655	71,507	44,161	41,129	851,228
Total . . . . .	860,179	693,134	275,674	203,191	137,689	64,836	2,234,703

TELEPHONE SERVICES IN OPERATION: AUSTRALIA, 1963 TO 1967

Services connected to—	30 June—				
	1963	1964	1965	1966	1967
Metropolitan exchanges—					
Automatic . . . . .	1,123,391	1,188,264	1,244,926	1,316,456	1,383,475
Country exchanges—					
Automatic . . . . .	322,187	361,368	414,636	467,844	523,697
Manual . . . . .	366,603	369,248	350,562	336,078	327,531
All exchanges—					
Automatic . . . . .	1,445,578	1,549,632	1,659,562	1,784,300	1,907,172
Manual . . . . .	366,603	369,248	350,562	336,078	327,531
Total services . . . . .	1,812,181	1,918,880	2,010,124	2,120,378	2,234,703

## Telephone instruments

TELEPHONE INSTRUMENTS IN SERVICE: STATES, 1963 TO 1967  
(<sup>'000</sup>)

30 June—	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	Aust.
1963 . . . . .	999	773	306	225	145	75	2,523
1964 . . . . .	1,053	819	324	241	155	78	2,670
1965 . . . . .	1,107	861	341	256	164	82	2,811
1966 . . . . .	1,182	905	357	272	176	86	2,978
1967 . . . . .	1,276	958	377	287	191	89	3,178
Number at 30 June 1967 per 100 population . . . . .	28.9	29.3	22.2	24.5	21.8	23.6	26.9

## Internal telephone traffic

## LOCAL AND TRUNK LINE TELEPHONE CALLS: AUSTRALIA, 1962-63 TO 1966-67

Year	Effective paid local calls		Trunk line calls		Total calls '000
	Total '000	Per service number	Total '000	Per service number	
1962-63 . . . . .	1,809,000	998	84,500	47	1,893,500
1963-64 . . . . .	1,958,000	1,020	95,700	50	2,053,700
1964-65 . . . . .	2,043,000	1,016	106,500	53	2,149,500
1965-66 . . . . .	2,103,000	992	116,600	55	2,219,600
1966-67 . . . . .	2,179,000	1,001	134,200	62	2,313,200

Subscriber trunk dialling (S.T.D.) facilities were introduced during the year 1961-62 from Canberra to the Sydney network and from Warragul (Victoria) to Melbourne. At the end of June 1967 subscriber trunk dialling was in operation at 268 exchanges, connected to approximately 686,000 services.

## Internal telegraphs

Telegrams can be lodged at any post office, telephone office or from any public telephone equipped for multi-coin operation. In addition, telegrams can be despatched from any subscriber's telephone or telegraph exchange (telex) equipment. The number of telegrams of various types transmitted within the Commonwealth during the years 1962-63 to 1966-67 is set out hereunder.

INTERNAL TELEGRAPH TRAFFIC: AUSTRALIA, 1962-63 TO 1966-67  
(<sup>'000</sup>)

Year	Ordinary (a)	Urgent	Press	Letter- grams	Meteoro- logical service	Service	Total telegrams
1962-63 . . . . .	16,663	492	148	91	948	582	18,924
1963-64 . . . . .	17,783	545	130	86	920	621	20,085
1964-65 . . . . .	18,302	532	96	65	912	643	20,550
1965-66 . . . . .	18,605	550	100	59	1,005	717	21,036
1966-67 . . . . .	19,019	494	78	47	1,014	719	21,372

(a) Includes radiograms.

**Teleprinter exchange service (telex)**

Particulars of the operations of the teleprinter exchange network, which are additional to the telegraph traffic shown on page 444, are given hereunder.

**TELEPRINTER EXCHANGE NETWORK (TELEX)  
SUBSCRIBERS AND CALLS, AUSTRALIA  
1962-63 TO 1966-67**

<i>Year</i>	<i>Subscribers at end of year</i>	<i>Calls during year</i>
1962-63 . . .	1,439	1,060,387
1963-64 . . .	1,815	1,492,024
1964-65 . . .	2,179	1,867,701
1965-66 . . .	2,444	2,161,353
1966-67 . . .	3,154	3,592,610

**Overseas telecommunication services**

The Overseas Telecommunications Commission (Australia) is the authority responsible for the establishment, maintenance, operation and development of Australia's overseas public telegraph, phototelegraph and telex services by cable and by radio, and the provision, maintenance, and development of cable and radio facilities for the conduct of Australia's overseas telephone services and of the facilities for services with ships at sea.

The Commission was established under the *Overseas Telecommunications Act 1946-1966*. This Act implemented, in Australia, a recommendation of the 1945 Commonwealth Telecommunications Conference for national ownership of the external telecommunication services of the British Commonwealth countries concerned and for the establishment of a representative advisory board, the Commonwealth Telecommunications Board, to co-ordinate their development.

The Commission provides telegraph, telex, phototelegraph, and, in conjunction with the Postmaster-General's Department, telephone services with overseas countries and Australian Territories. Leased one- and two-way circuits are also provided for large commercial users. In addition, it operates the Australian coastal radio services for communication with ships at sea in Australian waters and high frequency radio services for communication with ships in any part of the world. The Commission's coastal radio stations also provide certain services to a number of remote stations within Australia and its Territories.

Details of overseas communication systems operating in Australia prior to 1946 and developments leading to the establishment of the Commission were published in Year Book No. 37, pages 220-4.

To meet Australia's increasing demand for overseas communication channels, and because of limitations to performance and capacity inherent in current forms of telegraph cables and high frequency radio systems, the Commission, in partnership with the overseas telecommunications authorities of Britain, Canada, and New Zealand, installed a large capacity telephone cable across the Pacific Ocean, connecting Australia, New Zealand and Canada via Suva and Honolulu. The cable (COMPAC) was opened in December 1963 and forms part of a British Commonwealth large capacity cable scheme, in which a complementary cable between Britain and Canada (CANTAT) was officially opened in December 1961. The two cable connections are linked across Canada by a micro-wave system. The Commonwealth cable system feeds into the United States of America network at Hawaii and into the European network at London.

The last stage, the south-east Asia cable project (SEACOM), extends the large capacity telephone cable system from Sydney to Singapore and Kuala Lumpur via Cairns, Madang, Guam, Hong Kong, and Jesselton. It was opened for service on 30 March 1967.

The Commonwealth Cable Management Committee, comprising representatives of the partner Governments, Britain, Canada, Australia, New Zealand, Malaysia and Singapore, administers COMPAC and SEACOM.

Two years of international discussion and negotiations were concluded by the signing in August 1964 by a number of countries, including Australia, of agreements to establish the first global commercial communications satellite system, of which the 'space segment' is estimated to cost \$US200 million. 'Space segment' is a broad description of the communications satellites and the tracking,



control, command, and related facilities required to support operation of the satellites. An earth station, owned and operated by the Commission, at Carnarvon, Western Australia, operates into communications satellite INTELSAT II launched in January 1967 and positioned in geo-stationary orbit 22,300 miles above the equator at longitude 175°E. A second satellite earth station which also works into INTELSAT II has been established in Moree, New South Wales, with necessary staff residences, at a cost estimated at \$4 million, and commenced operations during March 1968.

#### International telecommunication traffic

Particulars of the volume of international telegram business, originating and terminating in Australia, transacted over the cable and radio services during 1966-67 are shown in the following table.

#### INTERNATIONAL TELEGRAPHIC TRAFFIC: AUSTRALIA, 1966-67(a)

('000 words)

Class of traffic	Words transmitted to—			Words received from—		
	Common-wealth countries	Foreign countries	Total	Common-wealth countries	Foreign countries	Total
Letter . . . . .	11,216	11,856	23,073	9,852	10,247	20,099
Ordinary . . . . .	10,301	8,634	18,935	9,524	6,921	16,446
Press . . . . .	4,539	183	4,722	3,747	454	4,201
Greetings . . . . .	1,436	..	1,436	1,783	..	1,783
Government . . . . .	467	1,032	1,499	634	1,304	1,938
Urgent . . . . .	690	207	897	490	110	600
Other . . . . .	12	..	12	45	..	45
<b>Total . . . . .</b>	<b>28,662</b>	<b>21,912</b>	<b>(b)50,574</b>	<b>26,075</b>	<b>19,037</b>	<b>(c)45,112</b>

(a) Year ended 31 March. (b) Excludes 4,439,345 words to Australian External Territories. (c) Excludes 6,420,182 words from Australian External Territories.

The following table shows particulars of overseas telecommunication traffic other than telegraphic between Australia and overseas countries for the year ended 31 March 1967.

#### INTERNATIONAL TELECOMMUNICATION TRAFFIC OTHER THAN TELEGRAPHIC AUSTRALIA, 1966-67(a)

Service		Transmissions to—			Transmissions from—		
		Common-wealth countries	Foreign countries	Total (b)	Common-wealth countries	Foreign countries	Total (c)
Telephone . . . . .	paid minutes	1,246,480	679,413	1,925,893	1,381,420	580,437	1,961,857
Telex . . . . .	paid minutes	391,790	531,457	923,247	430,981	521,572	952,553
Phototelegrams . . . . .	pictures	1,569	87	1,656	6,732	52	6,784

(a) Year ended 31 March. (b) Excludes 92,848 paid telephone minutes and 23,199 paid telex minutes transmitted to Australian External Territories. (c) Excludes 129,440 paid telephone minutes and 17,405 paid telex minutes transmitted from Australian External Territories.

#### Coast stations

The Overseas Telecommunications Commission operates fifteen coastal radio stations at points around the Australian coast, three on the Papua-New Guinea coast, and one at Norfolk Island. During the year ended 31 March 1967 the coastal radio service handled 5,067,890 paid words to ships and 3,026,567 words from ships. Ship calls over the radiotelephone service extended over 51,740 paid minutes.

## Radiocommunication stations authorised

The following table shows particulars of the different classes of radiocommunication stations authorised in Australia at 30 June 1967. Figures relate to radiocommunication (radio telegraph and radiotelephone) stations only; particulars of broadcasting stations and of broadcast listeners' licences are shown on pages 448 and 450 respectively.

### RADIOCOMMUNICATION STATIONS AUTHORISED: STATES AND TERRITORIES 30 JUNE 1967

<i>Class of station</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
<b>Transmitting and receiving—</b>									
Fixed(a)—									
Aeronautical	11	4	14	5	17	8	8	1	68
Services with other countries—									
Overseas Telecommunications Commission	67	12	4	..	10	..	..	..	93
Outpost(b)	279	..	618	169	430	19	224	..	1,739
Other	344	216	203	67	175	62	49	5	1,121
Land(c)—									
Aeronautical	77	27	37	15	29	7	29	2	223
Base—									
Land mobile	2,174	1,453	1,059	609	530	303	29	129	6,286
Harbour mobile	33	21	20	9	33	13	..	..	129
Coast(d)	31	16	27	22	30	22	4	..	152
Special experimental	169	141	57	53	57	17	5	..	499
Mobile(e)—									
Aeronautical	612	422	377	191	316	26	40	..	1,984
Land mobile	22,925	16,633	9,811	7,117	4,534	2,385	442	673	64,520
Harbour mobile	250	159	98	48	142	68	..	..	765
Outpost	269	..	427	301	507	67	832	..	2,403
Ship	1,810	526	1,127	464	552	370	36	..	(f) 5,049
Amateur	1,755	1,648	628	702	397	194	23	86	5,433
<i>Total, transmitting and receiving</i>	<i>30,806</i>	<i>21,278</i>	<i>14,507</i>	<i>9,772</i>	<i>7,759</i>	<i>3,561</i>	<i>1,721</i>	<i>896</i>	<i>90,464</i>
<b>Receiving only—</b>									
Fixed(a)	146	197	87	..	55	..	..	..	485
Mobile	..	..	1	..	..	..	..	..	1
<i>Total, receiving only</i>	<i>146</i>	<i>197</i>	<i>88</i>	<i>..</i>	<i>55</i>	<i>..</i>	<i>..</i>	<i>..</i>	<i>486</i>
<b>Grand total</b>	<b>30,952</b>	<b>21,475</b>	<b>14,595</b>	<b>9,772</b>	<b>7,814</b>	<b>3,561</b>	<b>1,721</b>	<b>896</b>	<b>90,950</b>

(a) Stations established at fixed locations for communication with other stations similarly established. (b) Stations established in out-back areas for communication with control stations such as those of the Royal Flying Doctor Service. (c) Stations established at fixed locations for communication with mobile stations. (d) Land stations for communication with ocean-going vessels. (e) Equipment installed in aircraft (aeronautical), motor vehicles (land mobile services), harbour vessels (harbour mobile services) and ocean-going vessels (ships), and mobile equipment of organisations such as the Royal Flying Doctor Service. (f) Includes 164 stations which cannot be classified according to State or Territory.

## BROADCASTING AND TELEVISION

Broadcasting and television services in Australia operate under the *Broadcasting and Television Act* 1942–1967 and comprise the National Broadcasting Service, the National Television Service, the Commercial Broadcasting Service, and the Commercial Television Service. General control of these services is a function of the Australian Broadcasting Control Board. Licence fees for commercial broadcasting and television stations are payable under the *Broadcasting Stations Licence Fees Act* 1964–1966 and the *Television Stations Licence Fees Act* 1964–1966 respectively.

Particulars of the composition, functions and responsibilities of the Australian Broadcasting Control Board are shown in Year Book No. 51, pages 594–5. The functions of the Board as shown therein were subsequently amended by repealing the Board's power to regulate the establishment and operation of networks. Pursuant to the *Broadcasting and Television Act* 1942–1967, the Australian Broadcasting Commission now consists of nine members, one of whom shall be a woman.

### Broadcasting services

#### The National Broadcasting Service

In sound broadcasting the programmes of the National Broadcasting Service are provided by the Australian Broadcasting Commission through transmitters operated by the Postmaster-General's Department.

*Technical facilities.* At 30 June 1967 the National Broadcasting Service comprised seventy-six transmitting stations, of which sixty-eight were medium frequency and eight high frequency.

The medium-frequency transmitters operate in the broadcast band 525 to 1,605 kilocycles a second. The high-frequency stations, using frequencies within the band three to thirty megacycles a second, provide services to listeners in sparsely populated parts of Australia such as the north-west of Western Australia, the Northern Territory, and northern and central Queensland.

Many of the programmes provided by country stations are relayed from the capital cities, high-quality programme transmission lines being used for the purpose. A number of programme channels are utilised to link national broadcasting stations in the capital cities of Australia, and, when necessary, this system is extended to connect both the national and commercial broadcasting stations.

At 30 June 1967 fifty-six of the Australian medium-frequency stations were situated outside the six State capital cities. Additional country stations are to be established, and, when these additions are complete, the medium-frequency and high-frequency stations together will provide for clear reception of the programmes of the National Broadcasting Service in practically every part of Australia.

*Programme facilities.* The programmes of the Australian Broadcasting Commission cover a wide range of activities. The proportion of broadcasting time allocated to the various types of programme during 1966-67 was as follows: classical music, 25.4 per cent; light entertainment, 9.4 per cent; news, 8.5 per cent; sporting, 5.0 per cent; light music, 2.4 per cent; talks, 6.7 per cent; drama and features, 3.6 per cent; education, 3.9 per cent; Parliament, 3.6 per cent; religious, 3.0 per cent; children's programmes, 2.5 per cent; rural, 1.7 per cent; and non-departmental and special programmes, 24.3 per cent. Further particulars of the operations of the Australian Broadcasting Commission in respect of music, drama and features, youth education, talks, rural broadcasts, news, and other activities are shown in Year Book No. 51, pages 596-7.

### The Commercial Broadcasting Service

Commercial broadcasting stations are operated under licences granted and renewed by the Postmaster-General after taking into consideration any recommendations which have been made by the Broadcasting Control Board. The initial period of a licence is five years and renewals are granted for a period of one year. The fee payable for a licence is \$50 on the grant of the licence, and thereafter \$50 a year plus an amount ascertained by applying the following rates to 'gross earnings', within the meaning of the *Broadcasting Stations Licence Fees Act 1964-1966*, during the preceding financial year—1 per cent up to \$1,000,000; 2 per cent \$1,000,001 to \$2,000,000; 3 per cent \$2,000,001 to \$4,000,000; and 4 per cent over \$4,000,000.

### Overseas Broadcasting Service

There are seven high-frequency stations at Shepparton and two at Lyndhurst, Victoria, which provide the overseas service known as 'Radio Australia'. As in the case of the National Broadcasting Service, these stations are maintained and operated by the Postmaster-General's Department, and their programmes are arranged by the A.B.C. The programmes, which give news and information about Australia presented objectively, as well as entertainment, are directed mainly to south-east Asia and the Pacific. The overseas audience has grown very substantially in recent years, as evidenced by a large and increasing number of letters from listeners abroad.

### Broadcasting stations

BROADCASTING STATIONS: STATES AND TERRITORIES, 30 JUNE 1967

Type of station	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
National—									
Medium frequency .	19	5	16	8	10	4	4	2	68
High frequency .	1	3	2	..	2	..	..	..	8
Overseas (high frequency) .	..	9	..	..	..	..	..	..	9
Commercial (medium frequency) .	37	20	22	8	14	8	1	1	111
<b>Total .</b>	<b>57</b>	<b>37</b>	<b>40</b>	<b>16</b>	<b>26</b>	<b>12</b>	<b>5</b>	<b>3</b>	<b>196</b>

Tables showing the call sign, location, frequency, and aerial power of national and commercial broadcasting stations in operation at 30 June 1967 are shown in *Transport and Communication*, Bulletin No. 58.

## Television services

### The National Television Service

The National Television Service is provided by the Australian Broadcasting Commission through transmitters operated by the Postmaster-General's Department. The first national station (ABN Sydney) commenced regular transmissions on 5 November 1956. At 30 June 1967 thirty-eight stations were operating, excluding nine translator stations. One additional national television station had been authorised but had not commenced to operate by that date.

The television programmes provided by the Australian Broadcasting Commission cover a wide range of activities. The proportion of television time allocated among the A.B.C.'s various departments to 30 June 1967 was as follows: drama, 25.1 per cent; talks, 12.2 per cent; sporting, 9.2 per cent; children's session, 14.1 per cent; news, 6.2 per cent; light entertainment, 10.2 per cent; education, 14.1 per cent; music, 1.4 per cent; religious, 2.1 per cent; rural services, 1.5 per cent; non-departmental, 3.9 per cent. Further particulars of the operation of the National Television Service in respect of talks, drama and features, music, rural services, education, news and other activities are shown in Year Book No. 51, pages 598-9. Transmission time for the year ended 30 June 1967 totalled 172,573 hours.

### The Commercial Television Service

Commercial television stations are operated under licences granted and renewed by the Postmaster-General. The first commercial station (TCN Sydney) commenced regular transmission on 16 September 1956. At 30 June 1967 forty-one television stations were operating.

The initial grant of a licence is for a period of five years and thereafter the licence is renewable annually. The fee payable is \$200 for the first year and thereafter \$200 a year plus an amount ascertained by applying the following rates to 'gross earnings', within the meaning of the *Television Stations Licence Fees Act* 1964-1966, during the preceding financial year—1 per cent up to \$1,000,000; 2 per cent \$1,000,001 to \$2,000,000; 3 per cent \$2,000,001 to \$4,000,000; and 4 per cent over \$4,000,000.

### Television stations

During the year ended 30 June 1967 the following national television stations commenced regular transmissions: New South Wales—ABGN Channel 7, Murrumbidgee Irrigation Areas; ABQN Channel 5, Central Western Slopes area; Queensland—ABNQ Channel 9, Cairns area (temporary station); ABSQ Channel 1, Southern Downs area. The following commercial television stations also commenced regular transmissions during the year: Queensland—FNQ Channel 10, Cairns area (temporary station); Western Australia—BTW Channel 3, Bunbury area. Particulars of all television stations in operation at 31 December 1964 are shown in Year Book No. 51, pages 598-9. The following table shows the number of television stations in operation at 30 June 1967.

TELEVISION STATIONS: STATES AND AUSTRALIAN CAPITAL TERRITORY  
30 JUNE 1967

Type of station and location	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	A.C.T.	Total
National—								
Metropolitan . . .	1	1	1	1	1	1	1	7
Country . . . . .	12	7	6	2	3	1	..	31
<i>Total, National</i> . .	<i>13</i>	<i>8</i>	<i>7</i>	<i>3</i>	<i>4</i>	<i>2</i>	<i>1</i>	<i>38</i>
Commercial—								
Metropolitan . . .	3	3	3	3	2	1	1	16
Country . . . . .	10	6	6	1	1	1	..	25
<i>Total, Commercial</i> .	<i>13</i>	<i>9</i>	<i>9</i>	<i>4</i>	<i>3</i>	<i>2</i>	<i>1</i>	<i>41</i>
<i>All stations</i> . . . .	<i>26</i>	<i>17</i>	<i>16</i>	<i>7</i>	<i>7</i>	<i>4</i>	<i>2</i>	<i>79</i>

Tables showing the call sign, location, frequencies, polarisation, aerial power, and weekly hours of transmission of National and Commercial television stations in operation at 30 June 1967 are shown in *Transport and Communication*, Bulletin No. 58.

### Broadcast listeners' and television viewers' licences

Broadcast listeners', television viewers', and combined receiving licences are issued at post offices in accordance with the provisions of the *Broadcasting and Television Act 1942-1967*, which stipulates that, except as prescribed, a person shall not use, maintain or have in his possession a broadcast or television receiver unless there is in force a licence which applies to that receiver. A broadcast listener's licence or a television viewer's licence, whichever is appropriate, authorises the operation of any broadcast receiver or any television receiver, which is: (a) in the possession of the holder of a licence, or of a member of his family, at the address specified in the licence and is ordinarily kept at that address; (b) installed in a vehicle which is ordinarily in the possession of the holder, or a member of his family, and is ordinarily kept at that address when not in use. A person who has both broadcast and television receivers at the one address is required to take out a combined receiving licence, provision for which was introduced by legislation effective from 1 April 1965.

A licence may be granted free of charge to a blind person over 16 years of age or to a person or authority conducting a school, and at a concession rate to certain classes of pensioners. Receivers provided for the use of inmates of an approved institution (including a hospital) are covered by an appropriate licence held by the institution. Persons residing in Zone 2 may also be granted a broadcast listener's licence at a reduced rate. Zone 1 is the areas within 250 miles of specified broadcasting stations and Zone 2 is the remainder of Australia.

Each broadcast or television receiver let out on hire (except under a hire purchase agreement) must be covered by a hirer's licence held by the person or firm from whom the receiver is hired. The keeper of a lodging house (which includes a hotel, motel, boarding house, or any other premises where lodging or sleeping accommodation is provided for reward) must take out a lodging house licence for each broadcast or television receiver provided by the proprietor in any room or part of the lodging house occupied or available for occupation by lodgers.

The fees payable for the various classes of licence are as follows.

#### BROADCAST LISTENERS' AND TELEVISION VIEWERS' LICENCES: RATES

Licence			Ordinary	Pensioner
			rate	rate
			\$	\$
Broadcast listener's licence and hirer's licence for a broadcast receiver .	Zone 1		5.50	1.00
	Zone 2		2.80	0.70
Lodging house licence for a broadcast receiver . . . . .	Zone 1		5.50	..
	Zone 2		2.80	..
Television viewer's licence and hirer's licence for a television receiver . . . . .			12.00	3.00
Lodging house licence for a television receiver . . . . .			12.00	..
Combined receiving licence . . . . .			17.00	4.00

#### Numbers of broadcast listeners' and television viewers' licences

##### BROADCAST LISTENERS' LICENCES IN FORCE(a): STATES, 1963 TO 1967

30 June—	N.S.W. (b)	Vic.	Qld	S.A. (c)	W.A.	Tas.	Aust.
1963 . . . . .	802,046	607,036	334,566	256,741	165,637	73,760	2,239,786
1964 . . . . .	822,499	622,663	342,321	266,027	174,121	74,159	2,301,790
1965(d) . . . . .	849,291	644,618	343,401	269,040	175,443	75,849	2,357,642
1966(d) . . . . .	929,119	716,594	340,687	281,747	169,709	88,095	2,525,951
1967(d) . . . . .	950,788	712,813	340,477	278,069	173,571	82,322	2,538,040

(a) Includes short-term hirers' licences. (b) Includes Australian Capital Territory. (c) Includes Northern Territory.  
(d) Includes combined broadcast listeners' and television viewers' licences.

## TELEVISION VIEWERS' LICENCES IN FORCE(a): STATES, 1963 TO 1967

30 June—	N.S.W. (b)	Vic.	Qld	S.A.	W.A.	Tas.	Aust.
1963 . . . .	637,766	530,256	178,391	167,502	95,907	45,503	1,655,325
1964 . . . .	721,043	581,286	214,763	194,430	115,272	55,305	1,882,099
1965(c) . . . .	787,507	620,996	243,660	208,642	123,741	60,079	2,044,625
1966(c) . . . .	843,103	662,595	277,182	233,726	142,881	66,187	2,225,674
1967(c) . . . .	927,038	690,857	302,575	254,504	159,048	71,113	2,405,135

(a) Includes short-term hirers' licences. (b) Includes Australian Capital Territory. (c) Includes combined broadcast listeners' and television viewers' licences.

The numbers of combined receiving licences included in both of the foregoing tables as at 30 June 1967 are: New South Wales, 753,205; Victoria, 598,035; Queensland, 243,285; South Australia, 203,993; Western Australia, 129,403; Tasmania, 60,405; Australia, 1,988,326.

Of 2,405,135 television viewers' including combined licences in force at 30 June 1967, 170,958 were held by short-term hirers, and could not be separated into metropolitan licences or country licences. Persons living in the metropolitan area held 1,447,132 or 65 per cent of the remainder. Short-term hirers' licences (included above) at 30 June 1967 were: New South Wales, 75,522; Victoria, 23,949; Queensland, 21,741; South Australia, 31,219; Western Australia, 15,059; and Tasmania, 3,468.

## Revenue received from broadcast and television licence fees

The following table shows the revenue received from broadcast listeners' licence fees and television viewers' licence fees during the years 1962-63 to 1966-67. Figures for 1964-65 and later years include revenue from fees for combined licences which took effect on 1 April 1965.

REVENUE RECEIVED FROM BROADCAST AND TELEVISION LICENCE FEES  
STATES, 1962-63 TO 1966-67  
(\$'000)

Year	N.S.W. (a)	Vic.	Qld	S.A. (b)	W.A.	Tas.	Aust.
1962-63 . . . .	9,860	7,968	3,239	2,837	1,737	784	26,425
1963-64 . . . .	10,560	8,474	3,590	3,063	1,843	865	28,395
1964-65 . . . .	12,400	9,811	4,230	3,586	2,124	1,006	33,157
1965-66 . . . .	13,401	10,335	4,545	3,832	2,285	1,047	35,445
1966-67 . . . .	14,244	10,840	4,951	4,101	2,571	1,127	37,835

(a) Includes Australian Capital Territory. (b) Includes Northern Territory in respect of broadcast licence fees.

## TRAVEL

An article outlining the history and growth of travel and the structure of tourist organisations in Australia, prepared by the Australian National Travel Association, appeared in Year Book No. 52, pages 1158-84. The following pages contain statistics of travel to and from Australia, together with some revised descriptive matter. Current statistics on overseas travel are published in monthly and quarterly (mimeographed) statements *Overseas Arrivals and Departures*.

## Overseas travel

Statistics of overseas arrivals in, and departures from, Australia are classified into three categories, namely: *permanent movement* (i.e. settlers arriving and Australian residents departing permanently); *long-term movement* (i.e. Australian residents returning to Australia after a stay in a country abroad of one year or longer, or departing from Australia with the intention of staying in a country abroad for one year or more, and overseas visitors arriving with the intention of staying in Australia for a year or more or departing after a stay in Australia of a year or more); and *short-term movement* (i.e. all other movements). Statistics relating to permanent movement are included in Chapter 7, Population. The statistics presented in this section on travel relate mainly to overseas arrivals and departures of visitors and Australian residents classified as short-term, but, for completeness, statistics of those classified as long-term also are shown on pages 458-9 of this section.

**Short-term movement, overseas visitors and Australian residents**

Short-term refers basically to travellers, (Australian residents and visitors from overseas) who intend to, or actually do, spend a period of less than twelve months in a country abroad or in Australia. This classification includes Australian troops, regardless of length of their stay abroad, and persons who come to Australia or go abroad for paid work or to study (as long as their intended or actual length of stay is less than one year). It excludes visitors to Australia and residents on visits abroad if their stay in Australia or in a country abroad is one year or more, all crew, and persons who arrive in and depart from Australia on the same ship's voyage or on the same flight; but includes persons who, on arrival, declare their purpose of visiting Australia to be 'in transit', as long as a change of ship or flight takes place. Australian residents visiting abroad may be *away from Australia* for more than a year but still be included as short-term as long as their *stay in any one country abroad* is not for a year or more. As from October 1967, when United States troops commenced coming to Australia on rest and recreation leave, their movements have also been included with short-term. For statistical purposes they are classified as short-term visitors travelling by air for holiday purposes and their country of residence and country of embarkation or disembarkation is shown as 'Asia—other'. During the period October to December 1967, 6,750 United States troops arrived in Australia on rest and recreation leave. (See Chapter 7, Population, pages 153-4 for further information on the classification of overseas travellers.)

**OVERSEAS VISITORS ARRIVING IN AND DEPARTING FROM AUSTRALIA, BY MODE OF TRAVEL, 1963 TO 1967**

SHORT-TERM

Year	Arriving			Departing		
	By sea	By air	Total	By sea	By air	Total
1963 . . . .	18,066	107,311	125,377	22,358	106,973	129,331
1964 . . . .	18,916	128,962	147,878	22,147	128,494	150,641
1965 . . . .	20,291	153,037	173,328	24,491	154,442	178,933
1966 . . . .	19,547	167,715	187,262	25,541	169,335	194,876
1967 . . . .	19,141	202,680	221,821	24,803	206,959	231,762

Over the period covered by this table departures exceeded arrivals substantially. The reason lies broadly in the difference between the period of intended stay, as stated on the arrival of the visitor, and the period actually spent in Australia, as stated on his departure, resulting in a different classification on arrival from that on departure.

The following table shows corresponding figures in respect of Australian residents on visits abroad.

**AUSTRALIAN RESIDENTS DEPARTING FROM AND RETURNING TO AUSTRALIA, BY MODE OF TRAVEL, 1963 TO 1967**

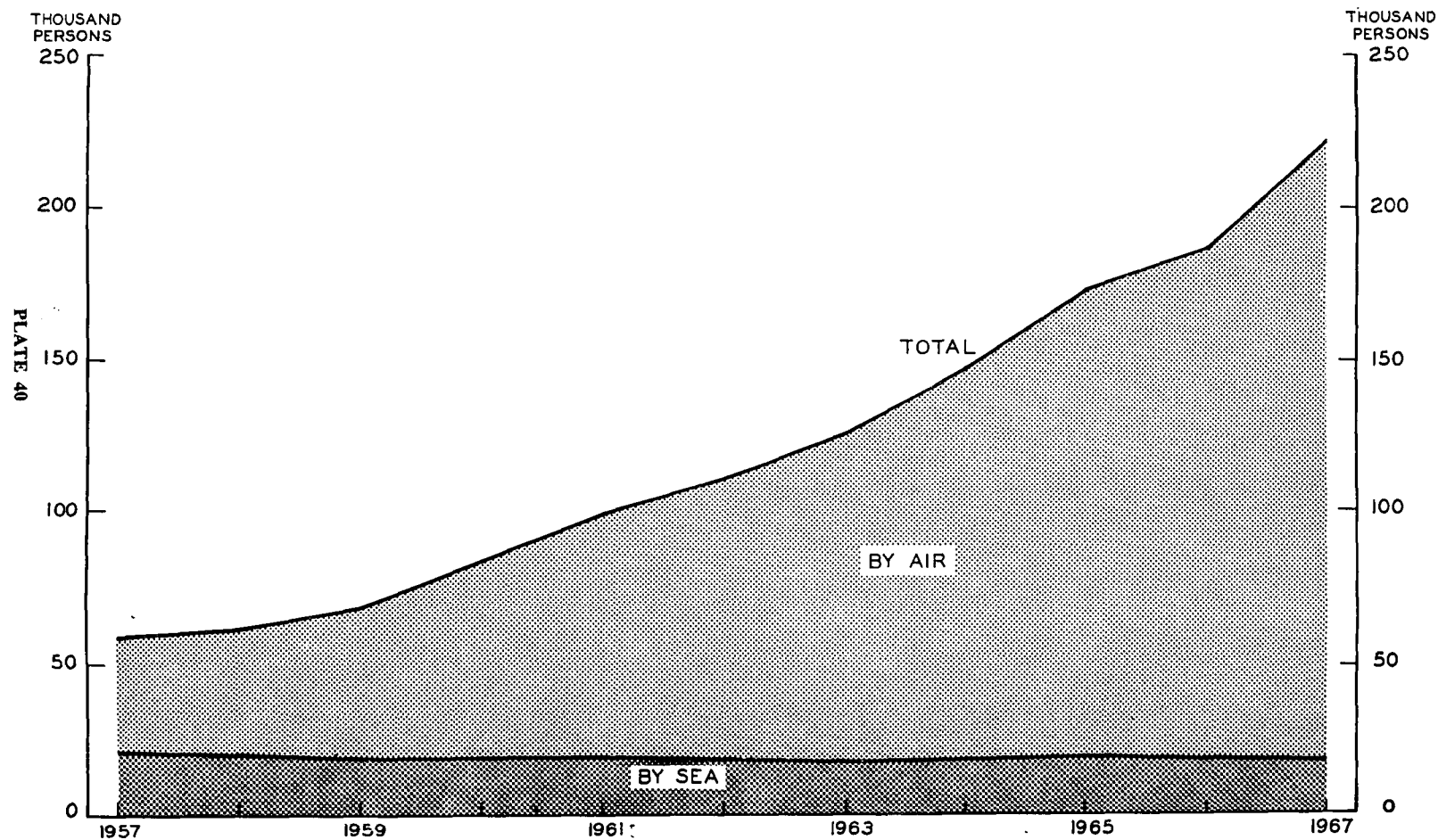
SHORT-TERM

Year	Departing			Returning		
	By sea	By air	Total	By sea	By air	Total
1963 . . . .	41,053	71,374	112,427	34,205	76,977	111,182
1964 . . . .	43,785	89,463	133,248	36,430	94,924	131,354
1965 . . . .	51,138	110,554	161,692	43,382	117,162	160,544
1966 . . . .	54,348	128,813	183,161	46,024	135,746	181,770
1967 . . . .	52,979	164,767	217,746	48,539	174,499	223,038

In the next table short-term visitors arriving in, and Australian residents departing from, Australia are shown by countries of embarkation and disembarkation respectively. Country of embarkation refers to the country in which the passenger embarked on the particular ship or aircraft which brought him to Australia and country of disembarkation refers to the intended country of disembarkation from the particular ship or aircraft which took the passenger from Australia. Thus, these statistics do not necessarily indicate the country of origin of visitors nor the country of destination of residents going abroad.

# OVERSEAS VISITORS ARRIVING—SHORT-TERM: AUSTRALIA

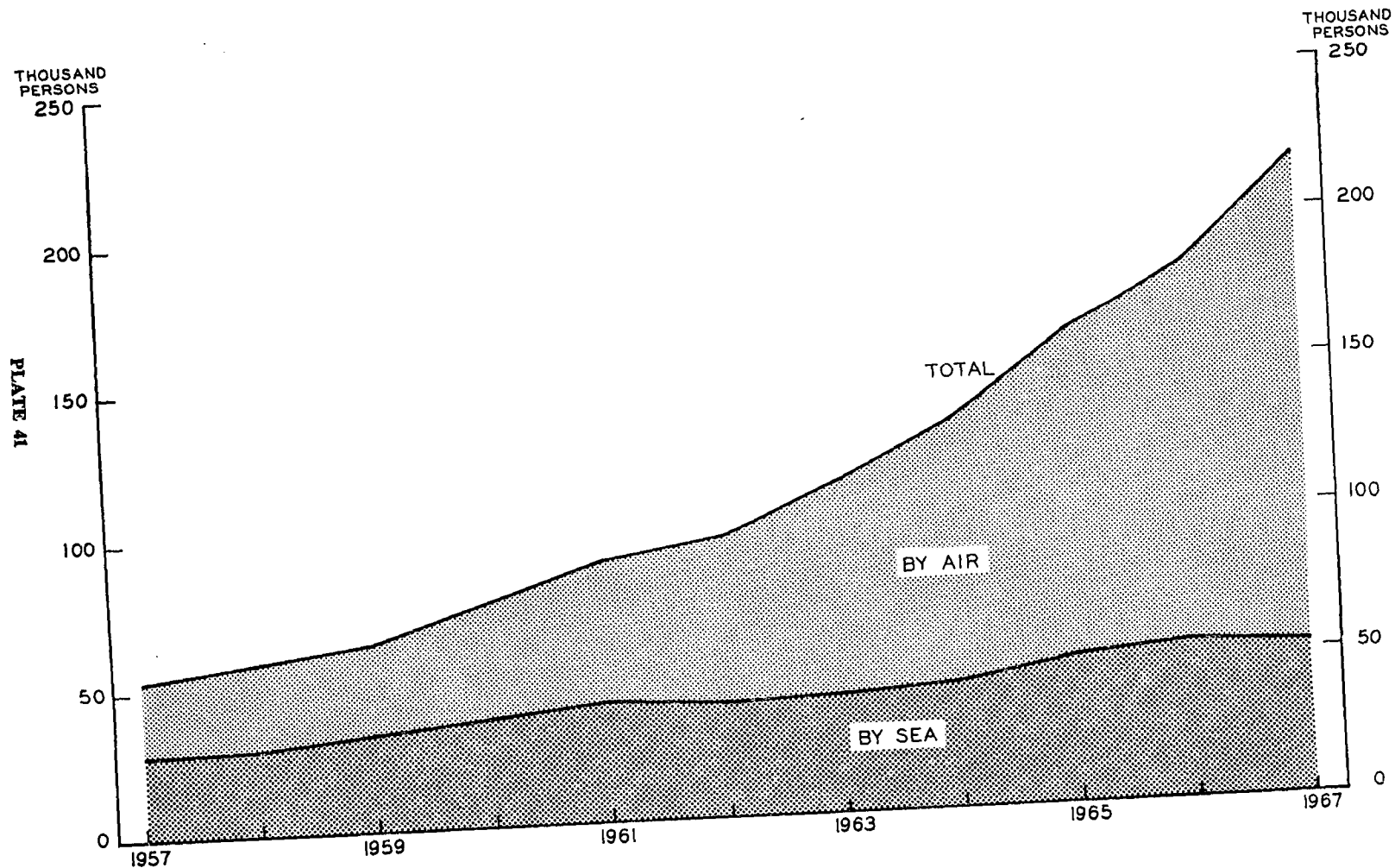
1957 TO 1967





# AUSTRALIAN RESIDENTS DEPARTING—SHORT-TERM: AUSTRALIA

1957 TO 1967



**OVERSEAS VISITORS ARRIVING, BY COUNTRY OF EMBARKATION  
AND AUSTRALIAN RESIDENTS DEPARTING, BY COUNTRY OF DISEMBARKATION  
BY MODE OF TRAVEL: AUSTRALIA, 1967**

**SHORT-TERM**

<i>Country of embarkation or disembarkation</i>	<i>Overseas visitors arriving</i>			<i>Australian residents departing</i>		
	<i>By sea</i>	<i>By air</i>	<i>Total</i>	<i>By sea</i>	<i>By air</i>	<i>Total</i>
Africa . . . . .	507	3,527	4,034	488	1,795	2,283
America—						
United States of America . . . . .	1,789	15,893	17,682	1,810	15,926	17,736
Other . . . . .	853	878	1,731	1,736	1,618	3,354
Asia—						
Hong Kong . . . . .	571	10,499	11,070	675	8,971	9,646
Malaysia and Singapore . . . . .	1,041	17,558	18,599	4,005	14,449	18,454
Other . . . . .	1,149	20,933	22,082	9,425	17,264	26,689
Europe—						
United Kingdom and Ireland . . . . .	5,144	7,244	12,388	13,481	5,683	19,164
Other . . . . .	1,833	5,748	7,581	10,774	12,473	23,247
Oceania—						
New Zealand . . . . .	4,449	86,617	91,066	7,597	51,348	58,945
Papua and New Guinea . . . . .	612	21,040	21,652	1,130	16,562	17,692
Other . . . . .	1,193	12,743	13,936	1,858	18,678	20,536
<b>Total . . . . .</b>	<b>19,141</b>	<b>202,680</b>	<b>221,821</b>	<b>52,979</b>	<b>164,767</b>	<b>217,746</b>

For visitors arriving information is also available of their country of residence (i.e. in which they last stayed for one year or more). No information is available regarding the country in which Australian residents going abroad in the short-term movement intend to spend most time.

**OVERSEAS VISITORS ARRIVING, BY COUNTRY OF RESIDENCE(a)  
AND MODE OF TRAVEL: AUSTRALIA, 1967**

**SHORT-TERM**

<i>Country of residence(a)</i>	<i>By sea</i>	<i>By air</i>	<i>Total</i>
Africa—			
Commonwealth countries . . . . .	198	1,357	1,555
South Africa . . . . .	287	1,776	2,063
Other . . . . .	15	395	410
America—			
Canada . . . . .	997	3,613	4,610
Other Commonwealth countries . . . . .	37	334	371
United States of America . . . . .	2,165	30,618	32,783
Other . . . . .	52	1,110	1,162
Asia—			
Ceylon, India and Pakistan . . . . .	176	2,063	2,239
Hong Kong . . . . .	429	3,169	3,598
Malaysia and Singapore . . . . .	759	7,024	7,783
Other Commonwealth countries . . . . .	26	165	191
Japan . . . . .	254	5,119	5,373
Other . . . . .	160	12,919	13,079
Europe—			
United Kingdom and Ireland . . . . .	5,144	19,577	24,721
Other Commonwealth countries . . . . .	68	179	247
France . . . . .	128	1,599	1,727
Germany . . . . .	326	2,575	2,901
Greece . . . . .	137	424	561
Italy . . . . .	155	1,583	1,738

(a) Country in which the visitor was last resident for a period of one year or more.

**OVERSEAS VISITORS ARRIVING, BY COUNTRY OF RESIDENCE(a)  
AND MODE OF TRAVEL: AUSTRALIA, 1967—continued**

**SHORT-TERM**

<i>Country of residence(a)</i>	<i>By sea</i>	<i>By air</i>	<i>Total</i>
<b>Europe—continued</b>			
Netherlands . . . . .	715	2,402	3,117
Switzerland . . . . .	82	873	955
Other . . . . .	319	3,593	3,912
<b>Oceania—</b>			
Fiji . . . . .	262	2,506	2,768
New Zealand . . . . .	4,609	72,354	76,963
Papua and New Guinea . . . . .	793	19,755	20,548
Other Commonwealth countries . . . . .	694	1,413	2,107
Other . . . . .	154	4,185	4,339
<b>Total . . . . .</b>	<b>19,141</b>	<b>202,680</b>	<b>221,821</b>

(a) Country in which the visitor was last resident for a period of one year or more.

The intended length of stay by visitors in Australia and by Australian residents abroad is related to the purpose of the journey in the following tables.

**OVERSEAS VISITORS ARRIVING, BY INTENDED LENGTH OF STAY AND STATED PURPOSE  
OF JOURNEY: AUSTRALIA, 1967**

**SHORT-TERM**

<i>Intended length of stay</i>	<i>In transit (a)</i>	<i>Business</i>	<i>Holiday</i>	<i>Education</i>	<i>Other and not stated</i>	<i>Total</i>
Under 1 week . . . . .	24,987	8,160	17,148	351	1,750	52,396
1 week and under 2 weeks . . . . .	2,760	10,077	19,674	803	1,846	35,160
2 weeks and under 3 weeks . . . . .	1,049	7,616	20,489	774	1,744	31,672
3 weeks and under 1 month . . . . .	317	2,680	15,775	245	829	19,846
1 month and under 2 months . . . . .	568	4,828	17,896	425	1,710	25,427
2 months and under 3 months . . . . .	..	1,885	9,739	358	1,434	13,416
3 months and under 4 months . . . . .	..	1,567	9,562	1,324	1,218	13,671
4 months and under 6 months . . . . .	..	624	3,496	290	571	4,981
6 months and under 12 months . . . . .	..	1,163	6,082	3,525	1,532	12,302
Indefinite, not stated, etc. . . . .	6,618	820	3,240	654	1,618	12,950
<b>Total . . . . .</b>	<b>36,299</b>	<b>39,420</b>	<b>123,101</b>	<b>8,749</b>	<b>14,252</b>	<b>221,821</b>

(a) Visitors who stated 'in transit' as the purpose of their journey to Australia and whose intended length of stay did not exceed one month. Excludes passengers passing through Australia without change of ship or aircraft.

**AUSTRALIAN RESIDENTS DEPARTING, BY INTENDED LENGTH OF STAY  
AND STATED PURPOSE OF JOURNEY: AUSTRALIA, 1967**

**SHORT-TERM**

<i>Intended length of stay</i>	<i>Business</i>	<i>Holiday</i>	<i>Education</i>	<i>Other and not stated</i>	<i>Total</i>
Under 1 week . . . . .	5,400	2,608	218	612	8,838
1 week and under 2 weeks . . . . .	6,492	12,535	353	868	20,248
2 weeks and under 3 weeks . . . . .	5,111	24,472	405	771	30,759
3 weeks and under 1 month . . . . .	3,022	19,949	307	567	23,845
1 month and under 2 months . . . . .	7,911	23,522	428	1,272	33,133
2 months and under 3 months . . . . .	5,503	15,037	349	826	21,715
3 months and under 4 months . . . . .	3,303	11,172	332	879	15,686
4 months and under 6 months . . . . .	1,489	9,277	191	493	11,450
6 months and under 12 months . . . . .	2,576	21,537	586	2,271	26,970
Indefinite, not stated, etc. . . . .	1,588	7,815	254	15,445	25,102
<b>Total . . . . .</b>	<b>42,395</b>	<b>147,924</b>	<b>3,423</b>	<b>24,004</b>	<b>217,746</b>

The intended length of stay of visitors from different countries is shown in the next table.

**OVERSEAS VISITORS ARRIVING, BY COUNTRY OF RESIDENCE(a)  
AND INTENDED LENGTH OF STAY: AUSTRALIA, 1967**

**SHORT-TERM**

Country of residence(a)	Intended length of stay										Total
	Under 1 week	1 and under 2 weeks	2 and under 3 weeks	3 weeks and under 1 month	1 and under 2 months	2 and under 3 months	3 and under 4 months	4 and under 6 months	6 and under 12 months	Indefinite, not stated, etc.	
Africa . . . . .	1,080	498	341	203	607	322	252	190	271	264	4,028
America—											
United States of America . . . . .	7,548	8,753	5,459	2,373	3,702	1,418	1,094	478	1,079	879	32,783
Other . . . . .	923	995	832	548	922	476	323	253	461	410	6,143
Asia—											
Hong Kong . . . . .	959	395	386	119	437	250	245	72	353	382	3,598
Malaysia and Singapore . . . . .	1,678	767	691	352	1,028	720	385	194	1,192	776	7,783
Other . . . . .	10,847	2,349	1,989	476	1,846	811	822	189	620	933	20,882
Europe—											
United Kingdom and Ireland . . . . .	4,345	2,452	2,636	1,543	3,744	2,332	2,373	1,074	2,090	2,132	24,721
Other . . . . .	3,813	1,842	1,507	491	1,560	823	1,323	605	1,565	1,429	15,158
Oceania—											
New Zealand . . . . .	16,171	14,480	15,694	12,521	6,388	2,368	1,901	829	2,203	4,408	76,963
Papua and New Guinea . . . . .	3,126	1,679	1,324	707	3,671	2,856	3,620	856	2,013	696	20,548
Other . . . . .	1,906	950	813	513	1,522	1,040	1,133	241	455	641	9,214
<b>Total . . . . .</b>	<b>52,396</b>	<b>35,160</b>	<b>31,672</b>	<b>19,846</b>	<b>25,427</b>	<b>13,416</b>	<b>13,671</b>	<b>4,981</b>	<b>12,302</b>	<b>12,950</b>	<b>221,821</b>

(a) The country in which the visitor was last resident for a period of one year or more.

The seasonal pattern of overseas short-term travel to and from Australia is shown in the next table which provides monthly figures of arrivals and departures during 1967.

**OVERSEAS VISITORS AND AUSTRALIAN RESIDENTS: ARRIVALS AND DEPARTURES  
BY MONTH OF ARRIVAL OR DEPARTURE AND MODE OF TRAVEL  
AUSTRALIA, 1967**

**SHORT-TERM**

Month	Overseas visitors						Australian residents					
	Arriving			Departing			Departing			Returning		
	By sea	By air	Total	By sea	By air	Total	By sea	By air	Total	By sea	By air	Total
January . . . . .	2,044	15,651	17,695	3,073	20,494	23,567	5,444	11,320	16,764	4,541	20,601	25,142
February . . . . .	1,979	15,494	17,473	2,584	15,572	18,156	5,732	9,453	15,185	3,516	12,874	16,390
March . . . . .	1,903	16,797	18,700	2,516	17,129	19,645	6,030	12,385	18,415	3,356	12,424	15,780
April . . . . .	1,103	15,001	16,104	2,443	17,108	19,551	6,803	14,257	21,060	3,339	12,141	15,480
May . . . . .	1,462	15,331	16,793	2,233	16,963	19,196	5,976	15,594	21,570	3,615	13,480	17,095
June . . . . .	859	12,017	12,876	1,399	13,148	14,547	3,503	13,951	17,454	3,812	12,816	16,628
July . . . . .	1,072	12,689	13,761	1,432	12,706	14,138	3,227	13,144	16,371	2,723	13,570	16,293
August . . . . .	1,087	17,655	18,742	1,901	16,207	18,108	3,367	15,079	18,446	3,263	16,615	19,878
September . . . . .	1,289	16,048	17,337	1,508	17,691	19,199	2,316	10,937	13,253	3,984	18,444	22,428
October . . . . .	1,954	18,262	20,216	2,667	18,158	20,825	4,817	11,571	16,388	6,447	15,237	21,684
November . . . . .	1,933	20,462	22,395	1,912	20,387	22,299	2,696	10,744	13,440	5,869	13,574	19,443
December . . . . .	2,456	27,273	29,729	1,135	21,396	22,531	3,068	26,332	29,400	4,074	12,723	16,797
<b>Total . . . . .</b>	<b>19,141</b>	<b>202,680</b>	<b>221,821</b>	<b>24,803</b>	<b>206,959</b>	<b>231,762</b>	<b>52,979</b>	<b>164,767</b>	<b>217,746</b>	<b>48,539</b>	<b>174,499</b>	<b>223,038</b>

The sex, marital status and age of short-term travellers to and from Australia are shown in the next table.

**OVERSEAS VISITORS ARRIVING AND AUSTRALIAN RESIDENTS DEPARTING  
BY SEX, AND MARITAL STATUS AND AGE: AUSTRALIA, 1967**

**SHORT-TERM**

<i>Characteristics</i>	<i>Overseas visitors arriving</i>			<i>Australian residents departing</i>		
	<i>Males</i>	<i>Females</i>	<i>Persons</i>	<i>Males</i>	<i>Females</i>	<i>Persons</i>
<b>Marital status—</b>						
Never married . . . .	46,732	32,270	79,002	43,924	34,411	78,335
Married . . . . .	81,155	46,754	127,909	76,007	48,784	124,791
Widowed or divorced .	4,741	10,169	14,910	3,786	10,834	14,620
<b>Age (years)—</b>						
9 and under . . . . .	6,971	6,520	13,491	5,757	5,746	11,503
10 to 19 . . . . .	9,287	8,971	18,258	8,528	9,210	17,738
20 to 49 . . . . .	82,306	42,021	124,327	77,285	46,697	123,982
50 and over . . . . .	34,064	31,681	65,745	32,147	32,376	64,523
<b>Total . . . . .</b>	<b>132,628</b>	<b>89,193</b>	<b>221,821</b>	<b>123,717</b>	<b>94,029</b>	<b>217,746</b>

**Long-term movement, overseas visitors and Australian residents**

In addition to those arrivals and departures of overseas visitors and the overseas travel of Australian residents classified as short-term, there is similar travel classified as 'long-term movement' (see explanation on page 451). Particulars of this travel, where the stay in Australia (for overseas visitors) or in a country abroad (for Australian residents) is for a year or more are given below.

The following two tables show the stated purpose of journey of overseas visitors to Australia and of Australian residents visiting abroad from 1963 to 1967 who were classified as long-term. When comparing the numbers of arrivals and departures changes in classification due to the factor mentioned on page 452 must be kept in mind.

**OVERSEAS VISITORS ARRIVING, BY STATED PURPOSE OF JOURNEY, AND  
OVERSEAS VISITORS DEPARTING: AUSTRALIA, 1963 TO 1967**

**LONG-TERM**

<i>Year</i>	<i>Arriving</i>				<i>Total</i>	<i>Departing</i>
	<i>Business</i>	<i>Holiday</i>	<i>Education</i>	<i>Other and not stated</i>		
1963 . . . . .	3,090	3,198	2,910	4,615	13,813	12,729
1964 . . . . .	3,545	3,836	3,014	4,625	15,020	13,085
1965 . . . . .	4,403	4,328	3,220	5,546	17,497	12,429
1966 . . . . .	4,279	5,052	3,517	6,386	19,234	11,999
1967 . . . . .	3,647	5,703	3,740	8,547	21,637	12,801

**AUSTRALIAN RESIDENTS DEPARTING, BY STATED PURPOSE OF JOURNEY, AND  
AUSTRALIAN RESIDENTS RETURNING: AUSTRALIA, 1963 TO 1967**

**LONG-TERM**

<i>Year</i>	<i>Departing</i>				<i>Total</i>	<i>Returning</i>
	<i>Business</i>	<i>Holiday</i>	<i>Education</i>	<i>Other and not stated</i>		
1963 . . . . .	4,786	21,864	2,246	9,421	38,317	22,205
1964 . . . . .	5,383	23,856	2,204	9,515	40,958	23,641
1965 . . . . .	7,032	24,167	2,494	12,620	46,313	26,260
1966 . . . . .	8,951	27,449	3,168	14,753	54,321	28,292
1967 . . . . .	9,221	25,400	3,361	14,166	52,148	35,655

In the next table overseas visitors arriving and Australian residents departing, long-term, are classified by country of their last residence or future intended residence, i.e. the country in which they last resided or intended to reside next for one year or more.

**OVERSEAS VISITORS ARRIVING, BY COUNTRY OF LAST RESIDENCE, AND  
AUSTRALIAN RESIDENTS DEPARTING, BY COUNTRY OF INTENDED RESIDENCE  
BY MODE OF TRAVEL: AUSTRALIA, 1967**

**LONG-TERM**

<i>Country of residence(a)</i>	<i>Overseas visitors arriving</i>			<i>Australian residents departing</i>		
	<i>By sea</i>	<i>By air</i>	<i>Total</i>	<i>By sea</i>	<i>By air</i>	<i>Total</i>
Africa . . . . .	169	382	551	355	355	710
America—						
Canada . . . . .	362	483	845	1,607	1,158	2,765
United States of America . . . . .	321	2,778	3,099	749	1,999	2,748
Other . . . . .	11	115	126	75	281	356
Asia—						
Hong Kong . . . . .	62	304	366	97	401	498
Malaysia . . . . .	19	1,054	1,073	110	2,126	2,236
Singapore . . . . .	14	353	367	85	461	546
Japan . . . . .	26	523	549	41	83	124
Other . . . . .	106	1,410	1,516	346	1,182	1,528
Europe—						
United Kingdom and Ireland . . . . .	1,819	1,849	3,668	9,555	3,074	12,629
Germany . . . . .	150	194	344	1,208	335	1,543
Greece . . . . .	82	110	192	3,675	942	4,617
Italy . . . . .	161	384	545	4,223	938	5,161
Netherlands . . . . .	388	169	557	717	185	902
Other . . . . .	225	580	805	2,358	709	3,067
Oceania—						
Fiji . . . . .	12	146	158	16	420	436
New Zealand . . . . .	1,792	4,546	6,338	2,464	3,487	5,951
Papua and New Guinea . . . . .	12	330	342	222	5,557	5,779
Other . . . . .	41	155	196	209	343	552
<b>Total . . . . .</b>	<b>5,772</b>	<b>15,865</b>	<b>21,637</b>	<b>28,112</b>	<b>24,036</b>	<b>52,148</b>

(a) Country in which the passenger resided last, or intended to reside next, for one year or more.

The occupations of travellers to and from Australia who have been classified as long-term are shown in the next table.

**OVERSEAS VISITORS ARRIVING AND AUSTRALIAN RESIDENTS DEPARTING, BY  
OCCUPATION AND SEX: AUSTRALIA 1967**

**LONG-TERM**

<i>Occupation group</i>	<i>Overseas visitors arriving</i>			<i>Australian residents departing</i>		
	<i>Males</i>	<i>Females</i>	<i>Persons</i>	<i>Males</i>	<i>Females</i>	<i>Persons</i>
Professional, technical, and related workers . . . . .	1,625	1,202	2,827	4,093	4,024	8,117
Administrative, executive, and managerial workers . . . . .	853	77	930	1,107	141	1,248
Clerical workers . . . . .	481	1,332	1,813	1,665	4,898	6,563
Sales workers . . . . .	468	153	621	905	575	1,480
Farmers, fishermen, hunters, timber getters, and related workers . . . . .	451	17	468	581	29	610
Miners, quarrymen, and related workers . . . . .	90	..	90	284	..	284
Workers in transport and communication . . . . .	555	80	635	815	240	1,055
Craftsmen and production-process workers . . . . .	2,269	194	2,463	5,531	842	6,373
Labourers . . . . .	472	..	472	3,073	..	3,073
Service (protective and other), sport, and recreation workers . . . . .	811	418	1,229	838	944	1,782
Occupations, inadequately described or not stated . . . . .	454	94	548	437	98	535
Persons not in work force—						
Children and students . . . . .	3,534	2,491	6,025	6,414	5,923	12,337
Others . . . . .	344	3,172	3,516	490	8,201	8,691
<b>Total . . . . .</b>	<b>12,407</b>	<b>9,230</b>	<b>21,637</b>	<b>26,233</b>	<b>25,915</b>	<b>52,148</b>

**Direct transit travellers**

As indicated on page 452, all the preceding figures in this section exclude persons who arrive in and depart from Australia on the same ship's journey or on the same flight. Persons thus excluded are not all normally considered visitors to Australia. For instance, settlers or other persons going to New Zealand, Papua and New Guinea, or other neighbouring countries, or leaving such countries may travel through Australia on their way. On the other hand, all persons visiting Australia on cruise vessels, which may remain in Australian waters for a considerable time, are also treated as direct transit travellers and are thus excluded from the figures shown on previous pages. Information regarding direct transit passengers on ships calling at Australian ports is given in the next table.

**OVERSEAS SHIPPING PASSENGERS IN DIRECT TRANSIT<sup>(a)</sup>**  
**AUSTRALIA, 1966 AND 1967**

<i>Approximate period from first to last Australian port (days)</i>	1966		1967	
	<i>Passengers</i>	<i>Passenger days</i>	<i>Passengers</i>	<i>Passenger days</i>
Less than 3 . . . . .	4,770	6,578	571	647
3 and less than 5 . . . . .	5,972	19,897	8,017	27,025
5 and less than 7 . . . . .	5,613	31,772	3,961	23,541
7 and less than 9 . . . . .	8,096	60,473	9,920	70,085
9 and less than 11 . . . . .	7,889	71,778	7,590	70,951
11 and less than 22 . . . . .	1,894	23,117	987	13,941
22 and over . . . . .	132	4,241	181	5,406
<b>Total . . . . .</b>	<b>34,366</b>	<b>217,856</b>	<b>31,227</b>	<b>211,596</b>

(a) Persons who arrived in and departed from Australia on the same ship's voyage.

**Sea cruises from Australia**

Excluded from the foregoing tables are passengers on short pleasure cruises in the south-west Pacific, commencing and finishing in Australia on ships not then engaged in regular voyages. During 1967 twenty such cruises, carrying 18,922 passengers, were completed.

**Tourist organisation**

The Australian Tourist Commission was established by the Commonwealth Government under the *Australian Tourist Commission Act 1967*. Its objectives are the encouragement of visits to Australia, and travel in Australia, by people from other countries. The Commission comprises a Chairman appointed by the Commonwealth Government; a representative of each of two Commonwealth Departments; two appointees to represent private industry, selected by the Commonwealth Government from a panel of names put forward by the Australian National Travel Association; and two non-voting representatives nominated by the State Governments.

For 1967-68 the Commonwealth Government provided \$1,550,000 to the Commission, to be spent on advertising campaigns and in associated promotional activities in overseas countries, particularly in New Zealand, North America, the United Kingdom, and Western Europe. The Commission brings to Australia travel agents, writers, photographers and other publicists to see at first hand what the country has to offer visitors. It takes no part in the detailed organisation of tourist activities in Australia. It has its Head Office in Melbourne and branch offices in London, New York, San Francisco, Auckland, Tokyo, and Sydney.

The Australian National Travel Association, which is described on pages 1161-2 of the special article *Travel and Tourism in Year Book No. 52*, was formerly responsible, *inter alia*, for the promotion overseas of Australia as a tourist destination. Following the creation of the Australian Tourist Commission, the Association now concentrates on the encouragement of the growth and development of travel and tourism within Australia, and the improvement of the standard and variety of facilities and services provided by private enterprise for the use of overseas visitors. It acts as a co-ordinating body for its members, provides a clearing house for information, and conducts surveys into aspects of local tourist activity. The Association is governed by a Board representative of travel and tourist interests. The Commonwealth Government is no longer represented on the Board. The Association's office is now located in Sydney.

## CHAPTER 13

### WELFARE SERVICES

This chapter relates to welfare services other than those concerned specifically with education, health and repatriation. The latter are dealt with, in the main, in the relevant chapters of this Year Book. Apart from a summary of government expenditure on welfare services and short descriptions of certain interstate organisations providing welfare services, the chapter is devoted to a description in some detail of the services provided by the Commonwealth. For information on the many important welfare services provided by State and local governments, especially in the fields of child and Aboriginal welfare, reference should be made to the Year Books or Statistical Registers of the States and the annual reports of the State departments concerned. Information on pension and superannuation schemes provided for government and semi-government employees, mine workers, parliamentarians, and employees of private business is included in the chapter Private Finance.

In addition, there are numerous services of this nature provided by charitable and other non-government institutions and organisations. There are institutions providing shelter and or caring for needy, aged, infirm or handicapped persons, neglected children, destitute persons, wayward boys and girls, and the like. Many organisations, too, provide aid in kind (food, clothing, etc.), auxiliary medical and nursing services, and other assistance to relieve suffering and hardship. Considerable work is also done by such organisations in the rehabilitation or establishment in the community of various types of people, such as prisoners and migrants, and in the prevention and alleviation of cruelty and maltreatment of any sort. Comprehensive information regarding the activities of such organisations is not available.

Further information on subjects dealt with in this chapter is included in the annual bulletins *Australian National Accounts*, *Commonwealth Finance*, and *State, Territory and Local Government Authorities' Finance and Government Securities*. Current and summarised information on Commonwealth social services is contained in the *Quarterly Summary of Australian Statistics* and the *Monthly Review of Business Statistics*.

#### Expenditure on welfare services

This section deals with various government payments for the relief of the aged, indigent, infirm, widowed and unemployed, assistance to families, Aboriginal welfare, etc. For summary statements of cash payments to persons made by public authorities under various functional heads, see *Australian National Accounts* and the other annual bulletins mentioned above.

##### Commonwealth expenditure on welfare services

Information concerning the cost of administering each Commonwealth benefit separately is not compiled. However, the chapter Public Finance, and, in more detail, the annual bulletin *Commonwealth Finance*, present an analysis of Commonwealth expenditure by function and economic type, from which some estimates of administrative costs can be derived. Commonwealth expenditure on Aboriginal welfare is included on page 464 and that on grants for the construction of homes for the aged and for accommodation for disabled persons on pages 477 and 478 respectively.

##### The National Welfare Fund

The National Welfare Fund was established by the *National Welfare Fund Act 1943* to finance a scheme of national welfare and has operated from 1 July 1943. At its commencement it was used to finance funeral benefits and maternity allowances, but other social and health benefits were made a charge on the fund from time to time, and at present expenditure on all benefits except repatriation, telephone rental concessions and a few minor social and health benefits is met from the fund. The fund is used only to finance the benefits themselves; it is not used to finance the cost of administering the benefits, or of capital works associated with the benefits.



**NATIONAL WELFARE FUND: RECEIPTS, EXPENDITURE, AND BALANCES**  
**1962-63 TO 1966-67**  
 (\$'000)

Year	Income		Total	Expenditure	Balance in fund at end of year
	Contribution from Consolidated Revenue	Interest on investments			
1962-63.	758,589	4,118	762,706	758,589	414,225
1963-64.	832,696	4,157	836,853	832,696	418,382
1964-65.	890,366	4,199	894,564	890,366	422,581
1965-66.	941,574	4,241	945,815	941,574	426,822
1966-67.	1,031,117	4,284	1,035,401	1,031,117	431,106

**COMMONWEALTH EXPENDITURE FROM NATIONAL WELFARE FUND**  
**STATES, TERRITORIES, ETC., 1966-67**  
 (\$'000)

Service	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T. (a)	A.C.T. (a)	Abroad	Total
<b>Social Services—</b>										
Age and Invalid Pensions .	189,043	120,930	77,097	43,720	33,794	14,574	1,239	937	506	481,840
Child Endowment(b)	68,816	56,232	29,685	19,063	15,498	6,912	1,225	1,783	67	199,282
Commonwealth Rehabilitation Service .	604	461	273	249	196	60	..	..	..	1,844
Funeral Benefits .	524	358	209	114	88	39	..	3	..	1,334
Maternity Allowances .	2,514	2,104	1,077	654	559	243	62	72	8	7,294
Unemployment Benefits .	3,948	1,882	3,068	1,653	374	228	14	19	..	11,186
Sickness Benefits .	2,655	1,753	964	554	445	190	20	30	..	6,611
Special Benefits(c)	338	603	159	63	36	47	1	1	..	1,247
Widows' Pensions .	21,188	14,387	8,962	5,448	4,011	1,983	191	197	71	56,438
<b>National Health Services—</b>										
Hospital and Nursing										
Home Benefits .	27,801	15,208	10,296	5,920	5,881	2,050	116	126	..	67,398
Medical Benefits .	17,520	11,776	4,269	5,156	3,925	1,195	..	..	..	43,841
Medical Benefits for Pensioners .	5,667	3,746	2,064	1,407	1,020	406	..	42	..	14,351
Milk for School Children .	3,067	2,391	1,396	857	698	442	77	93	..	9,021
Pharmaceutical Benefits .	27,759	21,138	9,839	6,256	4,730	2,071	..	(d)208	..	(e)72,001
Pharmaceutical Benefits for Pensioners .	12,306	6,933	4,546	2,705	1,989	802	..	..	..	29,280
Tuberculosis Campaign—										
Allowances .	372	263	340	98	53	44	21	2	..	1,193
Maintenance and surveys(f)	3,956	3,293	2,189	652	547	338	..	9	..	10,983
Miscellaneous(g)	558	474	579	49	156	104	88	(h)1,939	..	3,947
Rental losses(i)	..	..	142	..	..	..	..	..	..	142
Home Savings Grants(j)	4,269	3,891	1,550	1,117	666	273	5	114	..	11,885
<b>Total</b>	<b>392,904</b>	<b>267,823</b>	<b>158,703</b>	<b>95,735</b>	<b>74,666</b>	<b>32,003</b>	<b>3,058</b>	<b>5,574</b>	<b>652</b>	<b>1,031,117</b>

(a) Payments for some health services to residents of the Northern Territory and the Australian Capital Territory are included in the amounts shown for States. (b) Includes payments for student children aged 16 to 21 years. (c) Includes special benefits to migrants in reception and training centres. (d) Includes payments to the Royal Flying Doctor Service and Bush Nursing Centres, \$117,000. (e) Includes \$15,023,000 for pharmaceutical benefits supplied to hospitals and institutions, etc. (f) Mainly payments to State Governments as a contribution towards the cost of surveys and the maintenance of institutions for the treatment of tuberculosis. (g) This item covers the cost of the Commonwealth Health Laboratory Services, subsidies to home nursing services, the cost of radio-active isotopes provided under the National Health Act, cost of blood products, purchase of poliomyelitis vaccine, and hearing aids for school children. (h) Includes the cost of blood products (Commonwealth Serum Laboratories) \$867,000, and part cost of the Commonwealth Health Laboratories, \$202,000; and purchase of poliomyelitis vaccine, \$869,000. (i) Contribution to States, under Commonwealth and State Housing Agreement 1945, for losses on rental housing. (j) Under the Home Savings Grant Act 1964.

COMMONWEALTH EXPENDITURE FROM NATIONAL WELFARE FUND  
TOTAL, 1962-63 TO 1966-67

Service	1962-63	1963-64	1964-65	1965-66	1966-67	
					Amount	Per head
	\$'000	\$'000	\$'000	\$'000	\$'000	\$
<b>Social Services—</b>						
Age and Invalid Pensions . . . . .	375,507	399,880	426,597	442,355	481,840	41.15
Child Endowment(b) . . . . .	135,421	168,758	172,830	176,432	199,282	17.02
Commonwealth Rehabilitation Service . . . . .	1,395	1,489	1,604	1,660	1,844	0.16
Funeral Benefits . . . . .	802	812	866	1,050	1,334	0.11
Maternity Allowances . . . . .	7,563	7,457	7,294	7,159	7,294	0.62
Unemployment, Sickness and Special Benefits(c) . . . . .	29,315	21,625	14,540	15,557	19,044	1.63
Widows' Pensions . . . . .	31,353	41,569	47,044	50,017	56,438	4.82
<b>National Health Services—</b>						
Hospital and Nursing Home Benefits . . . . .	47,326	56,216	58,791	60,743	67,398	5.76
Medical Benefits . . . . .	23,474	24,848	35,277	41,282	43,841	3.74
Medical Benefits for Pensioners . . . . .	9,146	9,531	9,320	13,365	14,351	1.23
Milk for School Children . . . . .	7,454	7,775	8,059	8,493	9,021	0.77
Pharmaceutical Benefits . . . . .	57,044	58,237	60,638	67,713	72,001	6.15
Pharmaceutical Benefits for Pensioners . . . . .	19,867	20,602	21,564	24,071	29,280	2.50
<b>Tuberculosis Campaign—</b>						
Allowances . . . . .	1,607	1,593	1,458	1,286	1,193	0.10
Maintenance and surveys(f) . . . . .	9,748	10,473	10,146	13,379	10,983	0.94
Miscellaneous(g) . . . . .	1,529	1,785	2,859	3,453	3,947	0.34
Rental losses(i) . . . . .	37	45	130	213	142	0.01
Home Savings Grants(j) . . . . .	..	..	11,349	13,346	11,885	1.01
<b>Total . . . . .</b>	<b>758,589</b>	<b>832,696</b>	<b>890,366</b>	<b>941,574</b>	<b>1,031,117</b>	<b>88.06</b>

For footnotes (b), (c), (f), (g), (i) and (j), see table on page 462.

## State expenditure on certain welfare services

The following table shows net expenditure from State government funds on certain welfare services. The figures exclude expenditure on unemployment, bush fire, flood, etc., relief, Aboriginal welfare, and some other items which are excluded because information cannot be obtained for all States. Loan fund expenditure is excluded also. Because of differences in organisation and accounting methods, the information shown for some classes is not on exactly the same basis for all States; it may also be incomplete because particulars of some activities are not separately recorded and are therefore excluded. The expenditure shown is 'net' in the sense that receipts for services rendered have been deducted from gross expenditure.

NET EXPENDITURE BY STATE GOVERNMENTS ON CERTAIN WELFARE SERVICES, 1966-67  
(\$'000)

Service	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	Total
Relief of aged, indigent and infirm, child welfare, etc. . . . .	14,405	10,368	5,360	3,054	3,289	1,664	38,140
Miners' phthisis. . . . .	64	54	..	..	59	..	177
<b>Total . . . . .</b>	<b>14,469</b>	<b>10,422</b>	<b>5,360</b>	<b>3,054</b>	<b>3,348</b>	<b>1,664</b>	<b>38,317</b>

## Aboriginal welfare

Expenditure out of Commonwealth and State Consolidated Revenue Funds specifically on Aboriginal welfare during the years 1962-63 to 1966-67 is shown in the following table. Expenditure from Trust Funds and Loan Funds on this item is not available. As with the table in the previous paragraph, the figures hereunder may be incomplete because particulars of some activities are not available.

**ABORIGINAL WELFARE: EXPENDITURE FROM CONSOLIDATED REVENUE  
FUNDS, STATES AND TERRITORIES, 1962-63 TO 1966-67**

(\$'000)

<i>Year</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
1962-63 . . .	689	120	1,610	1,025	3,318	2,595	11	9,368
1963-64 . . .	605	120	1,705	1,212	1,550	3,045	11	8,248
1964-65 . . .	712	130	1,764	1,270	1,880	3,201	6	8,965
1965-66 . . .	809	130	2,016	1,428	2,151	2,595	7	9,136
1966-67 . . .	909	131	2,317	1,490	2,315	3,151	2	10,314

### Commonwealth social services

Under the provisions of section 51 of the Constitution, the Commonwealth Government is empowered to legislate on:

‘(xxiii) Invalid and old age pensions:

‘(xxiiiA) The provision of maternity allowances, widows’ pensions, child endowment, un-employment, pharmaceutical, sickness and hospital benefits, medical and dental services (but not so as to authorize any form of civil conscription), benefits to students and family allowances:’.

The latter paragraph was inserted in the Constitution after being accepted by the electors at a referendum on 28 September 1946. The enabling Act was assented to on 19 December 1946.

Before 1947, Commonwealth social service benefits were paid under various Acts. On 1 July 1947, with the passage of the *Social Services Consolidation Act* 1947, all Acts providing social service benefits were amalgamated. This Act eliminated certain anomalies and obsolete provisions, and changed the title ‘old-age pension’ to ‘age pension’. The word ‘Consolidation’ was dropped from the short title of the Act in 1954. The Act is at present styled the *Social Services Act* 1947-1967.

#### Social service benefits provided

The social service benefits provided by the Commonwealth Government under the *Social Services Act* 1947-1967, and the date on which each came into operation, are:

Age pension . . . . .	1 July 1909
Child endowment . . . . .	1 July 1941
Child endowment—student children . . . . .	14 January 1964
Commonwealth Rehabilitation Service . . . . .	10 December 1948
Funeral benefit . . . . .	1 July 1943
Guardians’ allowances for widowers and other unmarried age and invalid pensioners with children in their care . . . . .	14 October 1965
Invalid pension . . . . .	15 December 1910
Maternity allowance . . . . .	10 October 1912
Sheltered employment allowances . . . . .	30 June 1967
Sickness benefit . . . . .	1 July 1945
Special benefit . . . . .	1 July 1945
Supplementary assistance (age, invalid and widows’ pensions) . . . . .	15 October 1958
Unemployment benefit . . . . .	1 July 1945
Widows’ pensions . . . . .	30 June 1942
Widows’ pensions—children’s allowances . . . . .	2 October 1956
Wives’ and children’s allowances for pensioners who are invalids . . . . .	8 July 1943
Wives’ and children’s allowances for age pensioners . . . . .	14 October 1965

#### Age and invalid pensions

Age pensions are payable to men, sixty-five years of age and over, and women, sixty years of age and over, who have lived in Australia continuously for at least ten years, which need not be immediately prior to the date of claim for a pension. If a person has completed five years’, but not ten years’,

continuous residence, and has lived in Australia for periods which exceed a total of ten years, the period of continuous residence otherwise required is reduced by the total of his periods of residence in Australia in excess of ten years. Any periods of absence during which a person's home remains in Australia, and absences in certain other circumstances, are counted as residence, and any absence in an external Territory of the Commonwealth, while not counting as residence, does not interrupt continuity of residence in Australia. Residence in New Zealand or the United Kingdom may be treated as residence in Australia.

Invalid pensions are payable to persons, sixteen years of age and over, who have lived in Australia for a continuous period of five years (including certain absences) at any time, and who are permanently incapacitated for work to the extent of at least eighty-five per cent, or permanently blind. If the incapacity or blindness first occurred outside Australia, except during a temporary absence, a period of ten years' continuous residence is necessary, but if a person has completed five years', but not ten years', continuous residence and has lived in Australia for periods which exceed a total of ten years, the period of continuous residence otherwise required is reduced by the total of his periods of residence in Australia in excess of ten years. Residence in New Zealand or the United Kingdom may be treated as residence in Australia. Certain absences do not affect eligibility.

*Current rates of pension.* The maximum standard rate was increased to \$676 per annum (\$13 a week) from 30 September 1966. This is payable to a single, widowed, or divorced pensioner, a married man whose wife receives a wife's allowance, or a married pensioner whose spouse is not receiving an age or invalid pension, an unemployment, sickness or special benefit, a tuberculosis allowance, or a service pension. The maximum married rate was also increased from 30 September 1966, and is \$1,222 per annum (\$23.50 a week) for a married couple, both pensioners, i.e. \$611 per annum (\$11.75 a week) each. For a married person whose spouse receives an unemployment, sickness or special benefit, a tuberculosis allowance, or a service pension, the maximum rate is also \$611 per annum (\$11.75 a week).

A wife's allowance may be granted, subject to the means test, to the wife of an invalid pensioner or of an age pensioner permanently incapacitated, blind, or who has the care of a child, if she is not receiving an age or invalid pension, or a service pension under the *Repatriation Act 1920-1967* (see Chapter 5, Repatriation). The maximum annual rate of a wife's allowance is \$312 per annum (\$6 a week). A child's allowance of \$78 per annum (\$1.50 a week), free of the means test, is payable for the first child under sixteen years, and the pension may also be increased by \$78 per annum (\$1.50 a week), subject to the means test, for each other child under sixteen years. A guardian's allowance of up to \$4 a week is payable to widowers and other unmarried age or invalid pensioners who have one or more children in their care.

Eligibility for a child's allowance and the additional pension for children is extended to include a child over sixteen years until he reaches twenty-one years, provided he is wholly or substantially dependent on the pensioner and is receiving full-time education at a school, college or university. Supplementary assistance of up to \$2 a week, subject to a means test, is available to pensioners receiving the maximum standard rate pension if they pay rent or pay for board and lodging or for lodging. From 1958 to October 1965 the rate was \$1 a week, and supplementary assistance was available only to maximum standard rate pensioners paying rent who were considered to depend entirely on the pension. At 30 June 1967, 587,228 age pensioners (ninety per cent of all age pensioners) and 106,805 invalid pensioners (95 per cent of all invalid pensioners) were receiving the maximum pension.

If the pensioner is an inmate of a benevolent home, the maximum payable to him is \$4.50 a week if he is eligible for the standard rate pension, or \$4.20 a week otherwise. The rest is paid to the home for his maintenance. The balance is not paid to the home if the pensioner is in an infirmary ward, as payments under the Commonwealth Hospital Benefits Scheme are made in that case. The maximum payable to a standard rate pensioner is increased if supplementary assistance is also payable.

A table showing the maximum rates of pension operating since 1 July 1909 at dates prior to 14 October 1965 is included on page 608 of Year Book No. 51. Details of increased allowances payable from 14 October 1965 to 30 September 1966, when the current rates of pensions and allowances became operative, are included on page 505 of Year Book No. 52.

*Means test.* Age and invalid pensions (other than pensions paid to blind persons) and allowances paid to wives (but not a child's allowance of \$1.50 a week) are subject to a means test which applies to income and property. From March 1961 the means tests which previously applied separately on income and property were merged into one composite means test. The rate of pension payable depends on the claimant's *means as assessed*. These consist of his annual rate of income plus a property component equal to \$2 for each complete \$20 of his net property above \$400. A person's *means as assessed* may consist entirely of income, entirely of the property component, or of various combinations of income and property component. From 27 April 1967 the pension payable is calculated

by deducting from the applicable maximum annual rate of pension, plus, where applicable, guardian's allowance, and or additional pension for children, the amount by which *means as assessed* exceed \$442 where the pensioner is married or \$520 where the pensioner is single, widowed, or divorced. Where the standard rate applies, no pension is payable where the value of property is \$12,360 or more (\$14,440 or more if qualified for a guardian's allowance) if the pensioner is single, widowed or divorced; or \$11,580 if the pensioner is married. Where the married rate applies, no pension is payable where the value of property is \$10,940 or more. The wife's allowance is affected by income and property on the same basis as the pension, i.e. it is reduced by the amount of *means as assessed* over \$442. Supplementary assistance is reduced by the amount by which *means as assessed* exceed \$52.

Certain types of income are excepted. The main exceptions are: income from property; gifts or allowances from children, parents, brothers, or sisters; benefits (other than annuities) from friendly societies; child endowment or other payments for children; Commonwealth health benefits and amounts received from registered benefit organisations. A pensioner's income may also be reduced by up to \$156 per annum (\$3 a week) for each dependent child under sixteen years (twenty-one years if a full-time student).

Certain types of property are disregarded. They include the permanent home of the pensioner, his furniture and personal effects, the surrender value (up to \$1,500) of life insurance policies, the capital value of annuities or contingent interests, and the value of any reversionary interests.

For the purposes of the means test the income and property of a married person are considered to be half the total income and property of the husband and wife unless they are legally separated or in other special circumstances.

#### AGE AND INVALID PENSIONS: STATES AND TERRITORIES, 30 JUNE 1967

<i>Pensions in force</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
Age—									
Males .	74,382	46,934	33,980	18,074	13,796	5,964	652	360	194,142
Females .	177,565	119,204	70,001	43,361	31,945	13,626	696	823	457,221
Persons .	251,947	166,138	103,981	61,435	45,741	19,590	1,348	1,183	651,363
Invalid—									
Males .	24,894	14,872	10,088	4,960	4,641	2,086	269	148	61,958
Females .	20,549	11,907	8,320	4,126	3,666	1,444	185	159	50,356
Persons .	45,443	26,779	18,408	9,086	8,307	3,530	454	307	112,314

#### NEW PENSIONERS, BY SEX AND MARITAL STATUS: AUSTRALIA, 1966-67

<i>Marital status</i>	<i>Age pensioners</i>			<i>Invalid pensioners</i>			<i>Total</i>
	<i>Males</i>	<i>Females</i>	<i>Persons</i>	<i>Males</i>	<i>Females</i>	<i>Persons</i>	
Single . . .	2,839	4,683	7,522	4,109	3,052	7,161	14,683
Married . . .	16,816	19,620	36,436	7,349	2,941	10,290	46,726
Widowed . . .	2,932	11,409	14,341	631	755	1,386	15,727
Divorced . . .	389	878	1,267	383	345	728	1,995
Total . . .	22,976	36,590	59,566	12,472	7,093	19,565	79,131

The average age of new age pensioners was 68.6 years for men and 65.8 years for women.

#### NEW INVALID PENSIONERS, BY AGE GROUP: AUSTRALIA, 1966-67

	<i>16-19 years</i>	<i>20-44 years</i>	<i>45-59 years</i>	<i>60-64 years</i>	<i>65 years and over</i>	<i>Total</i>
Number . . .	1,879	3,473	9,476	4,262	475	19,565
Per cent . . .	10	18	48	22	2	100

Persons at or above the qualifying age for age pensions, when granted invalid pensions, are generally those with insufficient residence to qualify for age pension.

#### AGE AND INVALID PENSIONS: SUMMARY, AUSTRALIA, 1962-63 TO 1966-67

Year	Pensioners at end of year				Total payments during year (b)	Average weekly pension as at end of year			
	Age		Invalid	Total		Age (c)	Invalid (c)	Age and invalid combined (c)	
	Number	Rate (a)							
			No.	No.	\$'000	\$	\$	\$	
1962-63	.	607,350	531	104,038	711,388	375,507	10.16	10.52	10.24
1963-64	.	615,186	530	109,725	724,911	399,880	10.71	11.26	10.79
1964-65	.	628,100	532	107,473	735,573	426,597	11.18	11.73	11.26
1965-66	.	636,984	530	106,645	743,629	442,355	11.33	12.24	11.46
1966-67	.	651,363	(d)532	112,314	763,677	481,840	12.38	13.30	12.52

(a) Number of pensioners per 1,000 persons of pensionable age (males aged 65 years and over and females aged 60 years and over). (b) Includes allowances and supplementary assistance. (c) Includes supplementary assistance. (d) For earlier years persons of pensionable age—see footnote (a)—exclude Aborigines, while the number of pensioners includes Aborigines throughout.

The sum paid in age and invalid pensions in 1966-67, including the amount paid to homes for the maintenance of pensioners and allowances to wives of invalid pensioners, represented an expenditure of \$41.15 per head of population, compared with \$38.64 in 1965-66.

#### Sheltered employment allowance

This allowance, which reduces on a graduated scale as earnings from a sheltered workshop increase, was introduced on 30 June 1967 to provide an incentive for invalid pensioners and certain other disabled people to engage in approved sheltered employment. The allowance is paid to invalid pensioners so engaged in lieu of invalid pension and to disabled people who are not receiving a pension but would be likely to become permanently incapacitated to a pensionable degree if not provided with sheltered employment and are otherwise qualified to receive an invalid pension.

The maximum rate of the allowance is the same as the maximum rate of invalid pension. Additional benefits such as wife's and child's allowances that would be paid if the person were an invalid pensioner are added to the sheltered employment allowance to form one composite payment.

The means test is the same as for invalid pensions except that, in relation to earnings from sheltered employment, half the amount by which a single person's earnings exceed \$10 a week is disregarded; in the case of a married person, half the amount by which his earnings exceed \$17 but not \$25 a week is disregarded.

#### Child endowment

A person who is resident in Australia and has the custody, care and control of one or more children under the age of sixteen years or of a student child over sixteen but under twenty-one years, or an approved institution of which children are inmates, is qualified to receive an endowment in respect of each such child. There are provisions to meet cases of families divided because of divorce, separation, unemployment or death of a parent. There is no means test.

Twelve months' residence in Australia is required if the claimant and the child were not born here, but this requirement is waived if the Department of Social Services is satisfied that they are likely to remain in Australia permanently. Where the child's father is not a British subject, endowment is payable if the child was born in Australia, if the mother is a British subject, or if the Department is satisfied that the child is likely to remain permanently in Australia. Under certain conditions, endowment may be paid to Australians who are temporarily absent overseas.

*Rates of endowment.* From 1 July 1941 the rate of endowment was 50c a week for each child under sixteen in excess of one in a family, and for each child under sixteen in an approved institution. The rate was increased to 75c a week in June 1945, and to \$1.00 a week in November 1948. From June 1950, 50c a week became payable for the first or only child in a family. From January 1964 the rate was increased to \$1.50 a week for the third and subsequent children under sixteen years in families and for each child in an institution, and that amount also became payable for full-time

students between sixteen and twenty-one years. Full-time student children are those receiving full-time education at a school, college or university and who are not in employment or engaged in work on their own account. From September 1967 the weekly rate for the fourth and each subsequent child under sixteen years in a family was increased by progressive amounts of 25c each, making \$1.75 payable for the fourth child, \$2.00 for the fifth, and so on.

*Number of claims and endowed children—children under sixteen years.* The number of families receiving child endowment at 30 June 1967 in respect of children under sixteen years was 1,640,390, an increase of 29,900 or 1.9 per cent during the year.

**CHILD ENDOWMENT: CLAIMS AND ENDOWED CHILDREN UNDER 16 YEARS  
STATES, TERRITORIES, ETC., 30 JUNE 1967**

State, Territory, etc.	Family groups			Institutions		Total endowed children under 16 years
	Claims in force	Endowed children under 16 years		Number	Endowed child inmates under 16 years	
		Number	Average number per claim			
New South Wales . . . . .	594,967	1,281,366	2.15	135	6,113	1,287,479
Victoria . . . . .	453,872	1,000,722	2.21	123	5,231	1,005,953
Queensland . . . . .	231,113	540,748	2.34	56	3,293	544,041
South Australia . . . . .	158,645	351,664	2.22	56	1,661	353,325
Western Australia . . . . .	125,554	291,705	2.32	66	3,923	295,628
Tasmania . . . . .	54,506	127,688	2.34	22	499	128,187
Northern Territory . . . . .	7,597	17,484	2.30	38	5,821	23,305
Australian Capital Territory . . . . .	13,900	31,100	2.24	1	21	31,121
Abroad . . . . .	236	517	2.19	..	..	517
<b>Total . . . . .</b>	<b>1,640,390</b>	<b>3,642,994</b>	<b>2.22</b>	<b>497</b>	<b>26,562</b>	<b>3,669,556</b>

The following table shows, as at 30 June 1967, the number of claims in force and the number of endowed children under sixteen years in family groups, classified according to the number of endowed children in the family group. The families included in the table are not necessarily made up entirely of the children of one marriage, but may include step-children, foster children, adopted children, and any other children in the custody, care and control of the claimant.

**CHILD ENDOWMENT: ENDOWED CHILDREN UNDER 16 YEARS IN FAMILY GROUPS  
TOTAL, 30 JUNE 1967**

<i>Number of endowed children under 16 years in family group</i>	<i>Claims in force</i>	<i>Endowed children under 16 years</i>	<i>Number of endowed children under 16 years in family group</i>	<i>Claims in force</i>	<i>Endowed children under 16 years</i>
1 . . . . .	568,029	568,029	9 . . . . .	1,403	12,627
2 . . . . .	529,463	1,058,926	10 . . . . .	510	5,100
3 . . . . .	307,626	922,878	11 . . . . .	172	1,892
4 . . . . .	143,703	574,812	12 . . . . .	69	828
5 . . . . .	54,954	274,770	13 . . . . .	19	247
6 . . . . .	22,069	132,414	14 or more . . . . .	7	110
7 . . . . .	8,567	59,969			
8 . . . . .	3,799	30,392	<b>Total . . . . .</b>	<b>1,640,390</b>	<b>3,642,994</b>

Number of claims and endowed children—student children sixteen to twenty-one years

**CHILD ENDOWMENT: CLAIMS AND ENDOWED STUDENT CHILDREN  
STATES, TERRITORIES, ETC., 30 JUNE 1967**

State, Territory, etc.	Family groups			Institutions		Total endowed student children
	Claims in force	Endowed student children		Number	Endowed student child inmates	
		Number	Average number per claim			
New South Wales . . . . .	53,400	57,967	1.09	13	79	58,046
Victoria . . . . .	49,705	54,112	1.09	26	87	54,199
Queensland . . . . .	17,076	18,520	1.08	13	100	18,620
South Australia . . . . .	16,080	17,230	1.07	17	143	17,373
Western Australia . . . . .	9,517	10,579	1.11	21	118	10,697
Tasmania . . . . .	3,696	4,015	1.09	2	3	4,018
Northern Territory . . . . .	287	311	1.08	5	17	328
Australian Capital Territory . . . . .	1,839	2,051	1.12	..	..	2,051
Abroad . . . . .	23	29	1.26	..	..	29
Total . . . . .	151,623	164,814	1.09	97	547	165,361

**CHILD ENDOWMENT: ENDOWED STUDENT CHILDREN IN FAMILY GROUPS  
TOTAL, 30 JUNE 1967**

Number of endowed student children in family group	Claims in force	Endowed student children	Number of endowed student children in family group	Claims in force	Endowed student children
1 . . . . .	139,075	139,075	5 or more . . . . .	..	..
2 . . . . .	11,918	23,836			
3 . . . . .	617	1,851	<b>Total . . . . .</b>	<b>151,623</b>	<b>164,814</b>
4 . . . . .	13	52			

Liability and expenditure—children under sixteen years

**CHILD ENDOWMENT: CHILDREN UNDER 16 YEARS  
LIABILITY AND EXPENDITURE, STATES, TERRITORIES, ETC., 1966-67  
(\$'000)**

State, Territory, etc.	Annual liability at 30 June 1967			Total payments to endowees and institutions during year
	Family groups	Institutions	Total	
New South Wales . . . . .	59,206	477	59,683	64,654
Victoria . . . . .	46,743	408	47,151	51,780
Queensland . . . . .	26,108	257	26,365	28,252
South Australia . . . . .	16,459	130	16,589	17,799
Western Australia . . . . .	13,966	306	14,272	14,757
Tasmania . . . . .	6,164	39	6,203	6,583
Northern Territory . . . . .	844	454	1,298	1,199
Australian Capital Territory . . . . .	1,458	2	1,460	1,699
Abroad . . . . .	24	..	24	(a) 67
<b>Total . . . . .</b>	<b>170,972</b>	<b>2,072</b>	<b>173,044</b>	<b>186,790</b>

(a) Includes expenditure for endowed student children; separate figures not available.



*Liability and expenditure—student children sixteen to twenty-one years*

**CHILD ENDOWMENT: STUDENT CHILDREN, LIABILITY, AND  
EXPENDITURE, STATES, TERRITORIES, ETC., 1966-67**  
(\$'000)

State, Territory, etc.	Annual liability at 30 June 1967			Total payments to endowees and institutions during year
	Family groups	Institutions	Total	
New South Wales . . . . .	4,521	6	4,527	4,162
Victoria . . . . .	4,221	7	4,228	4,452
Queensland . . . . .	1,445	8	1,453	1,433
South Australia . . . . .	1,344	11	1,355	1,264
Western Australia . . . . .	825	9	834	742
Tasmania . . . . .	313	..	313	329
Northern Territory . . . . .	24	1	25	27
Australian Capital Territory . . . . .	160	..	160	84
Aboard . . . . .	2	..	2	(a)
<b>Total . . . . .</b>	<b>12,855</b>	<b>43</b>	<b>12,898</b>	<b>12,492</b>

(a) Included in preceding table showing expenditure for endowed children under sixteen years; separate figures not available.

*Child endowment summary, 1962-63 to 1966-67***CHILD ENDOWMENT: SUMMARY, AUSTRALIA, 1962-63 TO 1966-67**

Year	At end of year					Annual liability for endowment (b)	Total payments during year (b)
	Family group claims in force		Institutions	Endowed children			
	For children under 16 years(a)	For student children(a)					
						\$'000	\$'000
1962-63 . . .	1,535,388	..	497	3,457,620		139,876	135,421
1963-64 . . .	1,555,630	113,062	502	(c)3,631,047	(c)175,766	(c)(d)168,758	
1964-65 . . .	1,582,801	128,641	487	(c)3,710,616	(c)180,065	(c)172,830	
1965-66 . . .	1,610,490	132,900	488	(c)3,762,646	(c)182,288	(c)176,432	
1966-67 . . .	1,640,390	151,623	497	(c)3,834,917	(c)185,942	(c)(d)199,282	

(a) Claims by families with children under sixteen and student children are shown in both columns. Information on the number of families having such dual claims is not available. (b) A number of endowments are paid every twelve weeks. During two years out of every three there are four such payments but every third year there are five. Figures for annual liability, therefore, reflect trends in expenditure on child endowment more accurately than do figures for payments. (c) Includes student children and reflects higher rates for third and subsequent children under sixteen years in families. (d) Expenditure for this year includes five twelve-weekly payments.

**Commonwealth Rehabilitation Service**

The Commonwealth Rehabilitation Service was set up to help persons who are unable to work because of physical handicap, or who have had to give up their employment because of sickness or injury. It helps disabled persons to reach their maximum physical fitness and to prepare for suitable employment. They are given suitable treatment and training, the cases selected being those in which the person's disability is remediable and there are reasonable prospects of his engaging in a suitable vocation within three years after the commencement of treatment or training.

The service is available to invalid and widow pensioners, persons receiving unemployment, sickness or special benefits, persons receiving tuberculosis allowances, and persons aged fourteen or fifteen who, without treatment and training, would be likely to qualify for an invalid pension on reaching the age of sixteen years. During treatment, payment of pension or benefit continues. When vocational training begins the pension or benefit is suspended and a rehabilitation allowance, together

with a training allowance of \$3.00 a week, is paid instead. With an invalid pensioner, or a sickness, unemployment, or special beneficiary, the rehabilitation allowance is equivalent to and calculated in the same manner as an invalid pension. In the case of a widow pensioner the rate is the same as that of the widow's pension.

Living-away-from-home allowances are paid where necessary. Fares and living expenses (including those of an attendant where required) incurred in connection with treatment, training or attendance for an interview or for medical examination may also be paid. Necessary artificial replacements, surgical aids and appliances may be provided, free of charge, to a person receiving treatment and training or who needs them to assist him to engage in a suitable vocation after the discontinuance of his treatment and training or who needs them otherwise to assist in his rehabilitation. He may also be provided with books, equipment and tools of trade costing up to \$80 in any period of twelve months. Where books, equipment and tools of trade provided to assist a person to engage in a suitable vocation are retained by him, he is liable to repay the cost but is not required to make repayment until after he has commenced employment. The repayment may be made by instalments. If the treatment or vocational training does not result in the trainee's being able to engage in employment, he receives the pension or benefit to which he is entitled. Disabled persons who cannot qualify for the free service may pay for rehabilitation themselves, or they may be sponsored by government or private organisations. Rehabilitation allowances, training allowances, living-away-from-home allowances and other allowances are not payable in these cases. Books, tools, etc., are available on a repayment basis.

*Numbers dealt with by the service*

**COMMONWEALTH REHABILITATION SERVICE: AUSTRALIA, 1966-67**

Type	Referred	Accepted	Completed training	Placed in employment	
				After training (a)	Without training
Invalid pensioners . . . . .	8,318	342	93	85	111
Widow pensioners . . . . .	12	..	..	..	..
Unemployment and sickness beneficiaries .	12,617	921	164	165	579
Special beneficiaries . . . . .	3	1	..	1	..
Recipients of tuberculosis allowance .	178	16	4	5	14
Persons aged 14-15 years . . . . .	136	51	15	17	24
Persons provided with rehabilitation on payment of the cost by themselves or by another authority . . . . .	115	98	2	5	59
<b>Total . . . . .</b>	<b>21,379</b>	<b>1,429</b>	<b>278</b>	<b>278</b>	<b>787</b>

(a) Includes persons who had received training prior to 1 July 1966.

Of the 1,429 persons accepted during 1966-67, 69 per cent were under forty years of age. The average number undergoing rehabilitation at the end of each month during the year was 975. Total cost of this service during 1966-67 was \$1,843,873.

**Funeral benefits**

A funeral benefit of up to \$20.00 is payable to the person who has paid, or is liable to pay, the cost of the funeral of an age or invalid pensioner or of a claimant who, but for his death, would have been granted an age or invalid pension, or of a person who at the time of his death was receiving, or was a claimant for, a tuberculosis allowance, if he would otherwise have been qualified to receive an age or invalid pension. Where the cost of the funeral has been met partly by payment from a contributory funeral benefit fund of an organisation other than a friendly society, funeral benefit is payable to the extent of the amount (not above \$20.00) by which the cost of the funeral exceeded the amount paid from the fund. The maximum amount payable is increased to \$40.00 where an age, invalid or widow pensioner is liable for the funeral expenses of a spouse, a child under sixteen years, or another age, invalid or widow pensioner.

**FUNERAL BENEFITS GRANTED: STATES, TERRITORIES, ETC., 1962-63 TO 1966-67**  
(Number)

<i>State, Territory, etc.</i>	<i>1962-63</i>	<i>1963-64</i>	<i>1964-65</i>	<i>1965-66</i>	<i>1966-67</i>
New South Wales . . . . .	16,365	16,680	17,709	17,015	18,567
Victoria . . . . .	10,861	10,594	11,280	11,354	12,386
Queensland . . . . .	5,952	6,176	6,542	6,596	7,188
South Australia . . . . .	3,595	3,618	3,801	3,751	4,031
Western Australia . . . . .	2,589	2,749	2,981	2,709	3,129
Tasmania . . . . .	1,183	1,242	1,324	1,340	1,347
Northern Territory . . . . .	5	14	18	8	2
Australian Capital Territory . . . . .	74	73	94	92	108
Abroad . . . . .	..	2	5	2	6
<b>Total . . . . .</b>	<b>40,624</b>	<b>41,148</b>	<b>43,755</b>	<b>42,867</b>	<b>46,764</b>

Total cost of funeral benefits granted during 1966-67 was \$1,334,103.

**Maternity allowances**

Maternity allowances are paid to provide financial assistance towards the expenses associated with the birth of children and are additional to the benefits provided under the Commonwealth health scheme. They are not subject to a means test.

Subject to certain conditions, a maternity allowance is payable to a woman who gives birth to a child, either in Australia or on board a ship proceeding to Australia or from a port in Australia or an Australian Territory to another such port, and, on the date on which she lodges her claim, is residing in Australia or is in Australia and intends to remain permanently, provided she receives no benefit similar to a maternity allowance from the country from which she came. A woman who gives birth to a child during a temporary absence from Australia may also be eligible. An alien mother may receive the allowance if she or her husband resided in Australia for at least twelve months immediately prior to the birth of the child, or if she is likely to remain in Australia permanently.

*Rates of allowance.* The allowance is \$30.00 if the mother has no other children, \$32.00 if she has one or two children under sixteen, and \$35.00 if she has three or more other children under sixteen. The amount is increased by \$10.00 for each additional child born at a birth. An advance payment of \$20.00 may be made four weeks before the expected date of birth. The balance is payable immediately after the birth. Payment may be made in respect of the birth of a still-born child, or a child which lives for less than twelve hours, if the child had developed for at least five and a half months.

*Claims paid*

**MATERNITY ALLOWANCES: CLAIMS PAID AT EACH RATE**  
**STATES AND TERRITORIES, ETC., 1966-67**  
(Number)

State, Territory, etc.	Multiple births									Total claims paid
	Single births			Twins		Triplets				
	\$30.00	\$32.00	\$35.00	\$40.00	\$42.00	\$45.00	\$50.00	\$52.00	\$55.00	
New South Wales . . . . .	29,657	35,926	12,662	233	384	206	1	7	2	79,078
Victoria . . . . .	24,143	29,862	11,332	248	332	174	1	5	1	66,098
Queensland . . . . .	11,922	14,244	6,985	106	139	88	..	3	2	33,489
South Australia . . . . .	7,564	9,501	3,352	57	76	45	1	..	..	20,596
Western Australia . . . . .	6,447	7,848	3,006	56	111	41	..	..	1	17,510
Tasmania . . . . .	2,625	3,440	1,469	12	38	20	1	1	..	7,606
Northern Territory . . . . .	652	772	518	5	4	4	..	..	..	1,955
Australian Capital Territory . . . . .	802	1,047	322	11	19	9	..	1	..	2,211
Abroad . . . . .	114	115	12	..	1	..	..	..	..	242
Total . . . . .	83,926	102,755	39,658	728	1,104	587	4	17	6	228,785

**MATERNITY ALLOWANCES: CLAIMS PAID, STATES, TERRITORIES, ETC.  
1962-63 TO 1966-67**

<i>Year</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Abroad</i>	<i>Total</i>
<b>NUMBER</b>										
1962-63.	82,700	66,021	35,659	21,357	17,152	8,560	1,516	1,789	310	235,064
1963-64.	83,580	64,438	34,966	21,096	16,988	8,437	1,663	2,013	270	233,451
1964-65.	80,592	64,424	33,963	20,820	16,667	7,821	1,661	2,015	176	228,139
1965-66.	77,739	63,934	33,488	20,594	16,764	7,578	1,731	2,178	305	224,311
1966-67.	79,078	66,098	33,489	20,596	17,510	7,606	1,955	2,211	242	228,785
<b>AMOUNT (\$'000)</b>										
1962-63.	2,665	2,117	1,153	685	552	277	49	56	10	7,563
1963-64.	2,649	2,065	1,128	675	546	272	54	60	9	7,457
1964-65.	2,569	2,058	1,093	666	534	251	53	64	6	7,294
1965-66.	2,475	2,040	1,075	657	536	243	55	70	8	7,159
1966-67.	2,514	2,104	1,077	654	559	243	62	72	8	7,294

**Unemployment, sickness, and special benefits**

Unemployment and sickness benefits are paid to males over sixteen and under sixty-five years of age, and females over sixteen and under sixty years of age, who are unemployed or who are temporarily incapacitated for work and thereby suffer loss of income. They must have been living in Australia during the preceding twelve months or be likely to remain permanently in Australia. A person receiving an age, invalid or widow's pension, or a service pension (as distinct from a war pension) under the *Repatriation Act 1920-1967* or a tuberculosis allowance, is ineligible to receive a benefit.

To qualify for an unemployment benefit a person must establish that he is unemployed and that his unemployment is not due to his being a direct participant in a strike, that he is capable and willing to undertake suitable work, and that he has taken reasonable steps to obtain such work. Registration with the local Commonwealth District Employment Office is necessary. To qualify for a sickness benefit, a person must establish that he is temporarily incapacitated for work because of sickness or accident and that he has thereby suffered a loss of salary, wages or other income. A married woman is not eligible to receive a sickness benefit if it is reasonably possible for her husband to maintain her. Where her husband is able to maintain her only partially, a benefit may be paid at such rate as is considered reasonable in the circumstances. In exceptional cases a married woman may qualify for unemployment benefit in her own right.

A special benefit may be granted to a person not qualified for unemployment or sickness benefit who is not receiving an age, invalid or widow's pension or a service pension, and who, because of age, physical or mental disability or domestic circumstances, or for any other reason, is unable to earn a sufficient livelihood for himself and his dependants. Recipients of special benefits include, among others, persons caring for invalid parents, also deserted wives and persons ineligible for age, invalid or widows' pensions because of lack of residence qualifications.

Special benefits are also paid to migrants who are in reception centres awaiting their first placement in employment in Australia. During this time they receive a short instruction in English and in Australian conditions to facilitate their assimilation into the community and employment.

*Rates of benefit.* The maximum weekly rates of benefit payable and permissible income in respect of benefit periods which commenced on or after 1 March 1962 are as follows.

	<i>Maximum weekly rate</i>	<i>Permissible weekly income</i>
	\$	\$
Unmarried person under 18 years of age . . . . .	3.50	2.00
Unmarried person 18 to 20 years of age . . . . .	4.75	2.00
All others . . . . .	8.25	4.00

An additional benefit of \$6 a week may be paid for a dependent spouse and \$1.50 a week for each dependent child under sixteen years of age if resident in Australia. Additional benefit, at the same rate as that for a dependent spouse, may be paid where a woman is keeping house for a claimant who has one or more children under sixteen years of age in his care. It may be granted only if no such benefit is payable for his wife, and the housekeeper is substantially dependent on him but not employed by him.

The weekly rate of benefit is reduced by the amount by which a beneficiary's other income exceeds the amount shown in the relevant line of the final column in the preceding table. For unemployment benefit purposes the income of the spouse is also taken into account unless the claimant and his spouse are permanently separated. For sickness benefit purposes the income from an approved friendly society or other similar approved body in respect of the incapacity for which sickness benefit is payable is disregarded. 'Income' does not include child endowment or other payments for children, Commonwealth hospital and pharmaceutical benefits, a tuberculosis allowance, or an amount paid in reimbursement of medical, dental or similar expenses. There is no means test on property.

The amount of compensation, damages or similar payment, or war pension, if paid in respect of the same incapacity as that for which sickness benefit is claimed, is deducted from the sickness benefit. If not paid in respect of the same incapacity, compensation is regarded as income and war pension is ignored.

There is a waiting period of seven days for which unemployment or sickness benefit is not payable.

### Benefits

#### UNEMPLOYMENT, SICKNESS, AND SPECIAL BENEFITS STATES AND TERRITORIES, 1966-67

	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Number admitted to benefit—									
Unemployment—									
Males . . . . .	36,230	17,009	32,727	16,497	3,988	1,819	258	382	108,910
Females . . . . .	14,391	6,364	10,953	6,315	2,585	1,347	80	79	42,114
Persons . . . . .	50,621	23,373	43,680	22,812	6,573	3,166	338	461	151,024
Sickness—									
Males . . . . .	20,875	11,774	8,947	4,730	4,270	1,594	162	214	52,566
Females . . . . .	7,771	4,942	3,123	1,694	1,489	553	51	87	19,710
Persons . . . . .	28,646	16,716	12,070	6,424	5,759	2,147	213	301	72,276
Special—									
Ordinary—									
Males . . . . .	580	267	358	83	41	98	7	2	1,436
Females . . . . .	478	1,632	256	68	28	62	..	1	2,525
Persons . . . . .	1,058	1,899	614	151	69	160	7	3	3,961
Migrants—									
Persons . . . . .	864	4,346	..	169	..	..	..	..	5,379
Total—									
Males(a) . . . . .	57,685	29,050	42,032	21,310	8,299	3,511	427	598	162,912
Females(a) . . . . .	22,640	12,938	14,332	8,077	4,102	1,962	131	167	64,349
Persons(b) . . . . .	81,189	46,334	56,364	29,556	12,401	5,473	558	765	232,640
Persons on benefit at end of year—									
Unemployment—									
Males . . . . .	5,520	2,867	4,225	2,488	387	325	..	21	15,833
Females . . . . .	2,650	1,292	1,691	1,320	398	201	1	8	7,561
Persons . . . . .	8,170	4,159	5,916	3,808	785	526	1	29	23,394
Sickness—									
Males . . . . .	3,118	1,773	1,006	604	436	176	14	25	7,152
Females . . . . .	1,338	839	474	297	251	91	5	12	3,307
Persons . . . . .	4,456	2,612	1,480	901	687	267	19	37	10,459
Special—									
Ordinary—									
Males . . . . .	185	85	86	26	16	22	3	2	425
Females . . . . .	426	865	223	74	54	80	..	1	1,723
Persons . . . . .	611	950	309	100	70	102	3	3	2,148
Migrants—									
Persons . . . . .	57	253	..	12	..	..	..	..	322
Total—									
Males(a) . . . . .	8,823	4,725	5,317	3,118	839	523	17	48	23,410
Females(a) . . . . .	4,414	2,996	2,388	1,691	703	372	6	21	12,591
Persons(b) . . . . .	13,294	7,974	7,705	4,821	1,542	895	23	69	36,323
Benefits paid—									
Unemployment . . . \$'000	3,948	1,882	3,068	1,653	374	228	14	19	11,186
Sickness . . . . \$'000	2,655	1,753	964	554	445	190	20	30	6,611
Special(b) . . . \$'000	338	603	159	63	36	47	1	1	1,247
Total benefits paid(b) . \$'000	6,941	4,239	4,191	2,271	855	464	35	50	19,044

(a) Excludes migrants in reception centres.

(b) Includes migrants in reception centres.

**UNEMPLOYMENT, SICKNESS, AND SPECIAL BENEFITS: SUMMARY, AUSTRALIA  
1962-63 TO 1966-67**

Year	Number admitted to benefit			Average number of persons on benefit at end of each week			Amount paid in benefits		
	Un-employment	Sickness	Special (a)	Un-employment	Sickness	Special (a)	Un-employment	Sickness	Special (a)
							\$'000	\$'000	\$'000
1962-63	200,982	66,402	8,227	39,706	10,514	2,647	21,301	6,750	1,263
1963-64	139,500	69,503	7,602	25,925	10,994	2,684	13,458	6,901	1,266
1964-65	88,512	68,637	6,719	13,742	10,457	2,567	6,807	6,498	1,235
1965-66	114,497	69,585	7,838	14,927	10,044	2,507	7,813	6,483	1,261
1966-67	151,024	72,276	9,340	20,650	10,108	2,413	11,186	6,611	1,247

(a) Includes migrants in reception centres.

### Widows' pensions

*Rates and conditions.* Widows' pensions are payable according to the following classes. The rates shown have been in operation since October 1966.

*Class 'A'.* A widow who has the custody, care and control of one or more children under the age of sixteen years—\$884 per annum (\$17 a week). This includes the standard rate pension of \$676 per annum (\$13 a week) and a mother's allowance of \$208 per annum (\$4 a week). In addition, a flat rate allowance of \$78 per annum (\$1.50 a week) for one child and, subject to the means test, extra pension of \$78 per annum (\$1.50 a week) for each other child under sixteen years are payable. Payment may be made for a child over sixteen years until he reaches twenty-one years, if he is wholly or substantially dependent on the widow and is receiving full-time education at a school, college, or university.

*Class 'B'.* A widow who has no children under sixteen years of age or eligible full-time student children in her custody, care and control, and who is not less than fifty years of age or who, after having attained the age of forty-five years, ceased to receive a Class 'A' widows' pension because she no longer had the custody, care and control of a child—\$611 per annum (\$11.75 a week).

*Class 'C'.* A widow who is under fifty years of age and has no children under the age of sixteen years, or eligible full-time student children, in her custody, care and control, but is in necessitous circumstances within the twenty-six weeks after the death of her husband—\$11.75 a week for not more than twenty-six weeks after the death of her husband. If the widow is pregnant this period may be extended until the child's birth. She may then become eligible for a Class 'A' widow's pension.

Widow pensioners may receive supplementary assistance of up to \$104 per annum (\$2 a week), subject to a means test, if they pay rent or pay for board and lodging or for lodging. From October 1958 to October 1965 the rate was \$1 a week and was payable to widows, otherwise qualified, who were considered to be entirely dependent on the pension.

For classes 'A' and 'B' the term 'widow' includes a wife who has been deserted by her husband without just cause for a period of at least six months, a divorcee, a woman whose husband has been imprisoned for at least six months, and a woman whose husband is in a mental hospital. Certain dependent females also may qualify for 'A', 'B' or 'C' Class pensions.

The residence qualification is five years' continuous residence in Australia immediately prior to the date of lodgment of the claim, but this period may be reduced to one year if the widow and her husband were living permanently in Australia when he died. Certain absences are ignored.

A widow's pension is not payable to a woman receiving an age or invalid pension, a sheltered employment allowance, a tuberculosis allowance, or a war widow's pension, or to a deserted wife or divorcee who has not taken reasonable action to obtain maintenance from her husband or former husband.

*Means test.* Widows' pensions are subject to a means test on income and property. The pension payable depends on the claimant's *means as assessed*. These consist of her annual rate of income together with a property component equal to \$2 for every complete \$20 by which the value of her property is in excess of a stipulated sum. In the case of a Class 'B' widow, \$400 of property is exempt.

A Class 'A' widow has a basic exemption of \$2,000 when the value of her property exceeds \$4,500, but no property component is calculated where she has property of no more than \$4,500 in value. A Class 'A' pension is not payable where a widow has property valued at \$16,040 or more; no Class 'B' pension is payable where property is \$11,720 or more. In each case the maximum rate of pension is reduced by the amount by which the widow's *means as assessed* exceed \$520. There is no specific means test for the Class 'C' pension, which is paid only where it is evident that a widow has insufficient means of support. The types of income and property disregarded for means test purposes are the same as for age and invalid pensions. Supplementary assistance is reduced by the amount by which *means as assessed* exceed \$52.

### Pensions

#### WIDOWS' PENSIONS: STATES, TERRITORIES, ETC., 1966-67

State, Territory, etc.	Number admitted —all classes (a)	Pensions current at end of year				Average weekly pension at end of year (b)	Amount paid in pensions during year (b) (c)
		Class 'A'	Class 'B'	Class 'C'	All classes		
						\$	\$'000
New South Wales . . .	5,993	13,219	14,700	33	27,952	15.79	21,188
Victoria . . .	4,185	8,667	9,785	29	18,481	15.82	14,387
Queensland . . .	2,315	5,529	5,728	21	11,278	15.96	8,962
South Australia . . .	1,515	3,235	3,747	9	6,991	15.72	5,448
Western Australia . . .	1,099	2,333	2,885	10	5,228	15.43	4,011
Tasmania . . .	516	1,264	1,166	2	2,432	16.35	1,983
Northern Territory . . .	43	118	102	1	221	16.52	191
Australian Capital Territory . . .	61	161	146	..	307	17.17	197
Abroad . . .	..	(d)	(d)	(d)	(d)	..	71
<b>Total . . .</b>	<b>15,727</b>	<b>34,526</b>	<b>38,259</b>	<b>105</b>	<b>72,890</b>	<b>15.81</b>	<b>56,438</b>

(a) Excludes transfers from one class to another. (b) Includes supplementary assistance and allowances. (c) Includes payments to benevolent homes for maintenance of pensioners. (d) Included in the figures for the State or Territory in which the pensioner is normally domiciled.

#### WIDOWS' PENSIONS: SUMMARY, AUSTRALIA, 1962-63 TO 1966-67

Year	Number admitted —all classes (a)	Pensions current at end of year				Average weekly pension at end of year (b)	Amount paid in pensions during year (b) (c)
		Class 'A'	Class 'B'	Class 'C'	All classes		
						\$	\$'000
1962-63 . . .	12,537	25,261	33,112	104	58,477	10.45	31,353
1963-64 . . .	14,207	27,371	34,659	94	62,124	13.57	41,569
1964-65 . . .	14,243	29,713	35,574	111	65,398	14.09	47,044
1965-66 . . .	13,972	31,796	36,703	107	68,606	14.53	50,017
1966-67 . . .	15,727	34,526	38,259	105	72,890	15.81	56,438

(a) Excludes transfers from one class to another. (b) Includes supplementary assistance and allowances. (c) Includes payments to benevolent homes for maintenance of pensioners.

### Reciprocal social services agreements with other countries

*New Zealand.* An agreement between the Governments of Australia and New Zealand for reciprocity in social services came into operation on 3 September 1943 and was amended from 1 July 1949. The reciprocal arrangements cover age and invalid pensions, widows' pensions, child endowment, and unemployment and sickness benefits, and apply to both permanent and temporary changes of residence. Residence in one country may be treated as residence in the other country in relation to entitlement to benefits in which a residential qualification applies. Persons from one country taking up a permanent residence in the other country become eligible for any of the specified benefits of the new country under the same conditions (with one or two exceptions) as apply to citizens of that country. Persons in receipt of any of the specified benefits in one country may continue to receive those benefits while temporarily absent in the other country.

*Britain.* A reciprocal agreement on social services between Britain and Australia came into operation on 7 January 1954. Amendments became effective from 1 April 1958 and 1 October 1962. Under the current agreement residence in one country may be treated as residence in the other country as the basis for entitlement to benefits in which a residential qualification applies. Australians going to Britain for permanent residence are treated in Britain as if they had been insured under the National Insurance Scheme while in Australia, so that they can qualify for various National Insurance benefits. There is also provision for the safeguard of social service rights for persons going from one country to the other for temporary residence.

**Commonwealth assistance to aged persons homes and sheltered workshops and for accommodation for disabled persons employed in sheltered workshops**

*The Aged Persons Homes Act 1954-1967.* This Act is designed to encourage the provision of homes in which aged persons may reside in conditions approaching normal domestic life.

To be eligible for assistance under the Act an organisation must be:

- (a) carried on otherwise than for the purposes of profit or gain to the individual members; and
- (b) a religious organisation, an organisation the principal objects or purposes of which are charitable or benevolent, an organisation of former members of the defence forces established in every State or a State branch of such an organisation, an organisation approved by the Governor-General for the purposes of the Act, or a local governing body.

An organisation conducted or controlled by, or by persons appointed by, the Government of the Commonwealth or of a State is not eligible for assistance under the Act.

The Director-General of Social Services may make a grant of money to an organisation as assistance towards meeting the cost of the construction or purchase of a home, including land, to be used permanently for the accommodation of aged persons. The grant is made on a basis of \$2 for each \$1 raised by the organisation (\$1 for each \$1 from 1954 to 1957), not counting money which the organisation receives from a governmental body (other than a local governing body) or borrowed. Before a grant is made the Director-General must be satisfied that the sum of the money expended and the money at present available for expenditure by the organisation towards the capital cost of the home, together with the amount of the grant, will be not less than the capital cost of the home.

The following table gives information regarding grants approved during 1966-67. The amounts granted include new grants approved in 1966-67 together with adjustments made during the year in respect of grants originally approved in earlier years.

**AGED PERSONS HOMES: GRANTS APPROVED, AMOUNTS GRANTED, AND BEDS PROVIDED, STATES AND TERRITORIES, 1966-67**

	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Total</i>
Grants approved . No.	39	30	15	50	13	9	..	2	158
Amounts granted \$'000	2,220	3,037	785	3,613	888	343	..	208	11,095
Beds provided . No.	677	828	229	1,073	250	109	..	61	3,227

The following table gives information regarding grants approved for each of the years 1962-63 to 1966-67. The amounts granted in each year include new grants approved in that year together with adjustments made during the year in respect of grants originally approved in earlier years. In Year Books prior to No. 53, 1967, these subsequent adjustments were included in the amount shown for the respective year in which the original grant was approved.

**AGED PERSONS HOMES: GRANTS APPROVED, AMOUNTS GRANTED, AND BEDS PROVIDED AUSTRALIA 1962-63 TO 1966-67**

<i>Year</i>	<i>Grants approved</i>	<i>Amounts granted</i>	<i>Beds provided</i>
	No.	\$'000	No.
1962-63 . . .	154	8,566	2,939
1963-64 . . .	134	7,281	2,466
1964-65 . . .	151	6,680	2,083
1965-66 . . .	149	9,576	2,807
1966-67 . . .	158	11,095	3,227



Since the commencement of the Act in December 1954, 1,488 grants amounting to \$69,499,000 have been approved, and accommodation has been provided for 26,444 aged persons.

*The Disabled Persons Accommodation Act 1963.* This Act came into operation on 25 November 1963 but was repealed from 30 June 1967, when its provisions were incorporated in the *Sheltered Employment Assistance Act 1967* (see below).

Three grants under this Act amounting to \$252,036 were approved during 1966-67 in respect of projects in New South Wales and the Australian Capital Territory. The total grants approved to 30 June 1967 amounted to \$372,118.

*The Sheltered Employment (Assistance) Act 1967.* This Act, which came into operation on 30 June 1967, provides for subsidies of \$2 for \$1 to eligible organisations towards the capital cost of sheltered workshops, the equipment for them, and accommodation for disabled people employed or likely to be employed in sheltered workshops. The Act covers the erection of buildings and the purchase of existing buildings. In both cases the cost of land is included in the capital cost as is the cost of any necessary conversion of an existing building. The subsidy may also be paid towards the rental, for up to three years, where rented premises are used to provide sheltered employment. Organisations eligible for grants under the Act are the same as those specified under the Aged Persons Homes Act. A substantial number of the people employed in the sheltered workshop must be medically qualified for an invalid pension, or be likely to become so qualified if not provided with sheltered employment, and must receive payment for their work before the organisation can qualify for a subsidy.

#### Telephone rental concessions

Effective from 1 October 1964 an amendment to the Telephone Regulations of the Post and Telegraph Act provides that a telephone service for qualified age, invalid and widow pensioners and blind people is available at an annual rental equal to two-thirds of the amount otherwise payable. The Department of Social Services re-imburses the Postmaster-General's Department for the cost of the scheme including administrative costs. Expenditure during 1966-67 was \$1,455,410, plus administrative costs amounting to \$42,742.

### Selected non-government organisations

#### National Safety Council of Australia

The National Safety Council of Australia was founded in Victoria in 1927. In 1959 it was re-organised, and new Articles of Association were adopted in 1961, placing it on a more truly federal basis and reflecting the expanded character of the Council in the forty years since its formation. The objects of the Council are to devise and encourage the adoption of safety measures of all kinds, to promote discussion of all matters relating to safety measures, to conduct an educational campaign among the people of Australia to stimulate the adoption and observance of safety measures, and to consider, initiate and support improvements in the laws of the Commonwealth of Australia, the States and local governing bodies, calculated to prevent accidents.

The Council is now registered in Canberra, with Divisions established in all States. It is managed by a Federal Council responsible for those objectives which are of a national character. Each State Division controls its own affairs which are of State or local character.

#### Life saving

There are two life saving organisations in Australia, the Royal Life Saving Society—Australia and the Surf Life Saving Association of Australia. The objects of these organisations are the prevention of death from drowning and other forms of asphyxiation; the education of the general public in methods of life saving and resuscitation of the apparently drowned or asphyxiated; technical education in water safety; the encouragement of swimming and life saving in schools and other organisations; the encouragement of all aspects of swimming and aquatics which would assist in saving lives; and the initiation of research within the field of water safety and life saving.

The Royal Life Saving Society operates at lakes, rivers, and bay and harbour beaches, and gives instruction to school pupils and members of other bodies throughout Australia except on surf beaches.

The Surf Life Saving Association of Australia controls all life saving activities on the ocean beaches throughout Australia. In all, over 230 clubs are affiliated, comprising a membership of over 25,000. Volunteer patrols operate every week-end, and in recent years over 5,000 rescues have been recorded during each surfing season. The total number of recorded rescues during the past sixty years is 156,030.

**Royal Humane Society**

The Royal Humane Society of Australasia has as its main object the granting of awards to all who with bravery, skill and perseverance risk their own lives in saving or attempting to save those of their fellow creatures. The classes of awards are (a) Gold Medal, (b) Silver Medal, (c) Bronze Medal, and (d) Certificate of Merit. The Clarke Medal is awarded for the outstanding case of the year, and the Rupert Wilks Trophy is awarded for the most outstanding bravery by a child under thirteen years of age.

**The Order of St John**

The Priory in Australia of the Most Venerable Order of the Hospital of St John of Jerusalem is the governing body of the various activities of the Order, which comprises the St John Ambulance Association, the St John Ambulance Brigade and the Hospitallers' Clubs in all States and Commonwealth Territories.

Members of the St John Ambulance Association teach first aid, home nursing, hygiene, and child welfare, and members of the St John Ambulance Brigade provide first aid at public functions. The Hospitallers' Clubs in each State undertake the collection of funds for the St John Ophthalmic Hospital in Jerusalem and other duties which tend to bring together all persons interested in the work of the Order. The Order of St John maintains ambulance transport services in some States, acts as an auxiliary to such services in other States, and provides technical reserves for the medical services of the Crown.



## CHAPTER 14

# PUBLIC HEALTH

## STATE GOVERNMENT ACTIVITIES

(Includes activities of the Commonwealth Government in the Northern Territory and the Australian Capital Territory)

### Public health legislation and administration

For details of the administration of health services in each State, the Northern Territory, and the Australian Capital Territory, *see* pages 543–550 of Year Book No. 53. The following paragraphs refer briefly to administrative changes in 1967.

In *New South Wales* the Bureau of Maternal and Child Health has developed its services. It now has established pre-natal clinics (for expectant mothers living long distances from obstetric hospitals), baby health centres (where mothers are instructed in the care and management of babies), well baby clinics and paediatric referral clinics (for the routine medical examination and assessment of infants and pre-school children), and an advisory medical service for children attending day nurseries and pre-school kindergartens. Free urine tests for the detection of inborn errors of metabolism are carried out on babies aged six weeks and over.

In *South Australia* the former Poliomyelitis Branch of the Department of Public Health is now known as the Epidemiology Branch.

In *Tasmania* the *Division of Psychiatric Services*, formerly of the Department of Health Services, has been abolished, and its work has been taken over by the newly established and independent Mental Health Services Commission created under the *Mental Health Services Act* 1967. The new Act placed all employees of the Division of Psychiatric Services under the Commission as the employing authority and provided for their transfer from the Public Service. The Commission controls the major psychiatric rehabilitation hospitals and provides regional clinical psychiatric facilities. Some services operate at the general hospitals, while others, such as a child psychiatric unit and alcoholic rehabilitation service, are established separately. Day hospital facilities are available in Hobart, Launceston, and Wynyard.

The Canberra Community Hospital in the *Australian Capital Territory* is now administered, subject to the direction of the Minister for Health, by a management board of five members, three of whom are appointed by the Minister for Health, and two are elected by the Australian Capital Territory Advisory Council from the Council's members.

### Supervision and care of infant life

Because the health of mothers and infants depends largely on pre-natal attention as well as after-care, government, local government and private organisations provide instruction and treatment for mothers before and after confinement. The health and well-being of mother and child are looked after by infant welfare centres, baby clinics, crèches, etc.

In all States, Acts have been passed with the object of supervising the conditions of infant life and reducing the rate of mortality. (Information regarding infant mortality will be found in Chapter 8, Vital Statistics—*see* pages 202–7.) Departments control the boarding out of the wards of the State to suitable persons. Wherever possible, the child is boarded out to its mother or to a near female relative. Stringent conditions regulate the adoption, nursing and maintenance of children placed in foster-homes by private persons, while special attention is devoted to the welfare of ex-nuptial children.

Under the provisions of the *Social Services Act* 1947–1967 maternity allowances are paid to provide financial assistance towards the expenses associated with the birth of children. A sum of \$30 is payable to the mother in respect of each confinement at which a living or viable child is born if the mother has no other children under sixteen years of age. Where there are one or two other

children under sixteen, the amount payable is \$32, and where there are three or more other children under sixteen, the amount payable is \$35. Where more than one child is born at a birth the amount of the allowance is increased by \$10 in respect of each additional child. More detailed information concerning maternity allowances is given in Chapter 13, Welfare Services.

### Nursing activities

Several State Governments maintain institutions which provide treatment for mothers and children and, in addition, subsidies are granted to various associations engaged in welfare work.

*Infant welfare centres.* The following table gives particulars of the activities of infant welfare centres for the year 1967. The figures relate to all centres, whether permanently staffed or on a temporary or part-time basis. Centres may be located at accommodation specially provided for this purpose, or at halls, schools, etc.

INFANT WELFARE CENTRES: STATES AND TERRITORIES, 1967

	N.S.W.	Vic.	Qld (a)	S.A. (a)	W.A.	Tas.	N.T. (a)	A.C.T. (a)	Aust.
Number of centres	434	691	273	279	71	107	17	30	1,902
Attendances at centres	1,041,047	1,432,815	457,787	274,499	240,513	143,686	21,210	45,264	3,656,821
Visits by nurses to homes	n.a.	185,397	30,512	36,945	26,400	88,074	6,323	5,080	n.a.

(a) Year ended 30 June 1967.

Mobile units are used as centres in some States. The numbers of these in 1967 included in the above table were as follows: Victoria, 5; Queensland, 2; South Australia, 2; Western Australia, 4; and Tasmania, 12.

In the last thirty-five years the number of attendances at the infant welfare centres has increased almost four-fold. The numbers of attendances at five-year intervals since 1930 were as follows: 1930, 919,893; 1935, 1,355,306; 1940, 2,035,299; 1945, 2,927,764; 1950, 3,049,375; 1955, 3,099,233; 1960, 3,482,383; and 1965, 3,598,781.

*Bush Nursing Associations.* Treatment for mothers and children is also provided by the Bush Nursing Associations. The numbers of centres maintained by the Associations in 1967 were: New South Wales, 18; Victoria, 58; Queensland, 5; South Australia, 33; Western Australia, 18; and Tasmania, 23.

### Medical and dental inspection of school children

Medical and dental inspection of school children is carried out in all States, in the Northern Territory and in the Australian Capital Territory. In some States travelling clinics have been established to deal with dental defects.

#### New South Wales

School medical and dental services in New South Wales are under the control of the State Department of Public Health. The staff of the Child Health and Special Services sections of the Bureau of Maternal and Child Health, which conduct the school medical services and provide diagnostic, evaluation and supervisory services for atypical children, included in January 1968, 74 medical officers, 5 full-time and 13 part-time psychiatrists, 9 part-time ear, nose and throat surgeons, an ophthalmologist, 23 clinical psychologists, 79 nurses, 19 social workers, and 23 speech therapists.

The aim of the school medical services is to examine all school children in the State in order to discover any departure from normal health, physical or mental, and to notify the parent or guardian of any need for further investigation or treatment. Annual visits are made to government schools, and also to private schools which have applied for this service, in the metropolitan, Newcastle, and Wollongong areas, and in some of the larger country towns. Children are fully examined at kindergarten or on entry into primary school. Review examinations, with particular emphasis on vision and hearing, are conducted on pupils in fourth grade in primary schools and second and fourth forms in secondary schools, and on others who appear to need additional examinations. Excluding 109,308 review examinations, medical officers of this service examined 110,945 children in 1967. In other country areas there is a scheme for school children to be examined by local medical practitioners under the supervision of local municipal and shire councils.

The Department conducts 9 child health centres (8 in the metropolis and 1 at Newcastle), 12 child guidance clinics (11 in the metropolis and 1 at Newcastle), 10 hearing clinics (9 in the metropolis and 1 at Newcastle) and 14 speech therapy clinics, 9 of which are established at child health centres. Children in need of treatment other than child guidance or speech therapy are referred to a medical practitioner or to the out-patient department of a public hospital.

The school dental service has a staff of 32 dental officers, 30 dental assistants, and 5 dental nurses. The service is provided by 7 dental clinics established in the grounds of 3 metropolitan and 4 country public schools, 18 mobile clinics in country and outer metropolitan areas, and 3 dental teams with the Royal Flying Doctor Service (based at Broken Hill). In 1967, 91,428 school children were examined by the school dental service, and 20,234 of these were treated, and 32,809 notified of dental defects.

### Victoria

The School Medical Service is a division of the Maternal and Child Welfare Branch of the Department of Health. It has a full time staff of 40 doctors, 44 nurses and 21 administrative or office staff. As well, it has a part time staff of 3 medical officers, 3 nurses and the following consultants: 3 paediatricians, 2 psychiatrists and an ophthalmologist.

The present aim of the service is to examine fully all primary school children in their second year at school and to test their vision again in grade 4, and in form 2 of secondary schools. Children may also be examined at other times on the suggestion of teachers or parents, who suspect that ill health is interfering with school progress. Any disabilities found in children are brought to the notice of their parents who are advised to consult their family doctor for further advice or treatment. School nurses under medical direction visit homes and schools to follow up cases so referred. In co-operation with the Education Department and the Mental Health Authority, children with defects of vision and hearing and those who are mentally backward are assessed for special educational help.

School medical officers and nurses in all their activities seek to improve community and child health through health education to parents, teachers, teachers in training, and school children. Special programmes are conducted in teachers colleges where, through education and counselling, school medical officers seek to induce positive attitudes to health and healthy living, and to foster the ability of the teacher in training to impart this to children.

The School Medical Service advises the Education Department on medical problems and undertakes all medical assessments in connection with the teaching service, including medical assessment for temporary and permanent appointments, resumption of duty after sick leave, confinement leave, and medical eligibility of teachers for superannuation benefits.

The School Dental Service has an establishment of 43 dental officers and provides dental attention for children in the metropolitan area at 3 dental centres, and for a number of country districts by means of 15 mobile units, including 6 twin-surgery units. It also provides dental services for children's institutions in and around Melbourne and certain provincial centres. The service is now providing dental attention for some 80,000 primary school children.

### Queensland

During 1966-67 medical officers and nurses examined 108,998 school children; 4,997 children had disabilities of which parents were notified and advised to seek attention. In western Queensland local doctors act as part-time ophthalmic surgeons. Advice is given on school sanitation, communicable diseases in schools and health education.

During 1967 school dentists gave treatment to 10,489 school children who resided in areas beyond easy reach of hospital dental clinics. The treatment was carried out at 4 rail dental clinics and with portable equipment at schools. In addition, school children are treated at hospital dental clinics in the larger towns.

### South Australia

State schools within a radius of 60 miles from Adelaide and at 5 large country centres are visited annually, and the children are medically examined while in grades 1, 4, and 7 in the primary schools and in their second and fourth years in secondary schools. Efforts are made to visit the remaining country schools every 3 years, when all the children are examined. Students who wish to become teachers are examined on appointment as teaching scholars while still attending secondary schools and again immediately prior to entering a Teachers' College and finally when they leave the College to take up teaching. Courses of lectures in health education are given to all College students.

During 1967, 40,312 children were examined by medical officers in 129 country and 153 metropolitan schools. Of these, 4,813 required treatment for defective vision, 2,689 for defective hearing, and 9,988 for dental disorders. Dentists using mobile vans examined 3,785 school children in country

areas where a private dental service was not readily available; children offered treatment in 1967 numbered 3,886, including some who were examined in the previous year; 3,547 accepted and were treated free of charge. There were 2,914 children examined at the Deafness Guidance Clinic during 1967. Of the 1,423 new patients, 699 were referred to doctors or hospitals for treatment. Educational work was assisted by talks to mothers' clubs and interviews with parents by doctors and dentists, and by home visits and interviews by nurses.

### **Western Australia**

The School Medical Service of the State Public Health Department employs 7 full-time medical officers. Details of this service during 1967 compared with 1966 figures, shown in parentheses, were as follows: number of children examined 56,088 (56,877) (metropolitan, 37,180 (41,388), country, 18,908 (15,489)). The 417 (376) schools visited comprised metropolitan, 262 (281), of which 200 (205) were government and 62 (76) were non-government schools, and country, 155 (95) of which 124 (76) were government and 31 (19) were non-government schools.

During 1967 the 12 (15 in 1966) full-time dentists employed by the School Dental Service visited 5 (4) metropolitan schools, 74 (87) country schools and 21 (27) orphanages and Aboriginal missions. The number of children examined was 10,208 (9,247). With the consent of the parents, 6,357 (5,256) children were treated. Eight dental vans were in operation.

### **Tasmania**

During 1967, 3 full-time and 9 part-time medical officers examined school children in government and non-government schools. In addition 2 regional medical officers of health also examined school children. Twenty-three full-time and 6 part-time sisters visited homes and schools. Of the 32,386 children examined by medical officers, 7,502 were found to have defects.

The School Dental Health Service, available free to all school children, aims to examine and treat every child each six months. In 1966-67 fixed surgeries were in use or under construction in 19 districts and in clinics at Hobart and Launceston. Fifteen mobile caravans were also in use. An orthodontic service based in Hobart, using fixed and mobile clinics, supplements the therapeutic dental service. During the year ended 30 June 1967 operative dental treatment was given to 31,987 patients.

In 1966 a school of dental nursing was established in Hobart. Ten students were enrolled in 1966 and have now almost completed their training. A further 10 commenced training in 1967. The school treats 40 patients a day in its training surgeries. It is expected that approximately 30 nurses will work with dentists in the School Dental Health Service; a dental nursing certificate, or its equivalent, is required before a nurse can be appointed.

### **Northern Territory**

The Schools Medical Officer makes routine physical examinations of all children attending pre-school centres and schools, 2,201 children being examined during 1966-67. The only children not so examined by him are those at the special Aboriginal schools, who are examined during Aboriginal health surveys. A special dental service for school and pre-school children is available in Darwin and Alice Springs. During 1966-67, 2,272 dental services were carried out at these two centres. School doctors and dentists travel throughout the Territory to carry out diagnosis and treatment.

### **Australian Capital Territory**

The A.C.T. Health Services Branch of the Commonwealth Department of Health is responsible for health aspects of child welfare in the Australian Capital Territory. These include the School Medical Service carried out by 3 medical officers and 3 trained nurses, and the School Dental Service, staffed by 15 dentists, together with surgery and clinical assistants.

A Child Guidance Clinic assists children with psychiatric disorders. During 1967, 339 new cases were referred to it by private doctors, the School Medical Service, social workers, and the Australian Capital Territory Education Clinic. The Child Guidance Clinic is staffed by 3 part-time psychiatrists, a full-time psychologist, a social worker and a speech therapist.

Medical examinations are carried out at all public and private schools within the territory. The total number of school children examined during the year 1966-67 was 6,832. Examinations of children attending pre-school centres were made according to the time available, 183 pre-school children being examined.

Defects during the year were: 326 eyesight, 71 ear, nose and throat, 210 cases of hearing loss, 107 speech, and 268 miscellaneous. Triple antigen injections, totalling 10,311 in 1966-67, were given at regular sessions held throughout the year, and 2,223 anti-poliomyelitis injections were given at baby health clinics. In the same period, 25,056 doses of Sabin oral poliomyelitis vaccine were administered.

The School Dental Service provides free treatment for children attending infants and primary schools, both public and private, in the Australian Capital Territory. During 1967, 13,277 children were examined in Canberra and Jervis Bay schools. This service is also carrying out a detailed clinical assessment of the effects of fluoridation of Canberra's water supply.

### Disposal of dead by cremation

The first crematorium in Australia was opened in South Australia in 1903. At 31 December 1967 there were twenty-two crematoria in Australia, situated as follows: New South Wales, 8; Victoria, 4; Queensland, 4; South Australia, 1; Western Australia, 2; Tasmania, 2; Australian Capital Territory, 1. There is no crematorium in the Northern Territory. The following table shows the number of cremations and total deaths in each State and Territory for each of the years 1963 to 1967.

CREMATIONS AND TOTAL DEATHS: STATES AND TERRITORIES, 1963 TO 1967

State or Territory	1963		1964		1965		1966		1967	
	Crema- tions	Total deaths	Crema- tions	Total deaths	Crema- tions	Total deaths	Crema- tions	Total deaths	Crema- tions	Total deaths (a)
New South Wales	15,664	37,226	16,321	39,487	16,651	38,949	17,733	40,546	17,486	39,613
Victoria	8,782	26,920	9,832	27,548	9,857	28,031	10,362	28,673	10,173	28,373
Queensland	4,432	13,275	4,745	14,523	4,905	14,114	5,097	14,861	5,156	14,736
South Australia	1,304	8,201	1,506	8,906	1,638	8,788	1,957	9,323	2,076	9,071
Western Australia	1,900	5,976	2,003	6,429	2,010	6,274	2,308	6,772	2,448	6,779
Tasmania	786	2,818	864	3,174	912	3,043	947	3,159	1,019	3,228
Northern Territory	..	161	..	164	..	161	..	154	..	527
Australian Capital Territory	..	317	..	363	..	355	(b)81	441	(c)180	376
Australia	32,868	94,894	35,271	100,594	35,973	99,715	38,485	103,929	38,538	102,703

(a) Includes Aborigines. (b) Commenced operation 8 July 1966. Cremations include 32 in respect of deaths registered in the States as follows: N.S.W., 31; S.A., 1. (c) Includes 68 in respect of deaths registered in N.S.W.

### COMMONWEALTH GOVERNMENT ACTIVITIES

Commonwealth services outlined in the following pages are those provided under the National Health Service or otherwise administered by the Commonwealth Department of Health. For particulars of services administered by the Commonwealth Department of Social Services and of Commonwealth expenditure from the National Welfare Fund on all forms of social and health services see Chapter 13, Welfare Services.

At the time of federation the only health function given to the Commonwealth Government under the Constitution was the power to make laws with respect to quarantine. Following on the passing of the *Quarantine Act* 1908 a branch of the Department of Trade and Customs, under the control of a Director of Quarantine, was created on 1 July 1909. The Commonwealth Department of Health was formed in 1921 by the extension and development of the quarantine service, the Director of Quarantine becoming the Director-General of Health. An amendment to the Constitution in 1946 gave the Commonwealth power to make laws with respect to pharmaceutical, hospital and sickness benefits, and medical and dental services. In addition, the Commonwealth Government has used its powers under Section 96 of the Constitution to make grants to the States for health purposes.

### National health benefits

#### Pharmaceutical benefits

A comprehensive range of drugs and medicines is made available to all persons receiving treatment from a medical practitioner registered in Australia. The benefits are supplied by an approved pharmacist upon presentation of a prescription, or by an approved hospital to patients receiving treatment at the hospital. The patient pays the first 50 cents of the cost of a prescription dispensed by an approved pharmacist, but pensioners who are eligible for treatment under the Pensioner Medical Service (see page 489) receive all benefits without any contribution being made. Special arrangements exist to cover prescriptions dispensed at locations outside the normal conditions of supply, e.g. in remote areas. Total Commonwealth expenditure on pharmaceutical benefits in the year 1966-67 was \$101,280,799.



### Hospital and nursing home benefits

The *National Health Act 1953-1967* provides for the payment of Commonwealth hospital and nursing home benefits. Commonwealth benefits are payable only in respect of treatment received in approved hospitals and approved nursing homes. For the purposes of the National Health Act, premises which provide medical treatment, care and accommodation for sick persons are approved either as hospitals or as nursing homes, depending mainly on their clinical standards and the type of patients accommodated. Usually premises are approved as hospitals if their general standards are substantially equivalent to those of a public hospital and if hospital treatment, as defined in the National Health Act, is provided. Premises are approved as nursing homes where their general standards are similar to those prevailing in benevolent homes, convalescent homes, rest homes, or homes for the aged, and if nursing home treatment as defined in the Act is provided.

*Patients in approved hospitals.* A basic principle of the provision of benefits for patients in approved hospitals is the Commonwealth support of voluntary insurance against the costs involved. Insured patients in approved hospitals receive a Commonwealth hospital benefit of \$2 a day which is paid through the contributors' registered hospital benefits organisations. Total payments by contributors to organisations range from 15 cents to 65 cents a week for single persons and from 30 cents to \$1.30 a week for families. Examples of contributions and benefits payable, including Commonwealth benefits of \$2 a day, are:

Weekly contributions		Total benefits	
Single person	Family	Daily	Weekly
\$	\$	\$	\$
0.15	0.30	5.60	39.20
0.25	0.50	8.00	56.00
0.30	0.60	9.20	64.40
0.40	0.80	11.60	81.20
0.55	1.10	15.20	106.40
0.65	1.30	17.60	123.20

A contribution of 80 cents a week covers a family for benefits in excess of the public ward charge in any State. Contributions are allowable deductions for income tax purposes.

During the waiting period of two months after joining an organisation the Commonwealth benefit is payable at the rate of 80 cents a day, unless the organisation pays fund benefits, in which case Commonwealth benefit is payable at the higher rate of \$2 a day. While a member is in arrears with his contributions and fund benefits are not payable, the Commonwealth benefit is payable at the rate of 80 cents a day unless the member was in receipt of unemployment or sickness benefits under the *Social Services Act 1947-1967*, when the normal rate of \$2 a day is payable.

Contributors who would have been excluded from fund benefits because of organisations' rules covering pre-existing ailments, chronic illnesses, or maximum benefits are assured of hospital fund benefits by the provisions of the special account plan. Since 1 January 1967 the hospital fund benefit usually payable in such cases is \$3 a day and is paid either from a special account, guaranteed by the Commonwealth, or from the ordinary account of the organisation. If the payments from the special account exceed contributions credited to the account, the amount of deficit is reimbursed by the Commonwealth.

A person who joins a registered hospital benefits organisation within eight weeks of being discharged from an approved nursing home is entitled to immediate Commonwealth benefit of \$2 a day and to fund benefits without having to serve a waiting period. If a qualified patient in an approved hospital is not insured (i.e. not a member of a hospital benefits organisation), a Commonwealth benefit of 80 cents a day is deducted from his account by the hospital. The Commonwealth subsequently reimburses the hospital. Under arrangements made under the National Health Act public hospitals generally provide free public ward treatment to pensioners enrolled in the Pensioner Medical Service who are classified as public ward patients. The Commonwealth pays the hospitals a benefit of \$5 a day for each pensioner patient.

*Patients in approved nursing homes.* The Commonwealth nursing home benefit of \$2 a day is payable in respect of all qualified patients in approved nursing homes, whether the patients are insured or not. This benefit is deducted from the patient's account and subsequently paid by the Commonwealth to the nursing home. If no charge is made by the nursing home, the Commonwealth nursing home benefit of \$2 a day is still payable to the nursing home in respect of qualified patients.

There is no need for patients in approved nursing homes to be insured with a registered hospital benefits organisation, fund benefits being generally not payable. However, the National Health Act provides that where an insured special account patient is treated in an approved nursing home for

an illness or injury requiring hospital treatment of the kind provided in an approved hospital and is given treatment equivalent to that which he would have received in an approved hospital, approval may be given to the payment of special account fund benefits.

*Australians overseas.* Australian residents who receive hospital treatment in recognised hospitals in overseas countries, while temporarily absent from Australia, are eligible to receive the Commonwealth and fund benefits to which they are entitled.

*Expenditure on hospital and nursing home benefits.* The following table shows the amount of Commonwealth hospital and nursing home benefits paid during 1966-67. This does not include expenditure on mental hospitals (*see page 488*).

**COMMONWEALTH HOSPITAL AND NURSING HOME BENEFITS PAID  
STATES AND TERRITORIES, 1966-67  
(\$'000)**

Type of patient	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Uninsured patients (80c)	654	424	894	111	148	46	86	12	2,376
Insured patients (\$2)(a)	8,322	4,921	2,225	1,939	1,685	649	(b)	(b)	19,740
Pensioner patients (\$3.60)	6,976	4,164	3,506	1,582	1,787	572	35	109	18,731
Nursing home patients (\$2)	9,531	4,884	3,548(c)	2,009	2,033	761	(c)	..	22,767
<b>Total</b>	<b>25,483</b>	<b>14,393</b>	<b>10,173</b>	<b>5,641</b>	<b>5,653</b>	<b>2,029</b>	<b>121</b>	<b>121</b>	<b>63,614</b>

(a) Excludes payments of \$3,784,000 towards special accounts deficits in 1966-67. (b) Members who live in the Northern Territory or the Australian Capital Territory, or who are abroad, receive their Commonwealth benefit and fund benefit through membership of an organisation registered in one of the States, and payments to them are included in the respective States. (c) South Australia includes Northern Territory.

*Registered hospital benefits organisations.* The following table shows the number of registered hospital benefits organisations, the membership at 30 June 1967, and fund benefits paid during 1966-67. As many persons contribute on behalf of both themselves and their dependants, the total number of persons covered by hospital benefit schemes is considerably higher than the number of members.

**HOSPITAL BENEFITS: ORGANISATIONS AND FUND BENEFITS, STATES, 1966-67**

	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	Aust.(a)
Registered organisations at 30 June 1967(b)	32	43	3	13	9	9	109
Membership at 30 June 1967	1,467,065	1,063,335	321,940	403,154	288,232	113,849	3,657,575
Fund benefits paid(c)	\$'000 31,799	17,870	4,579	6,835	5,638	2,290	69,011

(a) Members who live in the Northern Territory or the Australian Capital Territory, or who are abroad, receive their Commonwealth benefit and fund benefit through membership of an organisation registered in one of the States, and payments to them are included in the respective States. (b) Excludes interstate branches. (c) Includes \$2,632,000 ancillary benefits.

### Mental hospitals

In 1946, when Commonwealth hospital benefits were introduced for patients in public hospitals, no provision was made for patients in mental hospitals. To help meet the cost of maintaining patients in mental hospitals the Commonwealth Parliament passed the *Mental Institutions Benefits Act 1948*. This Act ratified agreements with the States, whereby it was provided that the States would cease making charges for the maintenance of mental patients and that the Commonwealth would pay the States a benefit based on the amount which had been collected by the States from the relatives of patients in mental hospitals by way of charges for maintenance.

These agreements operated for five years and terminated in the latter half of 1954. The amount contributed by the Commonwealth during the operation of the agreements was approximately one shilling (10 cents) a day for each patient. When the agreements terminated, Dr Alan Stoller, of the Victorian Mental Hygiene Authority, was commissioned to undertake a survey of mental health facilities and needs in Australia. His report, issued in May 1955, stated that serious overcrowding existed in the majority of mental hospitals in Australia. The provision of more beds was the most urgent need, but other accommodation and rehabilitation facilities were also required.

Following the report, the Commonwealth made an offer of \$20 million to the States as part of a capital expenditure programme of \$60 million on increasing and improving patient accommodation. All States accepted the Commonwealth offer. By 1963 more than three-quarters of the total grant under the *States Grants (Mental Institutions) Act 1955* had been distributed and the Commonwealth Government announced in November 1963 its intention of continuing assistance to the States towards capital costs on a similar basis, but without overall limit, for a period of three years. In May 1964 the *States Grants (Mental Health Institutions) Act 1964* was passed to implement that policy. This Act provided for the continuation of Commonwealth aid of \$1 for every \$2 of capital expenditure by the States on mental health facilities for the three-year period ending 30 June 1967. With the passing of the *States Grants (Mental Health Institutions) Act 1967*, this date has been extended to 30 June 1970. The following table sets out the amounts which have been paid to the State Governments by the Commonwealth Government from 1962-63 to 1966-67.

EXPENDITURE ON MENTAL HOSPITALS BY THE COMMONWEALTH  
GOVERNMENT: STATES, 1962-63 TO 1966-67  
(\$'000)

Year	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	Aust.
1962-63 . . . . .	1,295	..	75	104	116	..	1,590
1963-64 . . . . .	982	..	108	173	332	..	1,595
1964-65(a) . . . . .	659	711	225	265	447	197	2,504
1965-66 . . . . .	1,717	1,567	146	242	338	529	4,539
1966-67 . . . . .	2,217	1,192	288	193	260	823	4,973
Total, 1962-63 to 1966-67	6,870	3,470	842	977	1,493	1,549	15,201

(a) Expenditure for 1964-65 includes final grants, totalling \$406,454, made under the 1955 Act as follows: New South Wales, \$274,938; Queensland, \$21,210; and South Australia, \$110,306.

There are no mental hospitals in the Northern Territory or in the Australian Capital Territory.

#### Medical benefits

A medical benefits scheme has operated since July 1953, being authorised firstly by the National Health (Medical Benefits) Regulations and then by the *National Health Act 1953-1967*. The basic principle of the scheme is Commonwealth support of voluntary insurance towards meeting the costs of medical attention. The benefits provided by the Commonwealth are paid either on a fee-for-service basis in respect of the items set out in the schedule to the National Health Act or in the form of a subsidy not exceeding half of the payments made to doctors by registered organisations under contract arrangements.

Commonwealth fee-for-service benefits are paid in accordance with the list of benefits set out in the schedule to the *National Health Act 1953-1967*. The present schedule came into force on 1 March 1968.

In order to qualify for a Commonwealth benefit a person is required to be insured with a registered medical benefit organisation. The organisation pays the Commonwealth benefit to the contributor, usually at the time it pays its own benefit. Reimbursement of the Commonwealth benefit is subsequently made to the organisation by the Commonwealth.

Commonwealth benefits ranging from 80 cents for ordinary general practitioner visits to \$60 for major operations are payable to members of registered medical benefit organisations. The fund benefit payable varies according to the weekly contributions paid by the member and the particular medical service. Examples of the range of benefits are as follows.

Type of service	Combined Commonwealth and fund benefits (a) \$
Certain major operations . . . . .	180.00
Appendix operation . . . . .	45.00
Midwifery . . . . .	33.75
Tonsils—	
Under 12 years . . . . .	15.75
12 years and over . . . . .	22.50
Surgery consultation—general practitioner . . . . .	from \$1.60 to \$2.00

(a) The total benefit varies according to the weekly contribution rate. The most common contribution rates now range from 20 cents to 30 cents a week for single persons and from 40 cents to 60 cents a week for families.

Provision is made for the payment of fund benefit from special account for claims lodged by contributors who have reached maximum benefits or who make claims in respect of pre-existing ailments. The medical special accounts are operated along the same principles as the hospital special accounts (*see* pages 486–7) and the special account fund benefit paid usually matches the Commonwealth benefit for the particular service.

*Australians overseas.* Australian residents temporarily absent from Australia who receive medical attention by registered medical practitioners in the country they are visiting are entitled, if insured, to the Commonwealth benefit and the medical fund benefit to which they would be entitled if the service were rendered in Australia.

*Expenditure on medical benefits.* The following table shows the number of registered medical benefit organisations, their membership, the number of medical services rendered to members and their dependants, and payments of Commonwealth benefits and medical fund benefits to members of registered organisations. As many persons contribute on behalf of both themselves and their dependants, the total number of persons covered by medical benefit schemes is considerably higher than the number of contributors. At 30 June 1967 the estimated number of persons covered by contributory medical schemes was 8,846,000.

MEDICAL BENEFITS: SUMMARY, STATES, 1966–67

	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	Aust. (a)
Registered organisations(b)(c) No.	28	19	6	8	8	9	78
Members(c) . . . . . No.	1,363,431	969,018	323,863	372,931	279,373	109,624	3,418,240
Medical services . . . . . No.	11,593,764	8,086,044	3,086,113	3,281,131	2,403,856	818,196	29,269,104
Commonwealth benefit(d) \$'000	16,823	11,644	4,267	5,111	3,848	1,191	42,885
Fund benefit(e) . . . . . \$'000	21,207	12,115	4,872	5,365	3,956	1,425	48,941

(a) Members who live in the Northern Territory or the Australian Capital Territory, or who are abroad, receive their Commonwealth benefit and fund benefit through membership of an organisation registered in one of the States.  
(b) Excludes interstate branches. (c) At end of period. (d) Excludes payments of \$956,000 towards special accounts deficits. (e) Includes \$2,042,000 ancillary fund benefits.

### Pensioner Medical Service

The Pensioner Medical Service, which commenced on 21 February 1951, was introduced under the authority of the National Health (Medical Services to Pensioners) Regulations made under the provisions of the *National Health Services Act 1948–1949*. The service has been continued under the provisions of the *National Health Act 1953–1967*. The service provided to eligible pensioners consists of medicine provided free of charge and a medical service of a general practitioner nature such as that ordinarily rendered by a general medical practitioner in his surgery or at the patient's home. Specialist services are not provided. Patients may be charged a small fee by doctors for travelling and attendance outside normal surgery or visiting hours. Doctors participating in the scheme are paid on a fee-for-service basis by the Commonwealth Government.

Persons eligible to receive the benefits of the Pensioner Medical Service are those receiving a full or part age, invalid or widow's pension under the *Social Services Act 1947–1967*; a full or part service pension under the *Repatriation Act 1920–1967*; a sheltered employment allowance under the *Social Service Act 1947–1967*; or an allowance under the *Tuberculosis Act 1948*; and their dependants.

At 30 June 1967 the total number of pensioners and dependants enrolled in the Pensioner Medical Service was 1,043,337, while the number of doctors participating in the scheme at that date was 6,175. During 1966–67 doctors in the scheme provided 8,187,264 services—visits and surgery consultations—for persons enrolled in the scheme. For these services they were paid \$14,351,156. The average number of services rendered by doctors to each enrolled person was 8.0.

### Anti-tuberculosis campaign

The main provisions of the *Tuberculosis Act 1948* are as follows: (a) Section 5 authorises the Commonwealth to enter into an arrangement with the States for a national campaign against tuberculosis; (b) Section 6 empowers the Commonwealth to take over or provide specified facilities for the diagnosis, treatment, and control of tuberculosis; (c) Section 8 provides for the setting up of an advisory council to advise the Commonwealth Minister for Health on matters relating to the national campaign; and (d) Section 9 authorises the Commonwealth to pay allowances to sufferers from tuberculosis and to their dependants.

Under an arrangement with the Commonwealth Government, each State conducts a campaign against tuberculosis. The Commonwealth Government reimburses the State for all approved capital expenditure in relation to tuberculosis, and for net maintenance expenditure to the extent that it exceeds net maintenance expenditure for the year 1947–48. Thus the States carry out the physical

or field work of the national campaign and the Commonwealth acts in an advisory, co-ordinating, and financial capacity. For this reason the Commonwealth has not found it necessary to make much use of its powers under Section 6 of the Tuberculosis Act. An advisory council, known as the National Tuberculosis Advisory Council, has been set up. There are twelve members, the chairman being the Commonwealth Director-General of Health.

To help reduce the spread of infection the Commonwealth Government pays allowances to persons suffering from infectious tuberculosis, so that they may give up work and undergo treatment. These allowances have been in operation since 13 July 1950. The rates now payable are: married sufferer with a dependent wife, \$26.75 a week; sufferer without a spouse but with a dependent child or children, \$17.00 a week; dependent child or children under sixteen years of age and full-time student children from sixteen to twenty-one years, \$1.50 a week for each dependent child (additional to child endowment); sufferer without dependants, \$16.25 a week (reducible to \$13.00 a week if a person is maintained free of charge in an institution).

There is a means test on income but not on property. The allowance is reduced by the amount by which a person's income from sources other than his allowance exceeds, in the case of a person receiving the married person rate, \$17.00 a week; a person who is without a spouse or dependent female and is entitled to a 'single person' rate, \$10.00 a week; and a person with a spouse but who is not entitled to a 'married person' rate, \$8.50 a week.

*New tuberculosis cases notified.* The following table gives particulars of the number of new cases of tuberculosis notified in Australia for 1967.

**TUBERCULOSIS: NEW CASES NOTIFIED(a), STATES AND TERRITORIES, 1967**

State or Territory	Age group (years)					Total
	0-14	15-34	35-54	55 and over	Not stated	
New South Wales . . . . .	41	141	301	370	..	853
Victoria . . . . .	54	123	211	211	..	599
Queensland . . . . .	26	57	156	210	5	454
South Australia . . . . .	8	33	35	65	..	141
Western Australia . . . . .	14	26	53	49	..	142
Tasmania . . . . .	3	12	17	18	..	50
Northern Territory . . . . .	3	14	21	7	..	45
Australian Capital Territory . . . . .	..	6	2	1	..	9
<b>Australia . . . . .</b>	<b>149</b>	<b>412</b>	<b>796</b>	<b>931</b>	<b>5</b>	<b>2,293</b>

(a) Figures supplied by the Director of Tuberculosis in each State.

*Commonwealth expenditure.* Expenditure by the Commonwealth Government on its anti-tuberculosis campaign is set out in the following tables. The figures for maintenance differ from those in the table shown in the chapter Welfare Services because they include administrative costs, which are not a charge on the National Welfare Fund.

**COMMONWEALTH EXPENDITURE ON ANTI-TUBERCULOSIS CAMPAIGN  
STATES AND TERRITORIES, 1966-67  
(\$'000)**

State or Territory	Allowances	Maintenance		Total
		(a)	Capital	
New South Wales . . . . .	372	4,012	356	4,740
Victoria . . . . .	263	3,374	110	3,747
Queensland . . . . .	340	2,196	28	2,564
South Australia . . . . .	98	708	5	811
Western Australia . . . . .	53	589	..	641
Tasmania . . . . .	44	360	..	404
Northern Territory . . . . .	21	..	..	21
Australian Capital Territory . . . . .	2	9	..	10
<b>Australia . . . . .</b>	<b>1,193</b>	<b>11,247</b>	<b>499</b>	<b>12,939</b>

(a) Includes \$264,000 for administrative costs.

**COMMONWEALTH EXPENDITURE ON ANTI-TUBERCULOSIS  
CAMPAIGN: AUSTRALIA, 1962-63 TO 1966-67**  
(£'000)

<i>Year</i>	<i>Allowances</i>	<i>Maintenance (a)</i>	<i>Capital</i>	<i>Total</i>
1962-63 .	1,607	9,942	984	12,533
1963-64 .	1,593	10,679	598	12,871
1964-65 .	1,458	10,354	696	12,508
1965-66 .	1,286	13,586	696	15,569
1966-67 .	1,193	11,247	499	12,939

(a) Includes administrative costs.

#### Anti-poliomyelitis campaign

Information concerning the initial production by the Commonwealth Government in 1955 of anti-poliomyelitis vaccine in Australia, and of the testing procedures which were carried out, is contained in Year Book No. 49 and earlier issues. Information regarding the campaign against poliomyelitis, using Salk vaccine, is contained in Year Book No. 53 (page 560) and in earlier issues.

One million doses of each of the three types of monovalent Sabin vaccine were imported by the Commonwealth in October 1962 for use in a possible emergency. The decision whether to use the Sabin vaccine rests with the individual State health authorities.

Following the success of a pilot scheme in 1964, the Tasmanian Government conducted a full scale Sabin vaccination programme in the latter months of 1965. In this campaign the oral vaccine was made available to all, irrespective of previous vaccination status.

Following a recommendation of the National Health and Medical Research Council in May 1966, all States except Victoria indicated that Sabin oral vaccination campaigns would be commenced during 1967. The Commonwealth commenced Sabin vaccination in the Australian Capital Territory in September 1966 and implemented a campaign in the Northern Territory during the cooler months of 1967.

Sabin vaccine is taken by mouth. Three doses of vaccine are given at intervals of at least eight weeks.

*New cases of poliomyelitis notified.* The numbers of new cases of poliomyelitis notified, and confirmed by the Poliomyelitis Sub-committee of the National Health and Medical Research Council, are shown for each State for each year from 1963 to 1967 in the following table.

#### POLIOMYELITIS: NEW CASES NOTIFIED, STATES AND TERRITORIES, 1963 TO 1967

<i>Year</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
1963 . . .	3	19	1	8	5	..	..	..	36
1964 . . .	1	6	..	..	..	..	..	..	7
1965 . . .	3	..	..	..	..	1	..	..	4
1966 . . .	..	..	1	..	..	..	..	..	1
1967 . . .	..	1	..	..	..	..	..	..	1

#### Free milk for school children scheme

The *States Grants (Milk for School Children) Act* 1950 was passed with the object of improving the diet of school children by the addition of a small quantity of milk each day. All children under the age of thirteen years attending government or non-government primary schools, including nursery schools, kindergartens, crèches and missions for Aborigines, are eligible to receive free milk. The cost of the milk and half the capital or incidental costs, including administrative expenses of the scheme, are reimbursed by the Commonwealth to the States. All States now participate in the scheme. At 30 June 1967 approximately 1,774,000 children were entitled to receive free milk under this scheme. Expenditure by the Commonwealth Government during the years 1962-63 to 1966-67 was as follows.

**COMMONWEALTH EXPENDITURE ON MILK FOR SCHOOL CHILDREN SCHEME  
STATES AND TERRITORIES, 1962-63 TO 1966-67  
(\$'000)**

<i>Year</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
1962-63	2,636	1,901	1,146	714	586	384	53	60	7,480
1963-64	2,663	2,186	1,120	708	618	399	50	55	7,799
1964-65	2,881	2,069	1,215	760	640	389	72	60	8,085
1965-66	2,916	2,386	1,259	801	622	408	56	74	8,521
1966-67	3,073	2,394	1,400	860	701	451	77	93	9,049

The figures in the foregoing table differ slightly from those in the table shown in Chapter 13, Welfare Services, as they include capital and administrative costs. Figures in the latter table represent only expenditure which is a charge on the National Welfare Fund, i.e. the cost of the milk.

### Commonwealth organisations concerned with health

This section summarises the activities of various Commonwealth organisations concerned with public health. More detailed information on the function and operations of these organisations is given in Year Book No. 53, pages 561-6.

*The National Health and Medical Research Council* was established in 1936 to replace the National Health Council. Its main functions are to advise Commonwealth and State Governments on all matters of public health legislation and administration, on matters concerning the health of the public and on medical research. It also advises the Commonwealth and State Governments on the merits of reputed cures or methods of treatment which are from time to time brought forward for recognition. The Council advises the Commonwealth Minister for Health on the application of expenditure from the Medical Research Endowment Fund which was established under the *Medical Research Endowment Act* 1937 to provide assistance to Departments of the Commonwealth or of a State engaged in medical research; to universities for the purpose of medical research; to institutions and persons engaged in medical research; and in the training of persons in medical research. The Commonwealth makes an annual appropriation for the Fund, the 1966-67 appropriation being \$959,000 and that for 1967-68, \$1,231,000.

*The National Biological Standards Laboratory* was set up under the *Therapeutic Substances Act* 1953-1959 which empowers the Commonwealth to ensure that therapeutic substances used for the prevention, diagnosis, and treatment of disease in man and animals are safe, pure, and potent. The Commonwealth Director-General of Health is authorised under the Act to set up laboratories to test such substances. Of the 1,791 samples examined by the Laboratory during 1966-67, 421 failed to meet the required standards. In addition, 1,048 safety tests were performed, 19 were failed and 10 were deferred for further testing. Administrative costs for 1966-67 were \$475,982, and \$90,819 was expended on plant and equipment.

*The Commonwealth Serum Laboratories* are controlled by the Commonwealth Serum Laboratories Commission, which is a body corporate established under the *Commonwealth Serum Laboratories Act* 1961-1967. The main functions of the Commission are to produce and sell prescribed biological products used for therapeutic purposes and to ensure the supply of prescribed essential biological products in accordance with national health needs. These functions include research and development relating to prescribed biological products and allied fields, and the maintenance of potential production capacity for use in emergencies. The Commission is expected under the Act to generate sufficient revenue from the sale of its commercial products to finance its activities relating to prescribed biological products. Certain services, determined by the Minister for Health from time to time, are payable by the Commonwealth. Payments to the Commission for these services in respect of the year 1966-67, totalling \$1,198,842, were as follows: cost of processed blood products supplied throughout Australia free of charge for medical purposes, \$867,371; cost of research on products not prescribed in regulations, \$316,347; and for reserve stocks of biological products including vaccines, \$15,126.

Fifteen *Commonwealth Health Laboratories* have been established under the *National Health Act* 1953-1967, principally in country areas throughout Australia, to provide facilities for the investigations into public health and preventive medicine and to assist local medical practitioners in the investigation and diagnosis of disease. The laboratories are situated in the following towns:

Albury, Alice Springs, Bendigo, Cairns, Canberra, Darwin, Hobart, Kalgoorlie, Launceston, Lismore, Port Pirie, Rockhampton, Tamworth, Toowoomba, and Townsville. During 1966-67 these laboratories performed 3,338,842 examinations and tests (Nuffield points score system) in respect of 545,028 patients. Administrative costs were \$1,172,059 and expenditure on plant and equipment was \$121,718.

The *Commonwealth Acoustic Laboratories* were established under the *Acoustic Laboratories Act* 1948 to undertake scientific investigations into hearing and problems associated with noise as it affects individuals. The laboratories also provide assistance in the general aural rehabilitation of ex-service personnel and school and pre-school children. The provision and maintenance of hearing aids is available free of charge to persons under twenty-one years of age and, since 10 November 1967, this service has been extended to persons in receipt of a Social Service pension and their dependants for a nominal fee of \$10. The cost of these services is met from the National Welfare Fund. The laboratories' functions also include the provision and maintenance of hearing aids on behalf of the Repatriation and other Commonwealth Departments. During 1966-67 the number of new cases examined at the laboratories was 15,493, including 6,822 children, 4,361 repatriation cases, 920 members of the defence forces, and 1,942 civil aviation referrals; 3,773 Calaid hearing aids were fitted and 24,159 maintained. The cost of supply and maintenance of hearing aids to persons under twenty-one years of age was \$241,585. Administrative costs of the laboratories were \$390,927 and expenditure on plant and equipment \$84,607.

The *Commonwealth X-ray and Radium Laboratory* was originally established in 1929 as the Commonwealth Radium Laboratory, and has served from that time as the Commonwealth centre for radiological physics and as custodian of all Commonwealth-owned radium used for medical purposes. The laboratory's functions have expanded over the years to include the physical aspects of X-rays; the distribution of all radio-isotopes used in Australia for medical purposes; the maintenance of facilities for radio-chemical investigation; and the assay of radioactive substances in the Australian environment. The laboratory also provides assistance in matters relating to protection against ionising radiations and operates a film-badge service to monitor the radiation exposure of those who work with such radiation. In 1966-67 the laboratory's radon service issued 31,961 millicuries of radon in the form of implants, needles and tubes for use in Victoria, South Australia, Tasmania, and New Zealand. A further 19,031 millicuries were issued by the associated centres in Sydney and Brisbane. There were 2,401 deliveries of radio-isotopes, including 49 different isotopes procured for use in medicine and medical research. Of these, 226 deliveries (including 12 different isotopes) were obtained from the Australian Atomic Energy Commission. Of the 49 isotopes, 21 were for use in medical diagnosis or treatment as distinct from medical research. Free issues for medical diagnosis and therapy supplied for patients throughout Australia were 37,548, the cost of \$132,000 being met from the National Welfare Fund. Film badges, numbering 74,711, were processed, assessed, and reported on. During 1966-67 an arrangement was made whereby the laboratory supplies radon direct to New Zealand users, and it was decided to install a whole-body monitor for use in investigation on the radio activity of selected samples and patients. Administrative costs for 1966-67 were \$244,487 and \$70,125 was expended on plant and equipment.

The *School of Public Health and Tropical Medicine* was established in 1930 by the Commonwealth Government at the University of Sydney under an agreement with that University. It provides training for medical graduates and students in public health and tropical medicine in addition to research and consultative activities in these and allied fields. During 1966-67, 11 diplomas were awarded in Public Health and 5 in Tropical Medicine and Hygiene. Costs met by the Commonwealth during 1966-67 were \$464,491 for administration and \$32,333 for plant and equipment.

The *Institute of Child Health* is associated with the School of Public Health at the University of Sydney and with the Royal Alexandra Hospital for Children at Camperdown. Its activities include research into medical and social problems of childhood, undergraduate and post-graduate teaching at the University of Sydney and collaboration with other national and international organisations concerned with child health and disease. Costs of the Institute paid by the Commonwealth during 1966-67 were \$102,769 for administration and \$44,046 for plant and equipment.

The *Commonwealth Bureau of Dental Standards* operates under Section 9 of the *National Health Act* 1953-1967. It is part of the Commonwealth Department of Health and is concerned with research, standards and testing related to dental and allied materials and processes. Its functions include the provision of a consultative service and testing facilities for manufacturers and distributors of dental materials. The number of these products tested during 1966-67 was 214. Expenditure on plant and equipment was \$37,805.

The *Australian Institute of Anatomy* also is part of the Commonwealth Department of Health and a number of Health Department sections are located in the Institute building. The scientific research work of the Institute is mostly concentrated on problems of nutrition by field surveys of dietary status and laboratory investigation into the biochemistry of nutrition and metabolism.



During 1966-67 this work was mainly directed towards nutritional problems in the Territory of Papua and New Guinea. The Institute also contains a museum section which includes a display of anatomical specimens and models.

### Control of infectious and contagious diseases

The provisions of the various Acts with regard to the compulsory notification of infectious diseases and the precautions to be taken against their spread are dealt with under the headings of quarantine and notifiable diseases.

#### Quarantine

The *Quarantine Act* 1908-1966 is administered by the Commonwealth Department of Health and has three sections of disease control, as follows: (i) human quarantine, which ensures that persons arriving from overseas are free of quarantinable disease; (ii) animal quarantine, which controls the importation of animals and animal products from overseas and the security of other animals present on vessels in Australian ports; and (iii) plant quarantine, which regulates the conditions of importation of all plants and plant products with the object of excluding plant diseases, insect pests and weeds.

In respect of interstate movements of animals and plants, the Act becomes operative only if the Governor-General considers that Commonwealth action is necessary for the protection of any State or States, and in general the administration of interstate movements of animals and plants is left in the hands of the States.

*Human quarantine.* All passengers and crews arriving in Australia from overseas, whether by air or sea, are subject to a medical inspection for the purpose of preventing the introduction of disease into Australia. At the major ports full-time quarantine officers carry out the work, but in the minor ports local doctors act as part-time quarantine officers. In each State, quarantine activities are controlled by the Commonwealth Director of Health, who is a senior medical officer of the Commonwealth Department of Health.

The main concern of the examining officers is to detect cases of the quarantinable diseases smallpox, cholera, yellow fever, plague, and typhus fever. These diseases are not endemic to Australia and it is of great importance to prevent their entry. Quarantine stations at the major ports and at Darwin and Townsville are kept ready for occupation at all times. In addition, persons arriving in Australia and suffering from infectious diseases such as chicken pox, mumps, scarlet fever, and measles are directed to appropriate care and placed in isolation where necessary.

Valid vaccination certificates are required of travellers to Australia as follows.

*Cholera.* All arrivals from locally infected areas and from India, Pakistan, Burma, Thailand, Vietnam, Philippines, Sabah, Sarawak, and Indonesia. No certificate is required in respect of children under one year of age.

*Yellow fever.* All arrivals from yellow fever endemic zones.

*Smallpox.* All arrivals from all countries except British Solomon Islands, Fiji, Nauru, New Zealand, Norfolk Island, Ocean Island, Territory of Papua and New Guinea, Gilbert and Ellice Islands, and Christmas (Indian Ocean), Cocos (Keeling), Heard, Kerguelen, Lord Howe, Macquarie, and Tonga Islands, provided travellers have not been outside these areas for at least fourteen days before arrival and that these areas are free from smallpox. Australia reserves the right, in respect of arrivals from other countries, to isolate any person who arrives by air without a smallpox vaccination certificate and refuses to be vaccinated. Children under one year of age are exempt. For passengers arriving in Australia by sea, exemption is granted to infants under twelve months of age and to persons who hold religious convictions against vaccination or who are suffering from a medical condition certified by a medical practitioner to contra-indicate smallpox vaccination.

All passengers, whether they arrive by sea or air, are required to give their intended place of residence in Australia, so that they may be traced if a case of disease occurs among the passengers on the aircraft or ship by which they travelled to Australia.

*Isolation.* Under the Quarantine Act, airline and shipping operators are responsible for the expenses of isolation of all travellers who disembark and (i) have come from a cholera infested area, or a cholera area specified above, within five days and do not possess a cholera vaccination certificate; or (ii) have come from an endemic zone within six days and do not possess a yellow fever vaccination certificate; or (iii) arrive by air without a smallpox vaccination certificate and refuse to be vaccinated on arrival.

The numbers of cases of infectious (non-quarantinable) diseases which were discovered among the passengers and crew of overseas vessels and aircraft calling at Australian ports during 1966-67 and during the preceding four years are shown in the following tables.

**HUMAN QUARANTINE: CASES OF INFECTIOUS  
(NON-QUARANTINABLE) DISEASES ON OVERSEAS VESSELS AND  
AIRCRAFT CALLING AT AUSTRALIAN PORTS, 1966-67**

Disease	Number of overseas vessels and aircraft on which cases were found	Number of cases of infectious disease	
		Passengers	Crew
Chicken pox . . . . .	39	165	9
Dysentery . . . . .	1	1	..
Infectious hepatitis . . . . .	5	4	1
Measles . . . . .	40	320	..
Mumps . . . . .	26	30	2
Rubella . . . . .	2	2	..
Scarlet fever . . . . .	1	..	2
Tuberculosis . . . . .	1	1	..
Venereal disease—			
Gonorrhoea . . . . .	90	..	108
Syphilis . . . . .	37	..	43
Other . . . . .	4	..	7
<b>Total . . . . . (a)</b>	<b>246</b>	<b>523</b>	<b>172</b>

(a) On some vessels there were cases of more than one disease.

**HUMAN QUARANTINE: OVERSEAS VESSELS AND AIRCRAFT ARRIVING IN AUSTRALIA  
AND CASES OF INFECTIOUS (NON-QUARANTINABLE) DISEASES FOUND  
1962-63 TO 1966-67**

Year	Number of overseas vessels and aircraft cleared		Number of overseas vessels and aircraft on which cases were found	Number of cases of infectious disease	
	Ships	Aircraft		Passengers	Crew
1962-63 . . . . .	2,943	2,423	91	438	35
1963-64 . . . . .	3,184	2,620	92	361	11
1964-65 . . . . .	3,359	2,936	107	333	19
1965-66 . . . . .	3,488	3,297	201	360	122
1966-67 . . . . .	4,040	3,918	246	523	172

*Animal quarantine.* Animal quarantine, authorised by the provisions of the *Quarantine Act 1908-1966*, aims at preventing the introduction or spread of animal diseases. It covers the importation of all animals, raw animal products and biological cultures associated with animal diseases, and goods associated with animals.

Of the domesticated animals, only horses, dogs, cats, and poultry are admitted from a limited number of countries depending on diseases being absent in the country of origin. All must be accompanied by health certificates which include prescribed tests. On arrival in Australia, they are subject to quarantine detention. Zoological specimens are imported into registered zoos, where they remain in permanent quarantine. Circuses are also registered if exotic species of animals are kept. In a similar manner, animals for scientific purposes are imported to approved laboratories. All these premises are kept under constant surveillance. Raw animal products such as hair, types of wool, skins, and hides are specially treated under quarantine control. Such items as raw meat, sausage casings and eggs, which cannot be sterilised, are admitted from very few countries. Other items, such as harness

fittings, fodder and ship's refuse, are treated to destroy any possible infection. Special attention is given to the importation of biological substances of animal origin. The Animal Quarantine Service is also responsible for the health certification of animals for export overseas in accordance with the requirements of the various countries.

The Division of Veterinary Hygiene was created in 1926 to deal with the administration of animal quarantine. The central administration is situated within the Health Department at Canberra, with a director, an assistant director and veterinary officers. The Principal Veterinary Officer of the Department of Agriculture in each State is appointed Chief Quarantine Officer (Animals) of that State, and members of his staff Quarantine Officers (Animals). These State officers carry out the quarantine policy formulated by the central administration. Quarantine accommodation is provided in permanent animal quarantine stations at each capital city.

The Division participates in world-wide international notifications of the more serious contagious diseases of animals and maintains a census of such diseases throughout the world. Information regarding animal diseases and parasites in Australia is also collected and disseminated by means of service publications. Consultation on technical matters is maintained with various scientific institutions, notably the Commonwealth Scientific and Industrial Research Organisation. In matters of policy and the quarantine control of imports there is a close liaison with the Department of Customs and Excise.

The Division collaborates with the General and Plant divisions of the quarantine service. Many diseases of animals are communicable to man, and for this reason animal and general quarantine administration are in some respects inseparable. Similarly the interests of animal and plant divisions overlap, many items such as insects, fodder and straw being the subject of combined control.

*Plant quarantine.* Since 1 July 1909 the importation into Australia of all plants or parts of plants, cuttings, seeds, and fruits, whether living or dead, has been subject to an increasingly stringent quarantine with the object of preventing the introduction of insect pests, plant diseases and weeds not yet established in this country. Under the *Quarantine Act* 1908-1966, quarantine inspectors are required to examine all plant material at the first port of entry and to release only material free from diseases and pests. Everyone entering Australia is required to declare if he or she has any plant material in luggage or personal effects. Heavy penalties are laid down for those found evading the regulations. All plant material entering as cargo must also be declared.

When the Commonwealth became responsible for all plant quarantine, the State Governments agreed to co-operate by providing and maintaining inspection facilities and personnel, for which they are reimbursed by the Commonwealth. In 1921 the administration of the regulations came under the newly-formed Department of Health, and in 1927 the Plant Quarantine Branch was created. It is controlled by a director who is responsible for policy and legislation and for co-ordinating the work of the State officers who carry out the detailed administration in their capacity as Commonwealth officers.

Any plant material found carrying diseases or pests, or suspected of doing so, may be ordered into quarantine for remedial treatment, or, if treatment is impracticable, may be destroyed. The cost of treatment is met by the importer. Regulations governing the different types of plants are based on the following broad principles. Importation of plants likely to be infected with plant diseases or pests, of noxious plants or fungi, and of poison plants is prohibited. Agricultural seed, not restricted under quarantine legislation, must conform to standards of purity and insect pest and disease freedom. Seed of commercial crops which could introduce diseases are prohibited imports except with special permission. All plant products not specifically restricted, such as timber, logs and crates, are subject to inspection upon arrival and treatment if necessary. Many commodities, including hops, cotton, peanuts in shell, potatoes, and certain crop seeds, may be imported only by approved importers under specified conditions. All nursery stock, including bulbs, must be grown in post-entry quarantine. Prior approval is necessary, and such material may be imported only by approved importers who are registered for this purpose. The number of plants which may be imported in any one year is limited. The importation of propagating material of commercial fruits, vines, and berries is permitted only after special prior approval and is subject to specific screening for virus by qualified authorities. Soil is a prohibited import, and any vehicles or goods contaminated with soil are required to be thoroughly cleaned, at the expense of the importer, before entry is permitted.

#### Notifiable diseases

*Methods of prevention and control.* Provision exists in the Health Acts of all States for the compulsory notification of certain infectious and other diseases and for the application of preventive measures. When any such disease occurs the local authority must be notified at once, and in some States notification must be made also to the Health Department.

As a rule, the local authorities are required to report from time to time to the Central Board of Health in each State on the health, cleanliness and general sanitary state of their several districts and on the appearance of certain diseases. Regulations provide for the disinfection and cleansing of premises and for the disinfection or destruction of bedding, clothing or other articles which have been exposed to infection. Regulations also provide that persons suspected to be suffering from, or to be carriers of, infectious disease must submit to clinical and laboratory examination. Persons suffering from certain diseases, for example, smallpox and leprosy, are detained in isolation.

*Notifiable diseases and cases notified, 1967.* The following table shows, by State and Territory, the number of cases notified in 1967 for those diseases notifiable in all States and Territories. In May 1965 the National Health and Medical Research Council at its Fifty-ninth Session proposed a basic list of diseases to be notifiable in each State and Territory, and this table is based upon that proposal. The table does not include all diseases which are notifiable in a State or Territory. Factors such as the following affect both the completeness of the figures and the comparability from State to State and from year to year: availability of medical and diagnostic services; varying degrees of attention to notification of diseases; and enforcement and follow-up of notifications by Health Departments.

NOTIFIABLE DISEASES(a): NUMBER OF CASES NOTIFIED  
STATES AND TERRITORIES, 1967

Disease	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Anthrax . . . . .	2	..	..	..	..	..	..	..	2
Brucellosis . . . . .	11	34	11	3	2	..	..	..	61
Diphtheria . . . . .	23	18	..	..	..	..	5	..	46
Gonorrhoea . . . . .	4,231	1,832	1,410	399	795	212	478	31	9,388
Infectious hepatitis(b) .	4,032	2,991	1,973	1,299	190	425	158	248	11,316
Leprosy . . . . .	5	..	3	..	12	..	48	..	68
Leptospirosis . . . . .	6	..	107	1	2	..	..	1	117
Paratyphoid fever . . .	1	4	..	..	1	..	..	..	6
Poliomyelitis . . . . .	..	1	..	..	..	..	..	..	1
Syphilis . . . . .	610	95	143	21	43	8	30	5	955
Tetanus . . . . .	7	10	11	1	..	..	..	..	29
Tuberculosis(c) . . . .	853	599	454	141	142	50	45	9	2,293
Typhoid . . . . .	7	16	6	1	1	2	..	..	33
Typhus (all forms) . . .	..	..	5	..	2	..	..	..	7

(a) No cases of cholera, plague, smallpox or yellow fever were notified. (b) Includes hepatitis, serum (homologous).  
(c) Queensland figure includes erythema nodosum and pleural effusion.

*Tuberculosis and poliomyelitis.* The number of new cases of tuberculosis notified in each State and Territory by age groups for the year 1967 is shown on page 490. Some data regarding deaths from tuberculosis are shown on page 212 of Chapter 8, Vital Statistics. Cases of poliomyelitis notified in each State and Territory for the years 1963 to 1967 are shown on page 491.

*Infectious hepatitis.* The following table shows the number of cases of infectious hepatitis notified in each State and Territory during the years 1963 to 1967.

INFECTIOUS HEPATITIS: CASES NOTIFIED, STATES AND TERRITORIES, 1963 TO 1967

State or Territory	1963	1964	1965	1966	1967
New South Wales . . . . .	2,822	2,731	3,325	4,188	4,032
Victoria . . . . .	3,840	2,697	1,987	2,137	2,991
Queensland(a) . . . . .	1,433	1,163	556	843	1,973
South Australia . . . . .	293	289	414	978	1,299
Western Australia . . . .	145	101	83	28	190
Tasmania . . . . .	856	636	197	200	425
Northern Territory . . . .	104	57	128	78	158
Australian Capital Territory .	20	12	51	125	248
<b>Australia . . . . .</b>	<b>9,513</b>	<b>7,686</b>	<b>6,741</b>	<b>8,577</b>	<b>11,316</b>

(a) Includes hepatitis, serum (homologous).

*Venereal diseases.* The prevention and control of venereal diseases is the responsibility of State Health Departments. The necessary powers for the purpose are provided either by a special Venereal Diseases Act or by a special section of the Health Act. Venereal diseases were made notifiable in South Australia in November 1965 and the diseases are now notifiable in all States and Territories. While the provisions of the legislation differ from State to State, the Acts usually make it obligatory upon the patient to report for and continue under treatment until certified as cured. Treatment of venereal disease must be by a registered medical practitioner. Facilities for treatment of venereal disease free of charge may be arranged at subsidised hospitals or at special clinics. Penalties may be imposed on a patient who fails to continue under treatment. Clauses are inserted in the Acts which aim at preventing the marriage of any infected person, or the employment of an infected person in the manufacture or distribution of foodstuffs.

### Commonwealth grants to organisations associated with public health

In addition to providing the services mentioned on pages 485-98, the Commonwealth Government gives financial assistance to certain organisations concerned with public health. Examples of organisations included in this category are given in the following text. More detailed information on their operations and functions is given in Year Book 53, pages 570-3.

*The Commonwealth National Fitness Council* operates under the *National Health Act 1941-1967*. Its main function is to advise the Minister for Health concerning the promotion of national fitness. The Act also provides for the establishment of a trust account, known as the National Fitness Fund, to assist in financing the movement. During 1966-67 the Commonwealth's contribution to the Fund was \$366,000, of which \$66,000 was for assistance towards capital expenditure. Expenditure from the Fund during 1966-67 was \$319,471, distributed as follows: State National Fitness Councils, \$225,684; State Education Departments, \$34,000; State Universities \$24,800; Australian Recreation Leadership Course, \$4,000; capital expenditure on national fitness projects, \$16,770; grants to Australian Capital Territory organisation, \$4,899; and administration, \$9,318.

*The Royal Flying Doctor Service* is a non-profit organisation providing medical services in the remote areas of Australia. It is distinct from, but co-ordinates with, the Aerial Medical Service operated by the Commonwealth Department of Health from Darwin and Alice Springs in the Northern Territory. The Royal Flying Doctor Service is financed mostly from donations and government contributions. During 1965-66 the Commonwealth Government contributed \$274,280, of which \$124,280 was for capital expenditure. The appropriation for 1966-67 was \$236,350, including \$86,350 for capital items. In the 2,590 flights during 1965-66 the Service flew 959,166 miles and transported 2,287 patients. In the same period its medical staff gave 18,510 consultations over the air and 319,856 telegrams were handled.

*The Red Cross Blood Transfusion Service* is conducted by the Australian Red Cross Society throughout Australia. The operating costs of the service in the States are met by the State Governments paying 60 per cent; the Commonwealth, 30 per cent; and the Society, 10 per cent. In the Northern Territory and Australian Capital Territory the Commonwealth pays 90 per cent and the Society 10 per cent. Commonwealth expenditure for each State and Territory during 1966-67 was as follows: New South Wales, \$230,756; Victoria, \$276,089; Queensland, \$214,990; South Australia, \$123,133; Western Australia, \$92,429; Tasmania, \$23,541; Northern Territory, \$2,321; and the Australian Capital Territory, \$10,566; making a total of \$973,825 compared with \$489,795 for 1965-66. The increase was due mainly to a variation in the method of re-imbursing the States for the Commonwealth proportion of the costs.

*Lady Gowrie Child Centres* were established in 1940 by the Commonwealth Government in each of the six State capitals. The functions of these centres include specialised demonstration and research relating to problems of physical growth and nutrition, physical and mental development, and also to test and demonstrate methods for the care and instruction of the young child. The centres are administered by local committees under supervision of the Australia Pre-school Association and are financed mainly by Commonwealth grants. The Commonwealth contribution for 1966-67 was \$120,000 for the Centres and \$14,800 for the Australian Pre-school Association.

*The Home Nursing Subsidy Scheme*, under the *Home Nursing Subsidy Act 1956*, provides for a Commonwealth subsidy to assist the States in the expansion of home nursing activities. Organisations eligible for the subsidy are those which are non-profit making, employ registered nurses, and receive assistance from a State Government, local government body or other authority established by or under State legislation. At 30 June 1967 there were 60 home nursing services in the States employing approximately 600 trained nurses. Commonwealth assistance to the States during 1966-67 was \$664,361. Home nursing services in the Northern Territory and Australian Capital Territory are provided by the Commonwealth Department of Health.

The *National Heart Foundation of Australia* is a national organisation established to promote research in cardiovascular disease, to rehabilitate heart sufferers and to foster the dissemination of information about heart diseases. Formed in 1960, as a result of a public appeal yielding \$5 million to which the Commonwealth Government contributed \$20,000, the Foundation has its headquarters in Canberra. From its inception to the end of 1967 the Foundation has allocated almost \$3 million for grants-in-aid towards research in university departments, hospitals and research institutes; research fellowships tenable in Australia and overseas; and overseas travel grants. Most of the annual expenditure of about \$700,000 is devoted to supporting research in cardiovascular disease.

The *World Health Organization* (WHO) is a specialised agency of the United Nations acting as a directing and co-ordinating authority on international health work. It also provides health services and facilities to people of trust territories and other groups if requested by the United Nations. Australia was represented at the Twentieth World Health Assembly held at Geneva in May 1967, and at the Eighteenth Western Pacific Regional Committee Meeting at Manila in September 1967. The Commonwealth contribution to WHO during 1966-67 was \$630,000, which included a grant of \$12,000 to the Commonwealth Serum Laboratories for WHO influenza research.

## INSTITUTIONS

Institutions referred to under this heading are classified into the following groups: (i) public hospitals and nursing homes; (ii) mental hospitals; (iii) private hospitals and nursing homes; (iv) repatriation hospitals; (v) isolation hospitals.

### Public hospitals and nursing homes

The statistics shown for public hospitals and nursing homes refer to the following institutions: *New South Wales*—all institutions which are under the authority of the New South Wales Hospital Commission, and which receive a government subsidy during the year, and the six State hospitals and nursing homes under the control of the Department of Public Health; *Victoria*—all subsidised hospitals and subsidised hospitals for the aged under the authority of the Victorian Hospitals and Charities Commission, two tuberculosis sanatoria, and the Peter McCallum Cancer Clinic; *Queensland*—all hospitals controlled by the State Government or by the State hospital boards, including some institutions for out-patients or first-aid treatment only and some other hospitals which provide public accommodation in the form of public wards or designated public beds; *South Australia*—all hospitals controlled or maintained by, or which receive a regular annual grant or subsidy for maintenance purposes from, the South Australian Government, and hospitals controlled and maintained by local government or semi-governmental authorities; *Western Australia*—all departmental and board hospitals, excluding the Perth Dental hospital, one subsidised leased hospital, and the Australian Inland Mission hospitals; *Tasmania*—all public hospitals designated as such by the Director-General of Health Services, together with three homes for the aged, two chest hospitals, and the Lady Clark convalescent home; *Northern Territory*—departmental hospitals at Darwin, Alice Springs, Tennant Creek, and Katherine; *Australian Capital Territory*—the Canberra Community Hospital.

PUBLIC HOSPITALS AND NURSING HOMES: NUMBER, STAFF AND ACCOMMODATION, STATES AND TERRITORIES, 1965-66

	N.S.W. (a)	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Number of hospitals and nursing homes	269	156	143	68	97	27	4	1	765
Medical staff—									
Salaried . . . . .	1,264	1,244	757	300	228	138	24	12	3,967
Other(b) . . . . .	5,264	1,984	199	684	420	150	..	106	8,807
Total medical staff . . . . .	6,528	3,228	956	984	648	288	24	118	12,774
Nursing staff(c) . . . . .	17,878	13,072	6,638	3,727	3,725	1,812	268	520	47,640
Accommodation—									
Number of beds and cots . . . . .	27,241	16,394	13,273	4,829	5,491	2,969	550	463	71,210

(a) Excludes all unsubsidised hospitals under the Public Hospitals Act. (b) Includes honorary and visiting medical officers. (c) Qualified and student nurses, assistant nurse trainees, nursing aides, and nursing aide trainees.

**In-patients treated**

The following table gives particulars of in-patients treated. The figures shown refer to cases, that is to say, a person who is admitted to hospital or nursing home twice during a year is counted twice. Newborn babies are excluded unless they remain in hospital or nursing home after their mothers' discharge.

**PUBLIC HOSPITALS AND NURSING HOMES: IN-PATIENTS TREATED  
STATES AND TERRITORIES, 1965-66**

	<i>N.S.W. (a)</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
In-patients at beginning of year—									
Males . . .	9,643	5,363	4,029	1,477	1,642	924	180	143	23,401
Females . . .	11,037	7,495	4,711	1,852	1,929	1,111	205	231	28,571
Persons . . .	20,680	12,858	8,740	3,329	3,571	2,035	385	374	51,972
Admissions and re-admissions during year—									
Males . . .	220,530	123,327	109,824	47,266	55,026	15,752	5,423	5,366	582,514
Females . . .	320,914	192,131	136,301	60,718	65,404	22,375	6,287	8,535	812,665
Persons . . .	541,444	315,458	246,125	107,984	120,430	38,127	11,710	13,901	1,395,179
Total in-patients (cases) treated—									
Males . . .	230,173	128,690	113,853	48,743	56,668	16,676	5,603	5,509	605,915
Females . . .	331,951	199,626	141,012	62,570	67,333	23,486	6,492	8,766	841,236
Persons . . .	562,124	328,316	254,865	111,313	124,001	40,162	12,095	14,275	1,447,151
Discharges—									
Males . . .	210,930	117,034	106,284	45,226	53,422	14,955	5,275	5,130	558,256
Females . . .	313,084	186,838	132,930	59,023	64,077	21,772	6,195	8,367	792,286
Persons . . .	524,014	303,872	239,214	104,249	117,499	36,727	11,470	13,497	1,350,542
Deaths—									
Males . . .	9,393	6,326	3,693	1,951	1,493	765	131	228	23,980
Females . . .	7,418	5,269	3,030	1,599	1,132	634	119	164	19,365
Persons . . .	16,811	11,595	6,723	3,550	2,625	1,399	250	392	43,345
In-patients at end of year—									
Males . . .	9,850	5,330	3,876	1,566	1,753	956	197	151	23,679
Females . . .	11,449	7,519	5,052	1,948	2,124	1,080	178	235	29,585
Persons . . .	21,299	12,849	8,928	3,514	3,877	2,036	375	386	53,264
Average daily number resident . . .	20,063	12,187	8,337	3,295	3,588	1,958	392	367	50,187

(a) Excludes all unsubsidised hospitals under the Public Hospitals Act.

In addition to those admitted to the hospitals and nursing homes, there are large numbers of out-patients treated. During 1965-66 there were 1,591,587 out-patients treated in New South Wales, 834,451 in Victoria, 776,315 in Queensland, 153,882 in South Australia, 196,000 (estimated) in Western Australia, 106,629 in Tasmania, 130,556 in the Northern Territory, and 21,082 in the Australian Capital Territory, making an estimated total for Australia of 3,810,000. The figures quoted refer to cases, as distinct from persons and attendances.

**Revenue and expenditure**

Details of the revenue and expenditure for the year 1965-66 are shown in the next table. The revenue includes the Commonwealth Hospital Benefits Scheme. For some States expenditure on capital items out of individual hospitals' own funds are not included in the figures shown. Comparison between the States should therefore be made with caution.

In previous Year Books, Commonwealth hospital benefits, which were paid direct to public hospitals and nursing homes in either full or part payment of fees incurred by pensioners and other uninsured patients, were shown for some States as a separate revenue item or included under 'Government aid'. In the following table this revenue has been treated on the same basis as Commonwealth hospital benefits paid for insured patients and included in the amounts shown for fees. Details of Commonwealth expenditure on each of the different categories of hospital benefits are shown on page 487.

**PUBLIC HOSPITALS AND NURSING HOMES: REVENUE AND EXPENDITURE,  
STATES AND TERRITORIES, 1965-66**  
(*\$'000*)

	<i>N.S.W. (a)</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
<b>Revenue—</b>									
Government aid . . . . .	78,333	50,161	29,582	20,275	22,476	10,107	3,668	3,704	218,306
Municipal aid . . . . .	..	..	..	292	1	..	..	..	293
Public subscriptions, legacies, etc. . . . .	195	6,486	238	474	28	..	..	..	7,421
Fees(b) . . . . .	45,937	28,929	10,438	7,708	8,756	3,210	410	905	106,293
Other . . . . .	1,291	1,853	4,397	1,637	178	29	..	..	9,385
<i>Total revenue</i> . . . . .	<i>125,757</i>	<i>87,429</i>	<i>44,655</i>	<i>30,386</i>	<i>31,441</i>	<i>13,346</i>	<i>4,078</i>	<i>4,609</i>	<i>341,701</i>
<b>Expenditure—</b>									
Salaries and wages . . . . .	73,020	51,443	24,469	13,807	15,341	7,632	1,641	1,758	189,111
Upkeep and repair of build- ings and grounds . . . . .	3,389	1,816	1,214	1,141	2,881	298	302	147	11,188
All other maintenance . . . . .	32,921	20,875	14,615	7,250	6,939	2,059	878	775	86,312
<i>Total maintenance</i> . . . . .	<i>109,331</i>	<i>74,134</i>	<i>40,298</i>	<i>22,198</i>	<i>25,161</i>	<i>9,989</i>	<i>2,821</i>	<i>2,680</i>	<i>286,612</i>
Capital . . . . .	14,491	12,713	4,069	9,617	6,614	3,358	(c) 1,257	2,228	54,347
<i>Total expenditure</i> . . . . .	<i>123,822</i>	<i>86,847</i>	<i>44,367</i>	<i>31,816</i>	<i>31,775</i>	<i>13,347</i>	<i>4,078</i>	<i>4,908</i>	<i>340,960</i>

(a) Excludes all unsubsidised hospitals under the Public Hospitals Act. (b) Includes Commonwealth Hospital benefits paid direct to public hospitals and nursing homes. (c) Major capital works only.

### Summary for Australia

A summary, for the years 1962-63 to 1965-66, of the number of public hospitals and nursing homes in Australia, medical and nursing staffs, beds, admissions, in-patients treated, out-patients, deaths, average daily number resident, revenue, and expenditure is given in the following table. This table has been revised to include particulars of the six State Hospitals and Homes in New South Wales and the hospitals for the aged in Victoria.

### PUBLIC HOSPITALS AND NURSING HOMES: AUSTRALIA, 1962-63 TO 1965-66

	<i>1962-63</i>	<i>1963-64</i>	<i>1964-65</i>	<i>1965-66</i>
Hospitals and nursing homes . . . . .	758	760	765	765
Medical staff(a) . . . . .	11,191	11,459	12,090	12,774
Nursing staff(b) . . . . .	41,555	43,740	45,212	47,640
Beds and cots . . . . .	67,369	69,213	70,027	71,210
Admissions . . . . .	1,275,588	1,325,800	1,363,890	1,395,179
Total in-patient (cases) treated . . . . .	1,321,982	1,374,329	1,416,198	1,447,151
Deaths . . . . .	39,120	42,461	42,603	43,345
Average daily number resident . . . . .	47,250	49,041	49,724	50,187
Out-patients (cases)(c) . . . . .	3,112,000	3,349,000	3,575,000	3,810,000
Revenue . . . . .	\$'000 257,746	281,982	310,644	341,701
Expenditure . . . . .	\$'000 262,686	284,751	309,897	340,960

(a) Honorary, visiting and salaried. (b) Qualified and student nurses, assistant nurses, assistant nurse trainees, nursing aides, and nursing trainees. (c) Partly estimated.

### Mental health services

The presentation of meaningful statistics of mental health services has become increasingly difficult because of changes in recent years in the institutions and services for the care of mental patients. The emphasis has shifted from institutions for care of patients certified insane to a range of mental health services provided for in-patients and out-patients at psychiatric hospitals, admission and reception centres, day hospitals, out-patient clinics, training centres, homes for the mentally retarded and geriatric patients, psychiatric units in general hospitals, and the like.

To enable valid comparisons to be made of mental health statistics in each State the mental health authorities of all States have proposed standard statistical definitions. The statistical recording systems of a number of States are currently being reviewed for this purpose. Meanwhile certain limited information is available which is shown in the following paragraphs. Since a common measure has not yet been achieved, the figures for individual States should not be added to form Australian totals.



**In-patient institutions**

The following table shows the number of major in-patient institutions in each State in 1966, the accommodation they provide for patients, and their staff. In-patient care for voluntary patients is also provided at many general public and a number of private hospitals. There are also psychiatric units attached to gaols, juvenile corrective centres and similar institutions. Only the following institutions are included in this table: *New South Wales*—the fourteen State psychiatric centres (a psychiatric hospital and associated admission centre being regarded as one psychiatric centre) and the two authorised private psychiatric centres (several other institutions provide in-patient care for voluntary patients only, but are excluded from the scope of the statistics); *Victoria*—the four psychiatric hospitals, ten mental hospitals, four informal hospitals, and nine intellectual deficiency training centres and schools; *Queensland*—four mental hospitals and one epileptic home (alcoholic clinics and inebriates' homes are excluded); *South Australia*—two mental hospitals and two receiving houses; *Western Australia*—the four mental hospitals, one psychiatric hospital, and the mental deficiency home for children; and *Tasmania*—the mental hospital and the psychiatric hospital.

**MENTAL HEALTH: IN-PATIENT INSTITUTIONS, ACCOMMODATION AND STAFF  
STATES, 1966**

	<i>N.S.W.</i> (a)	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>
In-patient institutions . . .	16	27	5	4	6	2
Beds and cots for patients . .	12,381	(b)9,470	4,165	2,434	1,921	930
Staff—Medical . . . .	190	145	(d) 21	30	15	10
Nursing . . . . .	(c) 3,423	2,866	(d)1,204	686	479	284

(a) 30 June.  
time staff only.

(b) The number of beds and cots occupied on 31 October 1966.

(c) Includes attendants.

(d) Full-

There are no in-patient institutions for mental patients in the Northern Territory or the Australian Capital Territory.

**State government expenditure on mental health services**

The following figures show particulars of expenditure by States for the year 1965–66. Maintenance expenditure represents expenditure on wages and salaries, upkeep and repair of buildings and grounds, and other maintenance. The figure for New South Wales relates to the 14 State psychiatric centres and the Master in Protective Jurisdiction of the Supreme Court. Capital expenditure is expenditure under the *State Grants (Mental Health Institutions) Act* 1964–1967 only. For details of Commonwealth financial assistance to the States for mental health services, see pages 487–8.

**MENTAL HEALTH: EXPENDITURE, STATES, 1965–66  
(\$'000)**

	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>
Maintenance . . . .	18,849	17,286	5,917	4,081	3,545	1,689
Capital . . . . .	5,151	4,700	439	726	1,013	1,586

**Patients**

*New South Wales.* A new system of collecting particulars of admissions to and discharges from the sixteen psychiatric centres in the State was introduced from 1 July 1964 following a census of the in-patients at these centres in June 1964. Under this system, the sixteen psychiatric centres in the State are regarded as constituting a single Psychiatric Service, and 'admissions' and 'discharges' are identified in relation to the Service as a whole (and not to a particular centre). Patients are classified into three broad groups—voluntary, formally recommended, or forensic—according to the status under which they are admitted to the care (or remain under the care) of a psychiatric centre. The following table shows for the sixteen psychiatric centres the number of patients on the in-patient register and the admissions and discharges of in-patients in 1965–66.

**PATIENTS ON THE IN-PATIENT REGISTER OF PSYCHIATRIC CENTRES  
NEW SOUTH WALES, 1965-66**

	<i>Males</i>	<i>Females</i>	<i>Persons</i>
Patients on the register at 1 July 1965 . . . . .	7,031	6,262	13,293
Admissions during 1965-66—			
Voluntary . . . . .	2,786	3,162	5,948
Formally recommended—Inebriate . . . . .	383	70	453
Other . . . . .	4,655	4,859	9,514
Forensic . . . . .	30	1	31
<i>Total admissions and re-admissions</i> . . . . .	<i>7,854</i>	<i>8,092</i>	<i>15,946</i>
Discharges during 1965-66—			
Deaths . . . . .	553	532	1,085
Other discharges . . . . .	7,703	7,883	15,586
<i>Total discharges</i> . . . . .	<i>8,256</i>	<i>8,415</i>	<i>16,671</i>
Patients on the register at 30 June 1966 . . . . .	6,629	5,939	12,568

**MENTAL PATIENTS: VICTORIA, 1966**

	<i>Psychiatric hospitals</i>	<i>Mental hospitals</i>	<i>Informal hospitals</i>	<i>Intellectual deficiency training centres and schools</i>	<i>Total</i>
Patients on the register at 1 January 1966 . . . . .	891	7,765	94	2,389	11,139
Admissions(a)—					
Males . . . . .	3,287	2,105	400	615	6,407
Females . . . . .	3,310	2,113	747	295	6,465
<i>Persons</i> . . . . .	<i>6,597</i>	<i>4,218</i>	<i>1,147</i>	<i>910</i>	<i>12,872</i>
Discharges . . . . .	6,641	4,010	1,126	455	12,232
Deaths . . . . .	77	879	3	56	1,015
Patients on the register at 31 December 1966—					
Males . . . . .	382	3,605	34	1,481	5,502
Females . . . . .	388	3,489	78	1,307	5,262
<i>Persons</i> . . . . .	<i>770</i>	<i>7,094</i>	<i>112</i>	<i>2,788</i>	<i>10,764</i>

(a) Includes transfers from one institution to another.

**MENTAL PATIENTS: QUEENSLAND, 1965-66**

	<i>Males</i>	<i>Females</i>	<i>Persons</i>
Patients on the register at 1 July 1965 . . . . .	2,318	1,704	4,022
Admissions and re-admissions—First admissions . . . . .	758	590	1,348
Re-admissions . . . . .	119	119	238
<i>Total admissions</i> . . . . .	<i>877</i>	<i>709</i>	<i>1,586</i>
Discharges . . . . .	660	715	1,375
Deaths . . . . .	151	104	255
Patients on the register at 30 June 1966 . . . . .	2,384	1,594	3,978

## MENTAL PATIENTS: SOUTH AUSTRALIA, 1965-66

	Males	Females	Persons
Patients on register at 1 July 1965 . . . . .	1,495	1,257	2,752
Admissions during 1965-66(a)—			
Voluntary . . . . .	1,173	995	2,168
Formally recommended and forensic . . . . .	351	291	642
<i>Total admissions and re-admissions</i> . . . . .	1,524	1,286	2,810
Discharges . . . . .	1,473	1,267	2,740
Deaths . . . . .	87	89	176
Patients on register at 30 June 1966 . . . . .	1,459	1,187	2,646

(a) Excludes transfers.

## MENTAL PATIENTS: WESTERN AUSTRALIA, 1965-66

	Males	Females	Persons
Patients on register at 1 July 1965 . . . . .	1,266	858	2,124
Admissions and re-admissions(a) . . . . .	1,016	937	1,953
Discharges(a) . . . . .	996	885	1,881
Deaths . . . . .	82	67	149
Patients on the register at 30 June 1966 . . . . .	1,204	843	2,047

(a) Excludes transfers.

## MENTAL PATIENTS: TASMANIA, 1965-66

	Males	Females	Persons
Patients on register at 1 July 1965 . . . . .	472	446	918
Admissions and re-admissions . . . . .	599	551	1,150
Discharges . . . . .	603	495	1,098
Deaths . . . . .	32	33	65
Patients on the register at 30 June 1966 . . . . .	436	469	905

## Private hospitals and nursing homes

In addition to the other hospitals and nursing homes referred to in previous sections, there are private hospitals and nursing homes in each State. The figures shown in the following table refer to those private hospitals and nursing homes which have been approved for the payment of hospital benefits under the Commonwealth *National Health Act* 1953-1966. Statistical information on patients, staff and finance of these institutions is not available on a uniform Australia-wide basis.

## PRIVATE HOSPITALS AND NURSING HOMES: STATES, 1962 TO 1966

State	30 June—				
	1962	1963	1964	1965	1966
NUMBER OF PRIVATE HOSPITALS AND NURSING HOMES					
New South Wales . . . . .	474	507	527	531	527
Victoria . . . . .	260	272	288	306	309
Queensland . . . . .	116	130	136	146	149
South Australia . . . . .	156	173	165	179	180
Western Australia . . . . .	85	85	85	91	95
Tasmania . . . . .	34	39	41	42	45
<b>Australia</b> . . . . .	<b>1,125</b>	<b>1,206</b>	<b>1,242</b>	<b>1,295</b>	<b>1,305</b>

PRIVATE HOSPITALS AND NURSING HOMES: STATES, 1962 TO 1966—*continued*

State	30 June—				
	1962	1963	1964	1965	1966
NUMBER OF BEDS FOR PATIENTS					
New South Wales . . . . .	10,563	11,482	12,647	13,626	14,503
Victoria . . . . .	5,556	5,896	6,371	6,797	7,117
Queensland . . . . .	2,943	3,350	3,818	4,362	4,416
South Australia . . . . .	3,440	3,755	3,983	4,280	4,419
Western Australia . . . . .	2,381	2,549	2,627	2,846	2,898
Tasmania . . . . .	763	870	925	982	1,033
Australia . . . . .	25,646	27,902	30,371	32,893	34,386

There were no institutions of this nature in the Australian Capital Territory or the Northern Territory during 1965-66.

### Repatriation hospitals

The medical care of eligible ex-servicemen and dependants of deceased ex-servicemen is a major function of the Commonwealth Repatriation Department (*see* the chapter Repatriation), which provides a comprehensive service.

In-patient treatment is provided at Repatriation General Hospitals in each capital city; in addition, there are auxilliary hospitals in all States except Tasmania. 'Anzac Hostels' are maintained in Queensland and Victoria for long-term patients. In-patient treatment may also be provided in country hospitals at the Department's expense in certain circumstances. Mental patients requiring custodial care are, by agreement with the State Governments, accommodated at the expense of the Department in mental hospitals administered by the State authorities.

The average daily number of patients resident in the six Repatriation General Hospitals and eight auxilliary hospitals during the year ended 30 June 1967 was 3,015. The number of medical, nursing and other staff employed at these institutions at 30 June 1967 was 6,153 and a further 541 were employed at Repatriation out-patient clinics and limb and appliance centres. Total expenditure on Repatriation institutions during 1966-67 was \$25,320,421 and \$30,576,677 on other medical services.

### Hansenide hospitals

There are four isolation hospitals in Australia for the care and treatment of persons suffering from Hansen's disease (leprosy). The numbers of isolation patients at these hospitals on 31 December 1967 were: Little Bay (New South Wales), 7; Fantome Island (North Queensland), 7; Derby (Western Australia), 170; and East Arm Settlement (Northern Territory), 13. In addition, there were 68 voluntary patients resident in the East Arm Settlement, mostly for the purpose of reconstructive surgery. With the exception of the Little Bay lazaret, nursing services are provided mostly by sisters of religious orders under supervision of Government medical officers.

Special wards for the isolation and treatment of leprosy patients are also provided at other centres. The location of these wards and the numbers of isolation patients resident at 31 December 1967, were: Fairfield (Victoria), 4; and Princess Alexandria Hospital (Queensland), 6.

Of the total 207 cases in isolation, 169 were full-blood Aborigines, 19 were others of Aboriginal blood, 2 were Pacific Islanders, 2 were Asians, and 15 were Europeans.



## CHAPTER 15

### EDUCATION, CULTURAL ACTIVITIES, AND RESEARCH

For the most recent statistics available on subjects dealt with in this chapter reference should be made to the series of mimeographed bulletins *Social Statistics* issued by this Bureau. The *Quarterly Summary of Australian Statistics* contains summarised information on these subjects, and financial aspects are dealt with in the annual bulletins *Commonwealth Finance and State, Territory and Local Government Authorities' Finance and Government Securities*. The Annual Reports of the respective State Education Departments provide detailed statistical and other information concerning particular States.

#### EDUCATION

An account of the development of the Australian school system up to 1929 may be found in Year Books Nos 1, 2, 17 and 22. In Year Book No. 40 a review of changes which occurred up to 1951 and of the practices then current was presented from material furnished by the then Commonwealth Office of Education (now part of the Commonwealth Department of Education and Science). The Department has contributed much of the textual matter in the early part of this chapter.

#### Education in Australian schools

##### Administration and organisation

In Australia the provision of schools is mainly the responsibility of State Governments. During the nineteenth century all six Australian colonies had established systems of compulsory education, beginning with the *Education Act* 1872 in Victoria, and followed by similar Acts in Queensland (1875), South Australia (1875), New South Wales (1880), Tasmania (1893), and Western Australia (1893). These Acts, with subsequent amendments, constitute the legal basis of compulsory education in the Australian States to-day.

School attendance is compulsory throughout Australia between the ages of six and fifteen at least. The minimum leaving age is fifteen years in New South Wales, Victoria, Queensland, and South Australia, and sixteen years in Tasmania, while in Western Australia attendance is compulsory until the end of the year in which the child turns fifteen years. The Education Acts require that all children between the prescribed ages must attend either a government school or some other recognised educational institution. Children may be exempted from the requirement of compulsory attendance if they live too far from a school or suffer a physical disability. These children usually receive correspondence tuition.

The school year in Australia begins at the end of January or early in February; it ends in mid-December. The long vacation is taken over the summer months (December to February) and two short vacations divide the school year into three terms.

At government primary schools it is usual for both boys and girls to attend the same school; at the secondary level practices vary, but the trend is towards co-educational schools. Non-government secondary schools cater mainly for boys and girls separately.

##### Government school systems

Government schools, except in the Commonwealth Territories, are a responsibility of the six State Governments. Although the educational systems are not identical, they have many similar features. Responsibility for framing educational policy and having it put into effect rests with a Minister for Education, who is a member of the State Cabinet. The administrative authority in each State is an Education Department headed by a Director-General or Director of Education. Separate divisions of the Education Department in each State administer primary, secondary and technical education (in New South Wales there is a separate Department of Technical Education). Other divisions look after such matters as the recruitment and training of teachers, pupil guidance, research, and the education of atypical children. In New South Wales administration has been decentralised to a degree by the appointment of directors who are responsible for policy in the area which they control.

Tuition at government primary and secondary schools is free in all States. Parents are usually expected to bear the cost of text-books, uniforms and charges for such things as the use of sports materials. However, income tax concessions exist in respect of these expenditures for both government and non-government systems, and certain text-book costs are subsidised in the case of pupils attending government and non-government schools in some States.

#### Non-government schools systems

More than 80 per cent of the children at non-government primary and secondary schools attend Roman Catholic schools, which form a highly developed system. At the primary level these children normally attend mixed parish schools, but at the secondary level there are boys schools, approximately half taking boarders, and girls schools. Some of the small convent schools in country districts are co-educational up to the junior secondary level.

The majority of other non-government schools, sometimes known as 'private' or 'independent' schools, are conducted by, or are under the auspices of, various other religious denominations, particularly the Church of England, Presbyterian and Methodist Churches. A few non-government schools, including some of the foremost, are undenominational and conducted under the auspices of corporate bodies.

The methods adopted by the educational authorities to ensure an acceptable standard of education at non-government schools vary from State to State. In New South Wales, Victoria, Western Australia, and Tasmania these schools are regularly inspected. In Victoria and Tasmania, schools and teachers must be registered. Non-government schools in Queensland and also those in South Australia are not subject to inspection.

The principals of a number of the larger non-government schools have formed organisations with both State and Australia-wide coverage, namely the Headmasters' Conference of the Independent Schools of Australia and the Association of Headmistresses of Independent Schools of Australia.

#### Schools and courses

*Primary education in government schools.* Though school attendance is not compulsory until the age of six, most Australian children begin school when they are five, attending infants schools or infants classes attached to a primary school. In some States the first year in the infants department is known as 'kindergarten'. The emphasis in infants classes is on the development of skills in language and numbers. Creative expression through drawing, dancing, handiwork, dramatisation, and painting and similar activities is encouraged.

Primary schools are normally provided when and where there is sufficient population to justify them. Irrespective of the size or the location of the school, standards of tuition do not vary appreciably, because teachers within a State follow similar courses of training and transfer freely between metropolitan and country areas. The Education Departments prescribe syllabuses of instruction, which are drawn up with the assistance of expert committees. The primary syllabuses have an emphasis on basic subjects like reading, writing, arithmetic and social studies, but the teacher has some freedom to modify courses to suit local circumstances and the varying abilities of his students.

Children attend primary schools in their own districts, usually within walking distance of their homes, on five days each week. The school day is broken up into three or four sessions by a lunch break and by a morning and sometimes an afternoon recess. The total period of instruction is four and a half to five hours daily with individual subject lessons lasting twenty to thirty minutes. Periods are set aside for physical education and sport. One teacher generally has charge of a class and teaches it all the subjects set out in the curriculum for the particular grade.

Progression from primary to secondary school is usually automatic. Allocation to particular schools or particular courses is based on the district in which the child lives, the recommendations of the headmaster, general ability tests, tests of achievement in the basic subjects, and parents' wishes.

*Secondary education in government schools.* The age of transfer from a government primary to secondary school is usually between twelve and thirteen. Most secondary schools are co-educational, although separate schools for boys and girls are not uncommon in capital cities. In the cities and larger country centres secondary and primary courses are provided in separate schools, but in less populous areas secondary classes sometimes share buildings with primary classes.

The secondary student takes up new studies, such as foreign languages, technical or commercial subjects, and moves on to more specialised studies in natural and social sciences and mathematics. The study of basic subjects begun in primary school is continued. The actual subjects studied depend on the ability of the pupil and, in some States, the type of school. A school day is divided into 'periods' and the children are taught by a number of teachers, each specialising in a particular subject or group of subjects.

In the past, to meet the varying abilities and needs of students, various kinds of secondary schools were established in which different types of education were provided, although in country areas secondary schools tended of necessity to be comprehensive and offered a full range of secondary courses. But following the re-examination by expert committees of the problems associated with the provision of appropriate secondary education for all, significant changes in the structure and curricula of secondary schools are taking place. In New South Wales, for example, following a committee's recommendation that the secondary curriculum should offer a core of common basic education to all students, secondary schools have become comprehensive. Pupils of different aptitudes and interests in a given locality now attend the same secondary school, undertake this core of common basic studies, and in addition specialise according to their proven abilities and interests.

The most common type of secondary school is the comprehensive or multi-purpose high school, which offers a wide range of subjects. To cater for this diversity of subjects, most high schools now have modern facilities for the teaching of domestic science, commercial subjects, woodwork, and other technical subjects. In some States there are still, however, separate high schools specialising in technical, agricultural, commercial, or home science subjects. Some of the agricultural high schools are residential. The curriculum consists of general educational subjects and practical farm training. There are also 'area' and 'rural' schools offering up to three years of secondary study, and in some States courses in agriculture are also given at high schools.

*Primary and secondary education in non-government schools.* Non-government schools follow curricula similar to those laid down by Education Departments and prepare their students for examinations conducted by public examining authorities. Most non-government schools are comprehensive type schools, providing a range of subjects and courses at various levels. Although there are similarities between non-government and government schools in the courses they provide, more emphasis is given to the religious training of pupils in denominational schools. Non-government schools sometimes offer facilities additional to those normally found in government schools, such as personal tuition in music. A few are organised on 'experimental' lines.

### Examinations

During the course of secondary education State-wide examinations are taken at two levels. The earlier examination qualifies pupils for entry to trade courses at technical colleges and agricultural colleges, to junior commercial positions in, for instance, insurance and banking, to nursing and secretarial courses, to lower grades of the public service, and to industry. The examination at the end of the secondary school course qualifies students for entry to teachers' colleges, and is also the qualification for entry to the university, certain subjects and combinations of subjects being set down as the matriculation requirements by the respective universities.

In most States the higher examination is controlled by a board consisting of representatives of the department of education, the universities, non-government schools, and sometimes of other bodies such as teachers' organisations. A brief description of the examinations in each State follows.

*New South Wales.* For pupils who commenced their secondary education in 1962 or later, the full secondary course is of six years' duration, with a School Certificate Examination at the end of the fourth year, age about sixteen, and a Higher School Certificate Examination (Matriculation) after a further two years. Pupils who leave school before gaining their School Certificate receive a signed statement of attainment from their school principal.

*Victoria.* The last Intermediate Examination taken at the end of the fourth secondary year was conducted in 1967. The School Leave Examination is taken at the end of fifth year, and the Matriculation Examination at the end of sixth year. Pupils at approved non-government schools and certain government schools may be accredited for the Leaving by passing examinations set by their own schools.

*Queensland.* The Junior Public Examination is taken at the end of third year, at about the age of fifteen and a half. The Senior Public Examination conducted by the University of Queensland is taken at the end of fifth year, at about the age of seventeen and a half, and matriculation is obtained on results in this examination.

*South Australia.* The Intermediate Examination taken at the end of the third year, at about the age of fifteen and a half, will be held for the last time in 1968. The Leaving Examination is taken at the end of the fourth year and a Matriculation Examination is held at the end of the fifth year.

*Western Australia.* The Junior Certificate Examination is taken at the end of third year, at about the age of fifteen and a half. Students who pursue a less academic course may take the High School Certificate Examination at this level. The Leaving Certificate Examination is taken at the end of fifth year, at an average age of seventeen and a half, and matriculation is gained on results in this examination.



*Tasmania.* The Schools Board Certificate Examination is taken at the end of fourth year, at about the age of sixteen and a half, and the Matriculation Examination conducted by the University of Tasmania at the end of the fifth or sixth year.

### Numbers of schools, teachers and pupils

The statistics which follow relate generally to schools providing education according to the primary or secondary school curricula of the various State Education Departments, or both, whether provided in government or non-government schools. Junior technical schools, correspondence schools, and schools in institutional homes, hospitals and similar establishments are included. Institutions providing only pre-school education, senior technical and agricultural colleges, evening schools, continuation classes, and institutions such as business colleges and coaching establishments are, as a rule, excluded.

School censuses are conducted annually at or about the beginning of August throughout all States and Territories of Australia. The numbers of pupils in the tables which follow refer to enrolments at the school census date. The numbers of schools and teachers refer to the position at dates which vary from State to State and in some instances from year to year. While it has not been possible to present all figures on a uniform basis between States, continuity of the figures for any one State over the period of years shown has been maintained as far as possible. Particulars relating to senior technical colleges are given on pages 521-3.

#### Schools, teachers and pupils

The numbers of government and non-government schools, teachers and pupils for 1967 and earlier years are shown in the following tables.

#### NUMBERS OF SCHOOLS AND PUPILS, BY CATEGORY OF SCHOOL STATES AND TERRITORIES, 1967

Category of school	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
<b>SCHOOLS</b>									
Government . . . . .	2,591	2,241	1,307	663	565	297	57	35	7,756
Non-government—									
Denominational—									
Church of England . . . . .	33	35	17	12	9	4	..	3	113
Hebrew . . . . .	4	7	..	..	1	..	..	..	12
Lutheran . . . . .	3	8	4	14	..	..	1	..	30
Methodist . . . . .	6	4	(a) 5	4	3	1	2	..	25
Presbyterian . . . . .	13	14	5	2	2	2	..	..	38
Roman Catholic . . . . .	661	482	295	130	174	51	11	15	1,819
Seventh-day Adventist . . . . .	18	8	6	5	7	3	..	..	47
Other . . . . .	..	4	1	2	2	1	2	..	12
Undenominational . . . . .	52	16	9	4	4	3	4	..	92
<i>Total, non-government</i> . . . . .	<i>790</i>	<i>578</i>	<i>342</i>	<i>173</i>	<i>202</i>	<i>65</i>	<i>20</i>	<i>18</i>	<i>2,188</i>
<b>Grand total</b> . . . . .	<b>3,381</b>	<b>2,819</b>	<b>1,649</b>	<b>836</b>	<b>767</b>	<b>362</b>	<b>77</b>	<b>53</b>	<b>9,944</b>

(a) Presbyterian and Methodist Schools Association.

**NUMBERS OF SCHOOLS AND PUPILS, BY CATEGORY OF SCHOOL  
STATES AND TERRITORIES, 1967—continued**

Category of school	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
<b>PUPILS (CENSUS ENROLMENT)</b>									
Government . . . . .	700,009	540,281	279,362	217,034	154,975	74,265	9,179	18,447	1,993,552
Non-government—									
Denominational—									
Church of England . . . . .	12,933	16,195	5,490	4,281	3,796	1,890	..	1,359	45,944
Hebrew . . . . .	388	2,500	..	..	142	..	..	..	3,030
Lutheran . . . . .	241	712	927	1,544	..	..	138	..	3,562
Methodist . . . . .	3,090	4,153	(a)2,113	2,107	1,690	318	406	..	13,877
Presbyterian . . . . .	5,674	8,441	969	1,493	1,272	638	..	..	18,487
Roman Catholic . . . . .	189,971	146,844	73,008	26,011	32,002	10,683	1,642	6,597	486,758
Seventh-day Adventist . . . . .	1,231	613	345	177	535	125	..	..	3,026
Other . . . . .	..	2,372	152	430	174	985	167	..	4,280
Undenominational . . . . .	6,528	3,692	3,924	1,216	123	274	66	..	15,823
<i>Total, non-government</i> . . . . .	220,056	185,522	86,928	37,259	39,734	14,913	2,419	7,956	594,787
<b>Grand total</b> . . . . .	<b>920,065</b>	<b>725,803</b>	<b>366,290</b>	<b>254,293</b>	<b>194,709</b>	<b>89,178</b>	<b>11,598</b>	<b>26,403</b>	<b>2,588,339</b>

(a) Presbyterian and Methodist Schools Association.

**NUMBERS OF TEACHERS: STATES AND TERRITORIES, 1967(a)**

State or Territory	Government schools			Non-government schools			All schools		
	Part-time		Eq. f.t.u. (b)	Part-time		Eq. f.t.u. (b)	Part-time		Eq. f.t.u. (b)
	Full-time	No.		Full-time	No.		Full-time	No.	
New South Wales . . . . .	29,288	1,178	582	7,179	(e)1,976	530	36,467	3,154	1,112
Victoria . . . . .	22,144	(c)2,229	(c)1,272	6,050	1,388	292	28,194	3,617	1,564
Queensland . . . . .	10,107	630	51	2,701	607	134	12,808	1,237	185
South Australia . . . . .	8,669	650	235	1,315	396	136	9,984	1,046	371
Western Australia . . . . .	5,619	174	63	1,347	243	64	6,966	417	127
Tasmania . . . . .	3,305	316	71	542	155	40	3,847	471	111
Northern Territory . . . . .	379	6	1	(d)72	(d)1	..	451	7	1
Australian Capital Territory . . . . .	745	32	15	269	(e)63	29	1,014	95	44
<b>Total</b> . . . . .	<b>80,256</b>	<b>5,215</b>	<b>2,290</b>	<b>19,475</b>	<b>4,829</b>	<b>1,225</b>	<b>99,731</b>	<b>10,044</b>	<b>3,515</b>

(a) Excludes teachers-in-training generally. (b) The methods used for calculating *equivalent full-time units* of part-time teaching vary from State to State, between government and non-government schools, and between primary and secondary schools within States. For most schools the information is based on either the total hours worked or total number of class periods taken in a week by part-time teachers, in relation to the normal hours worked or periods taken by full-time teachers. (c) If a full-time teacher teaches both senior and junior technical school pupils, he is counted as part-time in these statistics, (which include junior technical, but not senior technical, schools), if his teaching load in the junior school is less than 75 per cent. (d) Excludes unqualified teachers and teaching assistants at mission schools. (e) Visiting teachers who attend more than one school are counted as part-time in each.

**NUMBERS OF SCHOOLS AND PUPILS: AUSTRALIA, 1963 TO 1967**

	1963	1964	1965	1966	1967
<b>Schools—</b>					
Government . . . . .	7,910	7,872	7,844	7,826	7,756
Non-government . . . . .	2,193	2,205	2,221	2,194	2,188
<i>Total schools</i> . . . . .	<i>10,103</i>	<i>10,077</i>	<i>10,065</i>	<i>10,020</i>	<i>9,944</i>
<b>Pupils(a)—</b>					
Government . . . . .	1,756,538	1,801,364	1,857,120	1,921,263	1,993,552
Non-government . . . . .	552,759	565,415	580,532	583,067	594,787
<i>Total pupils</i> . . . . .	<i>2,309,297</i>	<i>2,366,779</i>	<i>2,437,652</i>	<i>2,504,330</i>	<i>2,588,339</i>

(a) Census enrolment.

NUMBERS OF TEACHERS, BY CATEGORY OF SCHOOL  
STATES AND TERRITORIES, 1967(a)

	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
<b>Government schools—</b>									
Full-time . . . . .	29,288	22,144	10,107	8,669	5,619	3,305	379	745	80,256
Part-time—									
Number . . . . .	1,178	(b)2,229	630	650	174	316	6	32	5,215
Eq. f.t.u.(c) . . . . .	582	(b)1,272	51	235	63	71	1	15	2,290
<b>Non-government schools—</b>									
<b>Baptist—</b>									
Full-time . . . . .	..	118	..	(d)25	..	..	..	..	143
Part-time—									
Number . . . . .	..	45	..	(d)6	..	..	..	..	51
Eq. f.t.u.(c) . . . . .	..	18	..	(d)1	..	..	..	..	19
<b>Church of England—</b>									
Full-time . . . . .	767	895	281	232	212	102	..	77	2,566
Part-time—									
Number . . . . .	220	219	58	68	52	37	..	21	675
Eq. f.t.u.(c) . . . . .	95	68	21	30	13	6	..	18	251
<b>Hebrew—</b>									
Full-time . . . . .	25	146	..	..	6	..	..	..	177
Part-time—									
Number . . . . .	8	32	..	..	1	..	..	..	41
Eq. f.t.u.(c) . . . . .	4	9	..	..	1	..	..	..	14
<b>Lutheran—</b>									
Full-time . . . . .	16	33	41	66	..	..	5	..	161
Part-time—									
Number . . . . .	6	5	8	25	..	..	..	..	44
Eq. f.t.u.(c) . . . . .	2	2	3	6	..	..	..	..	13
<b>Methodist—</b>									
Full-time . . . . .	162	229	(e)99	103	90	19	15	..	717
Part-time—									
Number . . . . .	51	56	(e)25	26	28	8	..	..	194
Eq. f.t.u.(c) . . . . .	29	7	(e)10	12	11	5	..	..	74
<b>Presbyterian—</b>									
Full-time . . . . .	331	505	51	73	74	35	..	..	1,069
Part-time—									
Number . . . . .	71	118	12	18	10	14	..	..	243
Eq. f.t.u.(c) . . . . .	32	21	2	9	3	4	..	..	71
<b>Roman Catholic—</b>									
Full-time . . . . .	5,332	3,857	2,033	751	924	308	41	192	13,438
Part-time—									
Number . . . . .	1,500	839	477	215	138	83	1	42	3,295
Eq. f.t.u.(c) . . . . .	327	138	92	59	32	21	..	11	680
<b>Seventh-day Adventist—</b>									
Full-time . . . . .	61	33	13	11	28	9	..	..	155
Part-time—									
Number . . . . .	20	7	3	2	11	3	..	..	46
Eq. f.t.u.(c) . . . . .	5	2	..	..	3	..	..	..	10
<b>Other denominational—</b>									
Full-time . . . . .	..	13	6	..	6	55	7	..	87
Part-time—									
Number . . . . .	..	5	..	..	..	7	..	..	12
Eq. f.t.u.(c) . . . . .	..	2	..	..	..	4	..	..	6
<b>Undenominational—</b>									
Full-time . . . . .	485	221	177	54	7	14	4	..	962
Part-time—									
Number . . . . .	100	62	24	36	3	3	..	..	228
Eq. f.t.u.(c) . . . . .	36	25	6	19	1	..	..	..	87
<b>Total, non-government schools—</b>									
Full-time . . . . .	7,179	6,050	2,701	1,315	1,347	542	(f)72	269	19,475
Part-time—									
Number . . . . .	(g)1,976	1,388	607	396	243	155	(f)1	(g)63	4,829
Eq. f.t.u.(c) . . . . .	530	292	134	136	64	40	..	29	1,225
<b>Grand total—</b>									
Full-time . . . . .	36,467	28,194	12,808	9,984	6,966	3,847	451	1,014	99,731
Part-time—									
Number . . . . .	3,154	3,617	1,237	1,046	417	471	7	95	10,044
Eq. f.t.u.(c) . . . . .	1,112	1,564	185	371	127	111	1	44	3,515

(a) Excludes teachers-in-training generally. (b) If a full-time teacher teaches both senior and junior technical school pupils, he is counted as part-time in these statistics (which include junior technical, but not senior technical, schools), if his teaching load in the junior school is less than 75 per cent. (c) For bases of calculating equivalent full-time units of part-time teaching see footnote (b) on page 511. (d) Baptist and Congregational. (e) Schools conducted by the Presbyterian and Methodist Schools Association. (f) Excludes unqualified teachers and teaching assistants at mission schools. (g) Visiting teachers who attend more than one school are counted as part-time in each.

**NUMBERS OF TEACHERS: GOVERNMENT AND NON-GOVERNMENT SCHOOLS(a)  
STATES AND TERRITORIES, 1963 TO 1967**

	Government schools			Non-government schools			All schools		
	Number of full-time teachers	Part-time teachers		Number of full-time teachers	Part-time teachers		Number of full-time teachers	Part-time teachers	
		Number	Eq.f.t.u. (b)		Number	Eq.f.t.u. (b)		Number	Eq.f.t.u. (b)
New South Wales—									
1963 . . .		(c)24,672		6,215	(d) 1,586	n.a.	n.a.	n.a.	n.a.
1964 . . .		(c)25,993		6,541	(d) 1,621	n.a.	n.a.	n.a.	n.a.
1965 . . .	26,846	878	415	6,842	(d) 1,743	443	33,688	2,621	858
1966 . . .	27,898	1,056	520	6,717	(d) 1,821	471	34,615	2,877	991
1967 . . .	29,288	1,178	582	7,179	(d) 1,976	530	36,467	3,154	1,112
Victoria—									
1963 . . .	17,373	(e) 1,668	n.a.	5,038	978	n.a.	22,411	2,646	n.a.
1964 . . .	19,026	(e) 1,568	n.a.	5,326	1,004	n.a.	24,352	2,572	n.a.
1965 . . .	20,083	(e) 1,816	1,134	5,551	1,149	278	25,634	2,965	1,412
1966 . . .	20,788	(e) 2,275	1,357	5,854	1,237	313	26,642	3,512	1,670
1967 . . .	22,144	(e) 2,229	1,272	6,050	1,388	292	28,194	3,617	1,564
Queensland—									
1963 . . .	8,810	854	n.a.	2,333	468	n.a.	11,143	1,322	n.a.
1964 . . .	9,058	819	n.a.	2,472	539	n.a.	11,530	1,358	n.a.
1965 . . .	9,316	696	56	2,543	492	107	11,859	1,188	163
1966 . . .	9,637	677	54	2,649	568	131	12,286	1,245	185
1967 . . .	10,107	630	51	2,701	607	134	12,808	1,237	185
South Australia—									
1963 . . .	6,895	431	n.a.	1,165	319	n.a.	8,060	750	n.a.
1964 . . .	7,340	477	n.a.	1,231	329	n.a.	8,571	806	n.a.
1965 . . .	7,872	468	143	1,252	355	114	9,124	823	257
1966 . . .	8,189	481	174	1,306	371	116	9,495	852	290
1967 . . .	8,669	650	235	1,315	396	136	9,984	1,046	371
Western Australia—									
1963 . . .	4,471	74	17	1,148	n.a.	44	5,619	n.a.	61
1964 . . .	4,713	103	16	1,188	141	32	5,901	244	48
1965 . . .	5,009	119	39	1,255	186	46	6,264	305	85
1966 . . .	5,298	135	39	1,278	221	67	6,576	356	106
1967 . . .	5,619	174	63	1,347	243	64	6,966	417	127
Tasmania—									
1963 . . .	2,919	183	n.a.	509	85	n.a.	3,428	268	n.a.
1964 . . .	3,016	141	n.a.	503	132	n.a.	3,519	273	n.a.
1965 . . .	3,131	194	55	509	157	29	3,640	351	84
1966 . . .	3,183	279	69	523	164	35	3,706	443	104
1967 . . .	3,305	316	71	542	155	40	3,847	471	111
Northern Territory—									
1963 . . .	207	4	n.a.	(f) 68	1	n.a.	275	5	n.a.
1964 . . .	241	6	n.a.	(f) 63	..	n.a.	304	6	n.a.
1965 . . .	281	4	1	(f) 72	1	..	353	5	1
1966 . . .	340	13	2	(f) 75	..	..	415	13	2
1967 . . .	379	6	1	(f) 72	(f) 1	..	451	7	1
Australian Capital Territory—									
1963 . . .		(c) 476		183	(d) 18	n.a.	n.a.	n.a.	n.a.
1964 . . .		(c) 554		215	(d) 27	n.a.	n.a.	n.a.	n.a.
1965 . . .	596	34	24	240	(d) 28	6	836	62	30
1966 . . .	695	16	9	261	(d) 41	13	956	57	22
1967 . . .	745	32	15	269	(d) 63	29	1,014	95	44

(a) Excludes teachers-in-training generally. (b) For basis of calculating equivalent full-time units for part-time teachers see footnote (b) on page 511. (c) Includes numbers of full-time teachers (including casual teachers) and part-time casual teachers expressed in equivalent full-time units. (d) Visiting teachers who attend more than one school are counted as part-time in each school visited. (e) If a full-time teacher teaches both senior and junior technical school pupils, he is counted as part-time in these statistics (which include junior technical, but not senior technical, schools) if his teaching load in the junior school is less than 75 per cent. (f) Excludes unqualified teachers and teaching assistants at mission schools.

**Ages of pupils**

The ages of pupils at school census dates for 1967 and earlier years are shown in the following tables.

**GOVERNMENT AND NON-GOVERNMENT SCHOOLS: PUPILS, BY AGE AND SEX  
AUSTRALIA, 1967**  
(Census enrolment)

Age last birthday (years)	Government schools			Non-government schools			Total		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total(a)
Under 6	84,133	79,653	163,786	21,250	21,501	42,751	105,383	101,154	206,537
6	99,403	92,876	192,279	26,126	25,968	52,094	125,529	118,844	244,373
7	96,563	90,733	187,296	25,916	26,219	52,135	122,479	116,952	239,431
8	95,592	90,089	185,681	25,987	26,113	52,100	121,579	116,202	237,781
9	93,791	87,965	181,756	25,307	25,984	51,291	119,098	113,949	233,047
10	92,362	86,108	178,470	25,093	25,946	51,039	117,455	112,054	229,509
11	91,631	83,974	175,605	24,979	25,837	50,816	116,610	109,811	226,421
12	88,529	81,594	170,123	25,075	26,838	51,913	113,604	108,432	222,036
13	87,029	79,487	166,516	23,688	26,801	50,489	110,717	106,288	217,005
14	86,672	78,113	164,785	22,838	26,343	49,181	109,510	104,456	213,966
15	65,497	54,573	120,070	19,744	21,053	40,797	85,241	75,626	160,867
16	38,112	27,492	65,604	14,848	13,686	28,534	52,960	41,178	94,138
17	19,627	12,268	31,895	9,703	7,036	16,739	29,330	19,304	48,634
18 and over	6,836	2,830	9,686	3,542	1,366	4,908	10,398	4,196	14,594
Total.	1,045,797	947,755	1,993,552	294,096	300,691	594,787	1,339,893	1,248,446	2,588,339

(a) Includes Aboriginal children.

**SCHOOLS: PUPILS, BY AGE, STATES AND TERRITORIES, 1967**  
(Census enrolment)

Age last birthday (years)	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.(a)
Under 6	86,192	62,160	20,349	19,190	7,880	6,885	1,182	2,699	206,537
6	86,124	66,831	36,082	23,512	19,083	8,686	1,407	2,648	244,373
7	84,148	65,101	35,654	23,365	18,964	8,452	1,251	2,496	239,431
8	83,456	65,659	34,949	23,000	18,710	8,326	1,248	2,433	237,781
9	81,844	63,679	34,731	22,438	18,631	8,215	1,129	2,380	233,047
10	80,351	62,948	34,104	22,424	18,428	7,982	1,048	2,224	229,509
11	78,631	62,416	33,335	21,955	18,832	8,159	1,015	2,078	226,421
12	77,484	60,510	33,399	21,779	18,337	7,624	986	1,917	222,036
13	75,928	59,281	32,520	21,620	17,395	7,394	877	1,990	217,005
14	75,642	58,524	30,944	21,554	17,150	7,564	641	1,947	213,966
15	54,498	46,947	22,070	17,233	12,251	5,840	467	1,561	160,867
16	31,241	31,564	11,104	10,791	5,554	2,599	233	1,052	94,138
17	18,507	15,619	5,471	4,371	2,762	1,090	89	725	48,634
18 and over	6,019	4,564	1,578	1,061	732	362	25	253	14,594
Total.	920,065	725,803	366,290	254,293	194,709	89,178	11,598	26,403	2,588,339

(a) Includes Aboriginal children.

**SCHOOLS: PUPILS, BY AGE AND SEX, AUSTRALIA, 1963 TO 1967**  
(Census enrolment)

Age last birthday (years)	1963		1964		1965 (b)		1966 (b)		1967 (b)	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Under 6	95,454	91,544	97,651	93,404	100,399	95,811	104,222	99,495	105,383	101,154
6	112,486	107,528	114,888	109,812	118,565	113,600	120,709	114,770	125,529	118,844
7	112,251	105,595	113,685	108,423	116,512	111,748	120,392	115,466	122,479	116,952
8	109,026	104,940	111,882	106,358	114,660	109,538	117,903	112,841	121,579	116,202
9	106,932	102,944	109,601	105,826	113,810	107,719	115,761	110,778	119,098	113,949
10	109,020	104,124	108,446	103,905	111,359	107,105	115,380	108,806	117,455	112,054
11	107,441	102,169	109,593	105,228	110,026	104,874	112,832	107,872	116,610	109,811
12	105,461	101,110	107,342	102,220	110,091	105,816	110,945	105,536	113,604	108,432
13	104,744	99,760	105,434	100,668	107,850	102,728	111,659	106,397	110,717	106,288
14	93,578	87,336	99,617	94,053	101,907	97,432	105,962	100,241	109,510	104,456
15	71,323	59,772	71,619	61,317	77,735	68,958	80,972	72,015	85,241	75,626
16	44,182	32,741	43,843	33,045	46,095	35,604	49,666	38,554	52,950	41,178
17	17,709	10,117	22,826	13,642	22,624	13,936	22,008	13,207	29,330	19,304
18 and over	5,428	1,693	7,072	2,290	8,249	2,901	7,279	2,662	10,398	4,196
Not stated(a)	1,412	1,477	1,549	1,540	..	..	..	..	..	..
Total.	1,196,447	1,112,850	1,225,048	1,141,731	1,259,882	1,177,770	1,295,690	1,208,640	1,339,893	1,248,446

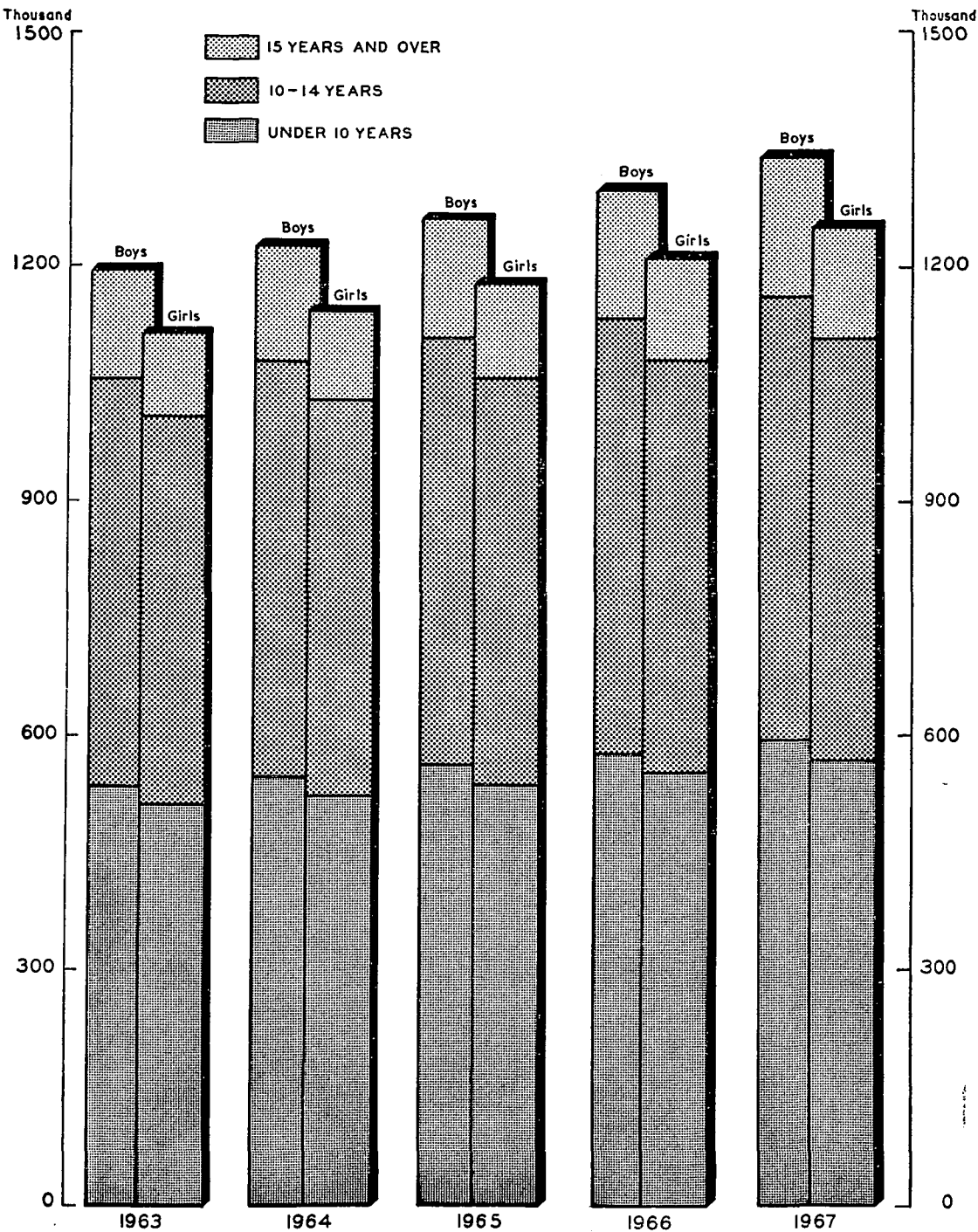
(a) Comprises Aboriginal children at special schools whose ages were not collected. (b) Aboriginal children included in specified age groups.

**Grades of pupils**

The numbers of pupils enrolled in grades in each State and Territory are shown in the following table. The grading of pupils differs for the various school systems in Australia because of the differences in curricula set by education departments. In addition, the methods of allocating classes to

SCHOOL PUPILS, BY AGE GROUP: AUSTRALIA

1963 TO 1967



grades vary from State to State, and there are also differences in the administrative methods of aggregating grades of a more or less similar nature. The figures presented in the table represent essentially the system of grading adopted in each different State and are therefore not comparable between States. Pupils not allocated to grades (i.e. physically, mentally, or socially handicapped children) are shown as being in special grades or schools or as 'ungraded'. However, the numbers shown in special grades or ungraded should not be taken as the total number of handicapped pupils in a State because some handicapped children are included in normal grades.

**GOVERNMENT AND NON-GOVERNMENT SCHOOLS: PUPILS, BY GRADE, ETC.  
AND SEX, STATES AND TERRITORIES, 1967**

Grade, year or form	Government schools			Non-government schools			All schools		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total

NEW SOUTH WALES									
Infants—									
Kindergarten . . . . .	36,250	33,881	70,131	10,548	10,325	20,873	46,798	44,206	91,004
1 . . . . .	40,544	36,694	77,238	10,651	10,346	20,997	51,195	47,040	98,235
2 . . . . .	35,468	33,144	68,612	10,212	10,146	20,358	45,680	43,290	88,970
Primary—									
3 . . . . .	33,641	31,958	65,599	9,888	9,739	19,627	43,529	41,697	85,226
4 . . . . .	33,368	31,454	64,822	9,767	10,017	19,784	43,135	41,471	84,606
5 . . . . .	32,683	30,372	63,055	9,575	9,613	19,188	42,258	39,985	82,243
6 . . . . .	31,444	30,121	61,565	9,498	9,785	19,283	40,942	39,906	80,848
Special primary grades(a) . . . . .	4,413	2,951	7,364	1,084	932	2,016	5,497	3,883	9,380
Secondary—									
Form I (or 7) . . . . .	31,841	29,438	61,279	9,071	9,588	18,659	40,912	39,026	79,938
Form II (or 8) . . . . .	30,406	28,265	58,671	8,425	9,325	17,750	38,831	37,590	76,421
Form III (or 9) . . . . .	16,494	13,833	30,327	6,634	6,412	13,046	23,128	20,245	43,373
Form IV . . . . .	23,815	21,772	45,587	7,958	8,633	16,591	31,773	30,405	62,178
Form V . . . . .	8,224	5,632	13,856	3,841	2,840	6,681	12,065	8,472	20,537
Form VI . . . . .	6,641	4,347	10,988	3,135	2,068	5,203	9,776	6,415	16,191
Special secondary grades(a) . . . . .	732	183	915	..	..	..	732	183	915
<b>Total . . . . .</b>	<b>365,964</b>	<b>334,045</b>	<b>700,009</b>	<b>110,287</b>	<b>109,769</b>	<b>220,056</b>	<b>476,251</b>	<b>443,814</b>	<b>920,065</b>

VICTORIA									
Primary—									
1(b) . . . . .	55,008	50,325	105,333	15,189	15,243	30,432	70,197	65,568	135,765
2 . . . . .	25,686	23,648	49,334	8,532	8,431	16,963	34,218	32,079	66,297
3 . . . . .	25,194	23,367	48,561	8,541	8,341	16,882	33,735	31,708	65,443
4 . . . . .	24,468	22,922	47,390	8,144	8,204	16,348	32,612	31,126	63,738
5 . . . . .	24,261	22,526	46,787	8,055	8,269	16,324	32,316	30,795	63,111
6 . . . . .	24,010	22,133	46,143	8,133	8,412	16,545	32,143	30,545	62,688
Ungraded(a) . . . . .	1,490	870	2,360	125	159	284	1,615	1,029	2,644
Secondary—									
7 or I . . . . .	24,916	22,134	47,050	7,074	8,280	15,354	31,990	30,414	62,404
8 or II . . . . .	24,066	21,128	45,194	6,507	8,157	14,664	30,573	29,285	59,858
III . . . . .	22,898	19,313	42,211	6,173	7,589	13,762	29,071	26,902	55,973
IV . . . . .	17,980	14,637	32,617	5,691	6,623	12,314	23,671	21,260	44,931
V . . . . .	11,393	8,364	19,757	4,733	4,992	9,725	16,126	13,356	29,482
VI . . . . .	4,351	3,193	7,544	3,436	2,489	5,925	7,787	5,682	13,469
<b>Total . . . . .</b>	<b>285,721</b>	<b>254,560</b>	<b>540,281</b>	<b>90,333</b>	<b>95,189</b>	<b>185,522</b>	<b>376,054</b>	<b>349,749</b>	<b>725,803</b>

QUEENSLAND									
Primary—									
Preparatory . . . . .	33	18	51	312	305	617	345	323	668
1 . . . . .	17,465	15,656	33,121	4,661	4,310	8,971	22,126	19,966	42,092
2 . . . . .	15,477	14,482	29,959	4,246	4,155	8,401	19,723	18,637	38,360
3 . . . . .	15,082	13,910	28,992	3,995	4,049	8,044	19,077	17,959	37,036
4 . . . . .	14,621	13,482	28,103	3,700	3,678	7,378	18,321	17,160	35,481
5 . . . . .	14,314	13,507	27,821	3,670	3,667	7,337	17,984	17,174	35,158
6 . . . . .	14,282	13,024	27,306	3,631	3,765	7,396	17,913	16,789	34,702
7 . . . . .	13,394	12,827	26,221	3,791	3,906	7,697	17,185	16,733	33,918
Ungraded(a) . . . . .	1,330	685	2,015	37	34	71	1,367	719	2,086
Secondary—									
8 . . . . .	12,484	11,521	24,005	3,986	4,251	8,237	16,470	15,772	32,242
9 . . . . .	11,943	11,133	23,076	3,902	4,263	8,165	15,845	15,396	31,241
10 . . . . .	10,060	9,039	19,099	3,712	3,630	7,342	13,772	12,669	26,441
11 . . . . .	2,968	2,204	5,172	2,134	1,694	3,828	5,102	3,898	9,000
12 . . . . .	2,617	1,804	4,421	2,011	1,433	3,444	4,628	3,237	7,865
<b>Total . . . . .</b>	<b>146,070</b>	<b>133,292</b>	<b>279,362</b>	<b>43,788</b>	<b>43,140</b>	<b>86,928</b>	<b>189,858</b>	<b>176,432</b>	<b>366,290</b>

(a) Pupils at special schools and in special classes at ordinary schools. (b) In Victoria children who are expected to reach five years of age by 1 July are admitted at the beginning of the school year. The younger children may not reach grade 2 until they have been at school for two years.

GOVERNMENT AND NON-GOVERNMENT SCHOOLS: PUPILS, BY GRADE, ETC.  
AND SEX, STATES, ETC., 1967—continued

Grade, year or form	Government schools			Non-government schools			All schools		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
SOUTH AUSTRALIA									
Pre-primary	..	..	..	112	145	257	112	145	257
Primary—									
Kindergarten	2,243	2,153	4,396	..	..	..	2,243	2,153	4,396
I	12,943	11,910	24,853	1,924	1,920	3,844	14,867	13,830	28,697
II	11,231	10,339	21,570	1,562	1,693	3,255	12,793	12,032	24,825
III	10,840	10,210	21,050	1,544	1,678	3,222	12,384	11,888	24,272
IV	10,620	9,756	20,376	1,502	1,696	3,198	12,122	11,452	23,574
V	10,488	9,912	20,400	1,569	1,675	3,244	12,057	11,587	23,644
VI	10,202	9,772	19,974	1,614	1,728	3,342	11,816	11,500	23,316
VII	9,936	9,220	19,156	1,694	1,706	3,400	11,630	10,926	22,556
Ungraded(a)	1,358	841	2,199	13	15	28	1,371	856	2,227
Secondary—									
VIII or 1st	10,237	9,444	19,681	1,558	1,726	3,284	11,795	11,170	22,965
IX or 2nd	9,237	8,478	17,715	1,539	1,685	3,224	10,776	10,163	20,939
X or 3rd	8,204	7,314	15,518	1,516	1,696	3,212	9,720	9,010	18,730
XI or 4th	4,390	3,340	7,730	1,270	1,150	2,420	5,660	4,490	10,150
5th	1,500	842	2,342	866	463	1,329	2,366	1,305	3,671
Ungraded(b)	52	22	74	..	..	..	52	22	74
Total	113,481	103,553	217,034	18,283	18,976	37,259	131,764	122,529	254,293
WESTERN AUSTRALIA									
Primary—									
Kindergarten	..	..	..	173	200	373	173	200	373
1	9,040	8,058	17,098	1,978	1,996	3,974	11,018	10,054	21,072
2	8,281	7,655	15,936	1,790	1,887	3,677	10,071	9,542	19,613
3	8,018	7,514	15,532	1,681	1,796	3,477	9,699	9,310	19,009
4	7,773	7,251	15,024	1,576	1,795	3,371	9,349	9,046	18,395
5	8,024	7,285	15,309	1,551	1,756	3,307	9,575	9,041	18,616
6	7,995	7,022	15,017	1,467	1,781	3,248	9,462	8,803	18,265
7	7,644	7,154	14,798	1,590	1,901	3,491	9,234	9,055	18,289
Special classes(c)	835	379	1,214	..	..	..	835	379	1,214
Secondary—									
1	7,065	6,469	13,534	1,913	2,190	4,103	8,978	8,659	17,637
2	6,968	6,339	13,307	1,720	2,130	3,850	8,688	8,469	17,157
3	5,911	5,408	11,319	1,544	1,892	3,436	7,455	7,300	14,755
4	1,802	1,442	3,244	951	922	1,873	2,753	2,364	5,117
5	1,321	873	2,194	822	726	1,548	2,143	1,599	3,742
Special classes(c)	335	200	535	..	..	..	335	200	535
Special schools(c)	546	368	914	4	2	6	550	370	920
Total	81,558	73,417	154,975	18,760	20,974	39,734	100,318	94,391	194,709
TASMANIA									
Pre-school	1,343	1,289	2,632	41	45	86	1,384	1,334	2,718
Primary—									
Kindergarten(c)	1,164	1,116	2,280	410	384	794	1,574	1,500	3,074
1	5,011	4,458	9,469	776	747	1,523	5,787	5,205	10,992
2	3,714	3,584	7,298	592	606	1,198	4,306	4,190	8,496
3	3,781	3,484	7,265	583	659	1,242	4,364	4,143	8,507
4	3,610	3,322	6,932	607	614	1,221	4,217	3,936	8,153
5	3,655	3,387	7,042	544	671	1,215	4,199	4,058	8,257
6	3,547	3,362	6,909	641	706	1,347	4,188	4,068	8,256
Secondary—									
I	3,445	3,213	6,658	696	750	1,446	4,141	3,963	8,104
II	3,234	3,131	6,365	645	736	1,381	3,879	3,867	7,746
III	3,069	2,897	5,966	655	743	1,398	3,724	3,640	7,364
IV	1,696	1,491	3,187	581	605	1,186	2,277	2,096	4,373
V	474	418	892	278	274	552	752	692	1,444
VI	376	213	589	187	118	305	563	331	894
Special schools(d)	473	308	781	..	19	19	473	327	800
Total	38,592	35,673	74,265	7,236	7,677	14,913	45,828	43,350	89,178

(a) Relates to occupation centres, opportunity classes, speech and hearing classes, and children in schools at spastic centres. (b) Speech and hearing classes. (c) In comparison with previous years' statistics numbers in kindergarten grade show an increase and grade 1 a decrease because of re-allocations between these grades. (d) For physically and mentally handicapped or delinquent children.



**GOVERNMENT AND NON-GOVERNMENT SCHOOLS: PUPILS, BY GRADE, ETC.  
AND SEX, STATES, ETC., 1967—continued**

Grade, year or form	Government schools			Non-government schools			All schools		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
<b>NORTHERN TERRITORY</b>									
Primary—									
Kindergarten . . .	53	35	88	..	..	..	53	35	88
I . . . . .	628	578	1,206	79	91	170	707	669	1,376
II . . . . .	443	405	848	82	76	158	525	481	1,006
III . . . . .	389	377	766	76	68	144	465	445	910
IV . . . . .	325	320	645	56	65	121	381	385	766
V . . . . .	361	314	675	54	70	124	415	384	799
VI . . . . .	325	290	615	42	37	79	367	327	694
VII . . . . .	284	287	571	54	50	104	338	337	675
Ungraded(a) . . .	1,302	1,192	2,494	715	708	1,423	2,017	1,900	3,917
Secondary—									
VIII or 1st . . .	234	225	459	20	28	48	254	253	507
IX or 2nd . . .	196	195	391	19	12	31	215	207	422
X or 3rd . . .	140	130	270	6	11	17	146	141	287
XI or 4th . . .	70	47	117	..	..	..	70	47	117
5th . . . . .	22	12	34	..	..	..	22	12	34
Total . . . . .	4,772	4,407	9,179	1,203	1,216	2,419	5,975	5,623	11,598
<b>AUSTRALIAN CAPITAL TERRITORY</b>									
Infants—									
Kindergarten . .	1,031	966	1,997	446	401	847	1,477	1,367	2,844
1 . . . . .	1,182	1,001	2,183	409	401	810	1,591	1,402	2,993
2 . . . . .	920	877	1,797	400	359	759	1,320	1,236	2,556
Primary—									
3 . . . . .	935	860	1,795	374	315	689	1,309	1,175	2,484
4 . . . . .	839	802	1,641	345	318	663	1,184	1,120	2,304
5 . . . . .	848	799	1,647	315	318	633	1,163	1,117	2,280
6 . . . . .	778	790	1,568	285	321	606	1,063	1,111	2,174
Special primary grades(b) . .	97	76	173	..	..	..	97	76	173
Secondary—									
Form I . . . . .	705	641	1,346	367	317	684	1,072	958	2,030
Form II . . . . .	714	675	1,389	353	279	632	1,067	954	2,021
Form III . . . . .	587	520	1,107	286	292	578	873	812	1,685
Form IV . . . . .	439	426	865	263	208	471	702	634	1,336
Form V . . . . .	292	211	503	184	131	315	476	342	818
Form VI . . . . .	272	164	436	179	90	269	451	254	705
Total . . . . .	9,639	8,808	18,447	4,206	3,750	7,956	13,845	12,558	26,403

(a) Relates to opportunity classes and occupation centres, and Aboriginal children at special schools at settlements, missions and on pastoral properties. (b) Pupils at special schools and in special classes at ordinary schools.

### Other aspects of school education

Information relating to school medical and dental services is given in the chapter Public Health, and particulars of school savings banks in the chapter Private Finance.

#### Provisions for isolated areas

Although the task of bringing education to isolated areas in Australia presents problems, all education authorities have aimed at providing opportunities for country children comparable to those available to city children. Country children follow the same curricula (with local adaptation, if desirable) and are under the guidance of teachers who are trained for service in country and city schools alike.

In areas where there are sufficient children of school age a 'one-teacher' school may be formed with all primary grades in a single classroom under the control of the one teacher. Special training is given to teachers undertaking work of this kind. Children who complete a primary course in a one-teacher school and cannot attend a secondary school may do secondary correspondence lessons under the teacher's supervision.

In districts where a number of small centres are scattered around a larger centre or country town the tendency is to close the one-teacher schools and transport pupils each day by buses to a 'consolidated' school in the larger centre. Consolidated schools provide primary instruction and from two to four years of post-primary instruction. The post-primary curriculum adopted is usually directed towards practical activities and training in subjects bearing on the primary industries of the locality.

Where a group of children is too small to warrant the establishment of a one-teacher school at public expense, a 'subsidised' school may be opened. The Education Department pays part of the cost and in some States appoints a teacher. Some States also administer 'provisional' schools, which are completely financed by the Government but which are not large enough, or sufficiently assured of adequate continued attendance of pupils, to warrant classification as permanent schools.

*Correspondence schools.* These have been established in each State capital city to meet the needs of children whose daily attendance at school is prevented by distance between home and school, by illness or by physical disability. The correspondence schools also cater for inmates of penal institutions, Australian children overseas, pupils of other schools in which particular courses are not available, and, as well, for members of the Defence Forces and other adults completing their secondary education. Where children are involved, lessons are done with the help of a supervisor, usually a member of the child's family, and posted back to the correspondence school in the capital city, where they are corrected and returned with comments. Every endeavour is made to maintain a personal link between teacher and pupil. Correspondence schools began with primary grades only, but were soon extended to cater for secondary pupils, and it is now possible to do a complete secondary course to matriculation standard by correspondence. Each year more than 20,000 students receive all or part of their instruction by correspondence.

*Schools of the air.* These are intended to give the outback child of school age some of the benefits of school life and to supplement correspondence education. The schools of the air keep the various correspondence schools informed of the progress of their pupils. Using the two-way wireless equipment developed first by the Royal Flying Doctor Service, children hundred of miles apart participate in the same lesson, and teacher and pupils can talk directly with each other. The first school of the air was established in 1951 at Alice Springs in the Northern Territory; it has been followed by similar schools at Broken Hill in the far west of New South Wales; Ceduna and Port Augusta in South Australia; Charleville, Mount Isa and Charters Towers in Queensland; Meekatharra, Derby, Kalgoorlie, and Port Hedland in Western Australia; and Katherine in the Northern Territory. These twelve schools serve children in an area of a million square miles.

#### **Handicapped children**

Some provision is made for the education of physically and mentally handicapped children, both by the State authorities and by church and voluntary organisations, often working in conjunction. In some cases, where residential schools are necessary for particular groups, educational facilities and teaching staff are provided by a State education department, while a voluntary organisation provides accommodation and accepts responsibility for the general welfare of the children. Among the facilities available are: hospital schools for sick and crippled children; 'spastic centres' for cerebral palsied children; schools and classes for deaf children; schools for blind children; and special schools and classes for mentally retarded children. Special schools and classes have involved the appointment of departmental specialists, the provision of a special training course at Melbourne Teachers' College and close liaison with school health services. In some States, clinics attached to hospitals, or functioning as an independent child welfare service, handle cases of personality maladjustment and work in co-operation with the psychological services of the education departments.

#### **Educational guidance**

Each Australian State has a system of educational guidance administered by educational psychologists and backed by a system of pupil record cards. The functions of these services are to provide advice on suitability of various secondary studies for particular children, diagnosis and guidance of atypical children, preliminary guidance, and, in some States, research. The weight given to each of these functions varies from State to State, but the aim is to provide educational guidance for all children.

Throughout Australia branches of the Commonwealth Employment Service co-operate with State education departments by giving post-school vocational guidance, using the data obtained during the school careers of the children and made available by the education departments. In New South Wales a similar service is also provided by the Youth Welfare Section of the State Department of Labour and Industry.

#### **Research**

All State education departments have set up branches undertaking research directed towards departmental activities. The work of the research branches is concerned with such matters as curriculum content, new teaching methods, evaluation procedures, wastage rates and educational statistics.

#### **School broadcasting and television**

Over the years an extensive school broadcasting system has been developed in Australia by the co-operative efforts of the Australian Broadcasting Commission and education authorities. The

Australian Broadcasting Commission's Education Department is responsible for preparing and broadcasting programmes, but it draws on the advice and services of teachers and maintains permanent liaison with State education departments. In 1966, 95 per cent of Australian schools were equipped to receive radio broadcasts.

Most school broadcasts are presented as part of the regular Australian Broadcasting Commission programmes without separate stations or wave lengths. Special efforts are made to relate the broadcasts to school work by the extensive distribution of booklets, giving details of programmes in advance, and subject notes accompanied by picture sheets, work books, and teachers' notes. Broadcasting has proved to be a most effective way of reaching the outback children of Australia, and radio lessons have been designed to supplement correspondence lessons.

The year 1966 saw a further increase in the number of schools receiving television broadcasts and in the number of programmes produced. The Australian Broadcasting Commission has increased its output of school television programmes, especially instructional programmes in mathematics and science for secondary schools. Direct teaching lessons designed for the senior forms were presented. At the same time most education departments began to subsidise the purchase of television sets, and by the end of 1966, 37 per cent of schools in Australia were equipped to use educational television programmes.

#### **Scholarships and bursaries**

All States have limited schemes of financial assistance to school pupils, mostly at the secondary level, through scholarships or bursaries. As tuition in government schools is free, this assistance is usually in the form of maintenance allowances, both for children living with their parents and for those living away from home. These may be paid in a lump sum or in instalments throughout the year. Awards are usually made on the results of a competitive examination, and sometimes a means test is applied. Other government and private authorities, such as the Repatriation Department and the Legacy War Orphans Fund, assist special categories of pupils with their school education. Many non-government schools also award scholarships, on a competitive basis, which enable students to attend the particular schools without payment of fees.

In 1964 the Commonwealth Government, with the co-operation of the State Departments of Education, introduced a programme of secondary scholarships to encourage successful candidates to complete the final two years of secondary schooling. Ten thousand of these scholarships are awarded each year. Further details of the Commonwealth secondary scholarship scheme and the Commonwealth technical scholarship scheme are given on pages 549-50.

#### **School transport**

All States make some provision to cover the costs of transport for children travelling to and from school.

#### **School buildings**

The great increase in the school population in the last decade led to an expansion in school building. To cope with this growth in population, it has been necessary to make use of temporary and emergency structures. Quite large schools are being built in stages to match increases in local population in new and rapidly developing suburbs in metropolitan areas. Authorities are giving attention to the use of new materials and to the planning of sites. Gymnasiums which may also serve as assembly halls are sometimes included, and lighting, heating and ventilation to meet different climatic conditions are planned. For details of assistance provided by the Commonwealth for the building and equipping of science laboratories, *see* page 550.

#### **Textbooks, materials and other equipment**

The State education departments supply government schools, free of charge, with essential equipment, including scientific apparatus, maps, blackboards, chalk, and cleaning materials, and non-consumable equipment for commercial, home science and manual training. Garden tools and physical training equipment are also supplied in most States. Readers and writing equipment for individual pupils are sometimes supplied free in primary schools, and several education departments produce monthly school magazines which are supplied free or cheaply. In primary schools (except in one State where textbooks are made available free to children in both government and non-government primary schools) and in secondary schools, textbooks must, however, be purchased by students. In several States schools own stocks of textbooks which are hired to students, and in one State secondary textbooks are sold at reduced prices. In four States certain textbook costs are subsidised for pupils attending government and non-government schools. The parent and citizen

organisations, with the assistance of subsidies from the education departments, are usually responsible for providing equipment such as radios and television sets, film strip projectors, pianos, duplicators and, in particular, library books.

The design of school furniture is undergoing change following research on posture and the physical measurement of children. Dual desks are now being replaced in many schools by individual tables and chairs, provided in a range of sizes suitable to each class. In line with modern educational practice, the new type of furniture has been designed to allow more flexible arrangements of the classroom.

#### **Visual aids**

Visual aids are widely used in Australian education. Each of the State education departments has a visual education branch to handle the production and distribution of such materials. Film strips and posters are distributed free or at low cost. Films are held in central libraries and are requisitioned by schools as required for teaching purposes.

### **Pre-school education**

Pre-school centres are maintained by voluntary organisations such as the Kindergarten Unions, churches, and committees of interested citizens. Over the years an increasing amount of financial assistance has been provided by State governments to approved pre-school centres so that the contributions made by parents remain at a realistic level. Grants are available for teachers' salaries and, in some areas, towards buildings and equipment.

The Australian Pre-school Association is a national body whose members are the organisations throughout Australia seeking to promote the health and welfare of young children. It aims to co-ordinate and strengthen pre-school education. It is responsible for the administration, on behalf of the Commonwealth Government, of six Lady Gowrie Child Centres for child-study and demonstration.

Pre-school centres are located in city and country areas, and programmes are adapted to meet the needs of the children attending. A typical pre-school centre provides half-day sessions for children. Crèches and day-nurseries provide full-day care in closely settled areas. In a few centres occasional or residential care is available. Pre-school centres are able to cater for only a small proportion of the children under six years of age, but radio and television have brought a form of education within the reach of practically every pre-school child in Australia. The Australian Broadcasting Commission pioneered the programme 'Kindergarten of the Air', a session of twenty-five minutes each week-day broadcast throughout the country and overseas through Radio Australia. This session was designed to reach children in isolated areas.

The half-hour television programme 'Play-school' is also available each week-day to children of kindergarten age in all State capital cities and in many country regions.

### **Technical education**

The following description of technical education refers to training in technical fields given by institutions other than secondary schools and universities. Students may proceed to this kind of training after completing three to five years at secondary school. Each State has developed a system of technical education based on institutions set up in all the State capital cities and in some country areas. There are 3 diploma-granting institutions in New South Wales, 20 in Victoria, 7 in Queensland, 3 in South Australia, 3 in Western Australia, and 3 in Tasmania. These institutions are known variously as technical colleges, institutes of technology and schools of mines. The earliest began as local and even private ventures in the second half of the nineteenth century, but almost all of them have now come under the control of the State governments.

The technical colleges in Queensland, South Australia, Western Australia, and Tasmania are administered by branches of the State education departments. In Western Australia and South Australia the Institutes of Technology function as autonomous institutions. New South Wales has a separate State Department of Technical Education. In Victoria there is a dual system with a number of the older colleges controlled by their own 'councils' in addition to government-controlled colleges administered by the Technical Education Branch of the Education Department. The council-controlled colleges receive government grants-in-aid. Most of the diploma and other tertiary courses of technical institutions are now receiving Commonwealth financial assistance under the arrangements covering colleges of advanced education as outlined on page 546.

Australian technical colleges offer training in all the major industrial skills and in a wide variety of commercial, artistic and domestic occupations. The three main types of courses are described in the following paragraphs.

### Trade courses

These offer part-time training for apprentices. In developing a system of technical education, the Australian authorities were influenced by the British tradition which regards practical experience on the job as the fundamental training procedure, to be supplemented by theoretical and practical training at an appropriate school. In each of the Australian States there is an apprenticeship authority which supervises the administration of apprenticeships, and an education authority which provides technical education through its technical colleges.

Most students who wish to become tradesmen leave school on the completion of three or four years of secondary schooling at about sixteen years of age. An increasing proportion, however, is entering at higher educational levels and receiving credit for this. On entering apprenticeship in one of the trades, the young apprentice is required to enrol in an appropriate trade course in one of the network of technical colleges in capital cities and large country towns.

The time spent on training varies from three to five years in different trades and States. Between four and eight hours' instruction a week is required. Most of this takes place in the employer's time, and it is unusual for more than two hours a week to be spent in attending classes outside working hours.

### Certificate courses

These courses are designed to provide training in technical occupations and in some cases can be counted towards a diploma course. Certificate courses vary in length from State to State, but generally speaking they last from two to seven years. Attendance may be full-time for all or part of the course, or wholly part-time. Usually there are no occupational requirements for admission to a certificate course, and students who have completed a related trade course may be admitted together with other students to a certificate course. Educational requirements in most cases specify possession of an Intermediate level examination certificate, which may need to include passes at appropriate levels in certain specified subjects. In addition, in New South Wales the Department of Technical Education conducts the Certificate Entrance Examination, a pass in which qualifies a student for attendance at a technical college. Courses are offered in subjects such as accountancy, industrial electronics, wool classing and architectural drafting.

### Diploma courses

Diploma courses are designed to provide professional training in fields such as architecture, art, building, commerce, management, public administration, manual arts, the various branches of engineering and metallurgy, and pure and applied science. They usually follow completion of a full secondary school course. The courses consist of complete progressive units of study in which the lecture room, laboratory and workshop are closely associated. They vary from three to five years' full-time and from three to seven years' part-time study. At least one full year of employment in an appropriate occupation is usually required. The aim of the courses is to develop highly trained technologists with the qualifications and experience required for membership of a professional institution.

The diploma schools or sections of the major institutions are being developed as colleges of advanced education, and these activities are gradually being separated from the trade and certificate sections of technical education.

### Other technical courses

Most colleges provide short post-diploma and refresher courses to keep students in touch with new developments in their fields, as well as courses of general interest, such as handicrafts and motor mechanics. Training in certain technical aspects of agriculture such as farm mechanics and wool classing is often given in the technical colleges. Some also offer general secondary courses to enable adults to prepare for matriculation and other public examinations.

### Technical correspondence teaching

Each State has a well developed system of technical education by correspondence to extend the facilities of a metropolitan college to rural students. Entrance qualifications are identical with those for the regular classes. A major problem of correspondence work is the linking of theory with practice. This is overcome to a certain extent by holding practical sessions at appropriate training centres once or twice a year at the technical college where the correspondence school is based, or at a mobile workshop stationed for the time at a focal point within the district. In New South Wales these mobile workshops are rail cars equipped with machinery and fittings to make them self-contained training schools for engineering and other trades. Among practical courses offered by correspondence are trade drawing, fitting and machinery, welding, diesel engine operation, automotive engineering and workshop practice, and farm mechanics.

**Technical colleges, teachers and students**

The numbers of colleges, teachers and enrolments during the years 1962 to 1966 are given in the following table.

**TECHNICAL EDUCATION: COLLEGES, TEACHERS AND ENROLMENTS  
STATES AND TERRITORIES, 1962 TO 1966**

State or Territory	Teachers			Students enrolled			
	Colleges	Full-time	Part-time	Total	Males	Females	Persons
<b>New South Wales(a)(b)</b>							
(c)(d)—							
1962 . . . . .	52	1,348	2,390	3,738	82,769	38,884	121,653
1963 . . . . .	52	1,474	2,732	4,206	87,477	40,219	127,696
1964 . . . . .	53	1,535	3,099	4,634	94,663	41,022	135,685
1965 . . . . .	54	1,570	3,140	4,710	98,840	41,377	140,217
1966 . . . . .	54	1,625	3,566	5,191	104,839	44,774	149,613
<b>Victoria(e)—</b>							
1962 . . . . .	70	2,773	2,219	4,992	48,939	12,487	61,426
1963 . . . . .	73	3,080	2,290	5,370	50,325	13,456	63,781
1964 . . . . .	73	3,378	2,363	5,741	52,031	13,399	65,430
1965(f) . . . . .	79	3,724	2,586	6,310	n.a.	n.a.	79,287
1966(f) . . . . .	82	4,151	2,639	6,790	n.a.	n.a.	82,230
<b>Queensland(d)—</b>							
1962 . . . . .	15	209	882	1,091	24,780	11,395	36,175
1963 . . . . .	15	229	977	1,206	29,044	12,860	41,904
1964 . . . . .	15	235	1,067	1,302	31,082	12,002	43,084
1965(g) . . . . .	14	308	921	1,229	29,715	6,740	36,455
1966 . . . . .	16	389	1,004	1,393	28,269	5,520	33,789
<b>South Australia—</b>							
1962(h) . . . . .	24	387	827	1,214	17,599	10,177	27,776
1963(i) . . . . .	24	453	954	1,407	18,661	11,291	(i)34,330
1964(i) . . . . .	25	462	1,101	1,563	19,956	11,503	(i)35,937
1965(i) . . . . .	25	520	1,153	1,673	21,805	13,214	(i)39,856
1966(i) . . . . .	25	549	1,214	1,763	21,685	14,332	(i)41,190
<b>Western Australia(d)(j)—</b>							
1962 . . . . .	25	352	1,136	1,488	29,374	15,531	44,905
1963 . . . . .	32	373	1,257	1,630	30,251	15,362	45,613
1964 . . . . .	32	444	1,398	1,842	34,399	16,711	51,110
1965 . . . . .	36	505	1,632	2,137	37,326	18,114	55,440
1966 . . . . .	36	606	1,710	2,316	39,161	19,396	58,557
<b>Tasmania—</b>							
1962 . . . . .	11	95	414	509	4,884	1,763	6,647
1963 . . . . .	11	104	438	542	5,491	1,994	7,485
1964 . . . . .	11	110	498	608	5,520	2,023	7,543
1965 . . . . .	12	146	442	588	5,501	2,110	7,611
1966 . . . . .	11	154	591	745	5,433	2,229	7,662
<b>Northern Territory—</b>							
1962 . . . . .	2	4	54	58	582	424	1,006
1963 . . . . .	2	1	66	67	706	552	1,258
1964 . . . . .	2	1	72	73	712	579	1,291
1965 . . . . .	2	1	100	101	947	942	1,889
1966 . . . . .	2	1	112	113	1,032	930	1,962
<b>Total—</b>							
1962 . . . . .	199	5,168	7,922	13,090	208,927	90,661	299,588
1963 . . . . .	209	5,714	8,714	14,428	221,955	95,734	322,067
1964 . . . . .	211	6,165	9,598	15,763	238,363	97,239	340,080
1965 . . . . .	222	6,774	9,974	16,748	n.a.	n.a.	360,755
1966 . . . . .	226	7,475	10,836	18,311	n.a.	n.a.	375,003

(a) Students enrolled represent gross enrolments, no allowance having been made for students enrolled in more than one course. (b) Includes Australian Capital Territory. Gross enrolments at Canberra Technical College were as follows: 1962, 2,431; 1963, 2,895; 1964, 3,551; 1965, 4,267; 1966, 4,855. (c) Figures include teachers and students at technical colleges and other centres, such as high school classrooms, in which technical classes are conducted. (d) Includes correspondence course teachers and students. (e) Teachers include those at both senior and junior technical colleges. (f) Student enrolment figures for 1965 and 1966 are not comparable with those shown for earlier years because as from 1965 students taking single subjects only were included and the census date was altered from 1 August to 31 May. (g) The figures for 1965 reflect the major reorganisation of technical education introduced at the beginning of the year. In addition to the establishment of the Institute of Technology, entry standards were raised, and the minimum number of students required to commence classes was also raised. (h) Excludes correspondence teachers and students. (i) Total students includes students enrolled in correspondence courses. Teacher figures include correspondence course teachers. (j) Teachers represent number of teaching positions.

### Teacher education

The teacher shortage evident in past years has now been overcome to some extent. Some States have little difficulty in recruiting and training sufficient staff to meet the present needs of primary schools. Despite expanded training programmes the shortage of secondary school teachers has proved a greater problem, especially in mathematics and science.

State education departments recruit most prospective teachers for government service from students leaving schools after a secondary course. Each department offers training awards annually on the basis of academic merit and personal suitability. The traineeships cover the cost of a teacher training course (which may include university studies) and provide a living allowance. Students are usually required to enter into an agreement to serve for a specified number of years in the government schools of the State where they have trained. In some States intending teachers can obtain a scholarship at the first public secondary examination to enable them to complete teachers college entrance requirements. Such an award entails a bond of service for a longer period.

The State education departments conduct teachers colleges to train teachers for government schools. These colleges are co-educational and, in the larger States, have been established in country areas as well as in cities. The principal and staff of the colleges are responsible to the Director of Education in the State concerned. Teachers colleges are also conducted by other organisations.

The following table shows the number of teachers colleges, i.e. institutions set up to provide courses of professional teacher training for pre-schools and schools, including technical schools. The institutions covered are the government teachers colleges, denominational and independent teacher-training colleges, and kindergarten training colleges.

NUMBER OF TEACHERS COLLEGES, 1967(a)

	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>A.C.T.</i>	<i>Aust.</i>
Government . . .	8	13	2	4	3	2	..	32
Non-government . .	13	7	2	1	1	..	1	25
Total . . .	21	20	4	5	4	2	1	57

(a) There are no teachers colleges in the Northern Territory.

#### Teachers for government schools

*Training of primary school teachers.* In most States teachers for government primary schools are trained in teachers colleges. Generally, the duration of courses for primary teachers is two years; but several States are introducing a minimum three-year course for primary teachers. The basic subjects taken in the various courses are history and principles of education, general and special methods of teaching in the primary school, school organisation, and educational psychology. In addition, students undertake courses in English (including speech training), mathematics, handicrafts, music, art, social studies, natural science, and physical and health education. Optional subjects may include dramatic art, visual aids, and so on. Supervised practice teaching in schools and the observation of demonstration lessons form part of all training courses. Since primary teachers in Australia may be called upon at some time to teach grouped classes in a small school or a 'one-teacher' school, special training for this kind of work is included in their course.

*Training of secondary school teachers.* Secondary teachers are normally specialists in a combination of subjects, such as English and history, modern languages, or mathematics and science. Intending secondary school teachers either obtain a university degree with additional professional teaching training such as a Diploma of Education, or are required to hold a diploma or certificate from a teachers college. Training also includes practice teaching under the supervision of teachers college and university staff, and the observation of demonstration lessons.

At several Australian universities, students wishing to take up teaching as a profession can receive their professional training along with the study of their teaching subjects as part of a first degree course in Education. The time taken to complete such a Bachelor of Education degree course is three or four years.

*Training for specialist teaching.* Teachers of specialist subjects, such as music, art, manual arts, domestic science, and commercial subjects, receive from two to five years' training which varies according to the institution concerned and the type of school in which the teacher is to serve. In several States the shorter courses are provided wholly by the teachers colleges. In five States teachers of music receive their specialist training at conservatoria of music. Where the specialist course is given at an institution other than the teachers college—e.g. at a university, technical college, or

conservatorium of music—as is usual for teachers of specialist subjects in high schools, students are required to attend teachers college or university lectures in education, and in some cases the specialist course is followed by a year of professional training. Courses designed to train physical education teachers are offered in universities in all States, and in four States at a teachers college as well.

Training for teachers of agricultural subjects in secondary schools is available in three States and consists of either an agricultural college diploma or a university degree course together with professional training. In Victoria there is a three-year agricultural college diploma course which follows on the normal two-year primary teachers course, whereas in Queensland students undertake a course at the Queensland Agricultural College, followed by two years of teacher education, one at university and one at a teachers college. In South Australia most students undertake a Bachelor of Science Degree concurrently with professional training and with special training in agricultural science. Teachers of technical subjects in secondary schools may be trained in manual or industrial arts courses of two to four years' duration, at teachers colleges, technical colleges, or, in one State, at a university. These courses include basic training in such subjects as wood and metal work, and geometrical drawing. In Victoria there is a separate Technical Teachers' College. Some teachers of trade subjects in technical schools are recruited from the ranks of qualified tradesmen engaged in industry or commerce. Upon appointment these teachers usually receive instruction in classroom teaching techniques and procedures.

The following table shows enrolments in government teachers colleges in 1967. The figures include departmental students (i.e. those awarded State education department scholarships or fellowships and who have executed an agreement for periods of teaching service after completion of their teacher education, whether they are required to attend a teachers college or receive instruction at a university or other educational institution), and private students at government colleges, including those sponsored by government departments other than State education departments. The figures exclude enrolments for refresher courses, summer schools, and courses designed for practising teachers. The figures include 910 departmental students at various universities who have not been enrolled at a teachers college.

GOVERNMENT TEACHERS COLLEGES: ENROLMENTS, AUSTRALIA, 1967

	Departmental students			Other students			Total		
	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons
<b>Level—</b>									
Courses in primary and sub-primary teaching .	2,766	8,552	11,318	76	84	160	2,842	8,636	11,478
Courses in secondary teaching(a) .	6,773	7,362	14,135	160	80	240	6,933	7,442	14,375
Courses not specified as primary or secondary teaching(b) .	402	499	901	n.a.	n.a.	122	402	499	(c)1,023
<b>Attendance—</b>									
Attendance only at teachers college .	3,946	9,737	13,683	199	121	(c)442	4,145	9,858	(c)14,125
Students required to attend at university or other advanced education institution—									
Full-time .	5,175	5,058	10,233	24	13	37	5,199	5,071	10,270
Part-time .	820	1,618	2,438	13	30	43	833	1,648	2,481
Total .	9,941	16,413	26,354	236	164	(c)522	10,177	16,577	(c)26,876

(a) Includes courses for students training as technical college teachers. (b) Courses which are not classified as primary or secondary level courses until a later stage of the course. The students are mainly first year students in university courses in Western Australia and students in university courses in Tasmania. (c) Includes 122 students not classified by sex.

*In-service training.* As almost all teachers now enter the profession by way of teachers colleges or universities, where they receive basic professional training, in-service training in Australia is directed chiefly towards keeping teachers abreast of developments and adding to their basic training. In-service training usually takes the form of short courses held sometimes during vacations, sometimes during school-time or in the evening. In some States in-service courses for teachers in remote areas are provided by correspondence. Courses consist of discussions and lectures given by senior staff members of education departments and university and teachers college lecturers on such subjects as classroom techniques and supervision, librarianship, visual aids, music, arts and crafts, and physical education. In some States there are also in-service courses for special groups of teachers such as headmasters or teachers in one-teacher schools. In addition, district inspectors are responsible for organising short conferences of teachers, where professional topics are discussed. Education departments encourage teachers to pursue university courses and in some States pay the cost of courses undertaken by selected teachers.



In January 1968 groups of Australian teachers again attended refresher courses in New Caledonia for Australian and New Zealand teachers of French. These courses have been offered to the Australian Government by the French Government. Since 1963 official publications of the education departments contain articles dealing with educational theory and practice. Magazines of the teachers' organisations, which reach the majority of government teachers, also contain articles of this type.

*Status of teachers.* Most teachers in governmental schools are permanent public servants and have security of tenure, superannuation rights, and the right of appeal in matters of promotion. The centralised education systems and the general policy of providing fully trained teachers for both city and country areas mean that teachers are subject to transfer to any part of the State in which they serve. It is common for a teacher's first appointment to be to a country school.

In each State there are unions of State school teachers and these together form a federal body, the Australian Teachers' Federation. Teachers in non-government schools have formed similar organisations. Their aim is to advance the teachers' status and conditions and to stimulate community interest in educational problems.

#### **Training of technical teachers**

Prior to the 1939-45 War technical colleges were staffed chiefly by trained teachers in the employment of the education departments or technicians drawn from industry. Although some of the latter were highly qualified, the great majority had not been trained as teachers.

To preserve links with industry and trade practice, schemes have been developed which continue the recruitment of specialist tradesmen as teachers but provide also for their training in educational method and teaching techniques. In Victoria the Technical Teachers' College provides training for students with appropriate diploma or trade qualifications and suitable industrial experience. In New South Wales technical college lecturers and tradesmen-teachers receive an in-service course of teacher training in general educational theory and teaching method, while correspondence courses and visiting lecturers assist the newly appointed tradesman-teacher in country colleges. Variations of this scheme are in operation in other States. Many technical teachers, principally of academic, commercial and domestic science subjects, hold trained teachers' certificates from teachers colleges.

#### **Training of non-government school teachers**

Teachers for non-government schools receive their training in a number of ways. The Roman Catholic Church staffs both its primary and secondary schools largely with members of religious orders. In recent years there has been a growth in the number of lay teachers being employed in Catholic schools, and training of students to become lay primary teachers has been instituted. Secondary teachers receive their academic training mostly through courses provided by Australian universities.

Other non-government schools tend to recruit their staffs from teachers who have already obtained qualifications in Australia or overseas. In New South Wales and Victoria non-government school authorities offer courses designed specially for teachers in their schools. Non-government schools recruit also university graduates, who are then given professional guidance by senior members of the school staff. Private students may enrol at government teachers colleges on payment of a fee, but the number of places available is limited. Some teachers destined for non-government schools train in this way.

In 1967 there were 1,199 students enrolled in non-government teachers colleges, of whom 929 were enrolled in primary, and 270 in secondary, teacher education courses.

During vacations many non-government teachers attend in-service training courses organised by education departments. In recent years vacation courses have been provided by bodies other than education departments for teachers from both government and non-government schools. For example, an independent body, the Science Foundation for Physics within the University of Sydney, has provided such courses for teachers of science in secondary schools in New South Wales.

#### **Kindergarten training colleges**

The Kindergarten Unions, which are non-government organisations, have established colleges providing three-year courses in all States except Tasmania, where an infant and pre-school course is provided by the Hobart Teachers' College. The minimum entrance age is usually seventeen years and applicants with matriculation status are preferred. In New South Wales the Sydney Day Nursery and Nursery Schools' Association maintains a training college which provides a course for pre-school and kindergarten teachers. These colleges provide full-time diploma courses which are similar in content and standards. Teachers are trained for work with children between the ages of two and seven years, and the training courses include the study of general educational theory, the theory of pre-school education, general cultural subjects, and art and crafts (including music). In addition, training is given in practical pre-school teaching. The total number of students enrolled in 1967 in kindergarten teachers colleges was 668. This figure excludes students enrolled in kindergarten teacher education courses in Hobart Teachers' College.

### Government expenditure on schools and technical education

The following tables show particulars of the total net expenditure (i.e. gross expenditure less receipts for services rendered) from certain funds on government schools, education departments and technical education. The data have been compiled on the same basis as far as differences in organisation and accounting methods between States and Territories will permit. The tables include only expenditure from the consolidated revenue funds and certain trust or special funds. They exclude loan fund expenditure; expenditure on debt charges, pay-roll tax and superannuation payments, in so far as it is possible to identify these items; and some items for which information cannot be obtained from the public accounts of all States. In particular, the following tables exclude specific purpose expenditure by the Commonwealth for schools and technical colleges in the States, such as science laboratory grants.

#### Government schools' and education departments' expenditure

The figures relate throughout to years ended 30 June. Net expenditure per pupil relates the total net expenditure to the mean of the numbers of pupils enrolled at government schools at two consecutive school censuses. Net expenditure per head of population relates the total net expenditure to the mean population.

#### GOVERNMENT SCHOOLS AND EDUCATION DEPARTMENTS: NET EXPENDITURE STATES AND TERRITORIES, 1962-63 TO 1966-67

Year	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T. (a)	A.C.T.	Aust.
TOTAL NET EXPENDITURE (\$'000)									
1962-63	108,088	76,262	33,604	29,540	21,684	11,678	932	2,224	284,012
1963-64	119,778	84,756	37,246	33,363	23,894	12,966	1,087	2,498	315,588
1964-65	140,803	91,593	40,011	36,380	26,810	14,413	1,352	3,264	354,626
1965-66	148,835	101,617	43,008	40,408	30,751	15,476	1,634	3,563	385,292
1966-67	165,495	111,640	48,309	45,674	33,237	17,340	1,855	4,043	427,593
TOTAL NET EXPENDITURE PER PUPIL(b) (\$)									
1962-63	174.53	164.63	133.45	161.40	164.75	169.27	176.88	190.69	163.70
1963-64	190.18	177.12	145.81	175.24	176.11	184.86	182.14	192.05	177.40
1964-65	218.83	184.79	153.87	183.16	192.51	202.63	202.33	226.13	193.86
1965-66	224.50	197.72	161.54	195.65	213.67	214.83	214.30	223.83	203.95
1966-67	241.16	209.84	175.80	213.70	220.21	236.36	212.17	230.44	218.45
TOTAL NET EXPENDITURE PER HEAD OF POPULATION(b) (\$)									
1962-63	26.88	25.32	21.49	29.58	27.89	32.60	19.85	31.97	26.18
1963-64	29.37	27.58	23.35	32.60	29.91	35.74	21.74	32.46	28.54
1964-65	33.99	29.20	24.59	34.58	32.81	39.34	25.61	38.67	31.44
1965-66	35.36	31.81	25.91	37.35	36.73	41.87	29.49	38.47	33.50
1966-67	38.73	34.35	28.62	41.37	38.55	46.37	31.94	40.46	36.52

(a) Figures include expenditure on adult education which amounted to \$2,148 in 1962-63, \$916 in 1963-64, \$1,092 in 1964-65, \$887 in 1965-66, and \$2,372 in 1966-67. (b) Expenditure figures exclude expenditure on special education of Aboriginal children, while pupil and population figures include Aborigines.

The following table shows, for the six States, the net expenditure on government schools and education departments classified into the following headings: primary education, secondary education, administration, transportation of school children and students, and training of teachers. Expenditure on technical and agricultural education is excluded from the tables. It has been necessary

to estimate some items of expenditure, largely because the meanings of 'primary' and 'secondary' differ between States and because elementary and higher educations are sometimes given in the same school by the same teachers. Expenditure on government schools in the Northern Territory and Australian Capital Territory is not included in the following table because the detail is not available.

**GOVERNMENT SCHOOLS AND EDUCATION DEPARTMENTS: CLASSIFICATION OF  
EXPENDITURE, STATES, 1962-63 TO 1966-67**

(\$'000)

<i>Year</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>Total (a)</i>
<b>PRIMARY EDUCATION</b>							
1962-63 . .	55,880	38,976	20,816	13,992	11,154	4,330	145,148
1963-64 . .	60,824	42,590	21,066	15,586	12,258	4,990	157,314
1964-65 . .	70,199	45,492	20,995	16,640	13,800	5,521	172,647
1965-66 . .	70,612	49,930	22,050	18,136	15,714	5,868	182,310
1966-67 . .	75,819	52,495	24,392	20,462	16,821	6,731	196,720
<b>SECONDARY EDUCATION</b>							
1962-63 . .	35,386	20,460	8,094	10,964	5,918	3,958	84,780
1963-64 . .	40,706	23,852	10,458	12,699	6,686	5,034	99,435
1964-65 . .	49,992	26,027	12,778	14,193	7,522	5,678	116,190
1965-66 . .	54,337	29,463	13,809	15,915	9,247	6,080	128,851
1966-67 . .	62,454	34,452	16,076	18,092	9,864	6,633	147,571
<b>ADMINISTRATION</b>							
1962-63 . .	4,138	1,780	1,344	600	750	1,374	9,986
1963-64 . .	4,522	1,906	1,484	698	858	810	10,278
1964-65 . .	5,503	2,232	1,571	813	1,021	833	11,973
1965-66 . .	6,237	2,357	1,794	848	909	904	13,049
1966-67 . .	7,094	2,773	2,010	975	1,058	1,048	14,958
<b>TRANSPORTATION OF SCHOOL CHILDREN AND STUDENTS</b>							
1962-63 . .	5,300	5,352	1,806	1,172	2,170	1,284	17,084
1963-64 . .	5,582	5,600	2,076	1,270	2,362	1,336	18,226
1964-65 . .	5,867	6,009	2,474	1,312	2,611	1,418	19,691
1965-66 . .	7,342	6,414	2,770	1,424	2,673	1,500	22,123
1966-67 . .	9,074	6,940	2,995	1,582	3,044	1,574	25,209
<b>EDUCATION OF TEACHERS</b>							
1962-63 . .	7,384	9,694	1,544	2,812	1,692	732	23,858
1963-64 . .	8,144	10,808	2,162	3,110	1,730	796	26,750
1964-65 . .	9,242	11,833	2,193	3,422	1,856	963	29,509
1965-66 . .	10,307	13,453	2,585	4,085	2,208	1,124	33,762
1966-67 . .	11,054	14,980	2,836	4,563	2,450	1,354	37,237

(a) Excludes Northern Territory and Australian Capital Territory.

**Technical education expenditure**

The following table shows the net expenditure on technical education from the State consolidated revenue funds, together with expenditure in the Australian Capital Territory. As with school expenditure, the table excludes specific purpose Commonwealth grants to the States for technical education and therefore does not show total government expenditure on technical education. For Commonwealth payments, *see* pages 550-1.

**TECHNICAL EDUCATION: NET EXPENDITURE, STATES AND  
AUSTRALIAN CAPITAL TERRITORY, 1962-63 TO 1966-67  
(\$'000)**

<i>Year</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>A.C.T.</i>	<i>Aust.</i>
1962-63 . . .	9,530	15,712	2,144	960	2,336	688	162	31,532
1963-64 . . .	10,684	18,048	2,044	1,330	2,772	732	211	35,821
1964-65 . . .	12,637	19,963	1,892	1,386	3,426	813	305	40,422
1965-66 . . .	13,137	22,864	2,677	1,216	4,240	946	445	45,525
1966-67 . . .	14,465	25,597	3,175	1,046	4,851	988	585	50,707

### Non-government schools' finance

Most Roman Catholic parish schools charge fees, but payment is not insisted on in the case of families who cannot afford it. At the majority of non-government secondary schools, privately endowed scholarships are available in varying numbers, and reductions in fees are normally made for children of clergy or for two or more members of one family attending the same school. With these exceptions, pupils of non-government schools must pay fees.

Certain State scholarships and bursaries are tenable at approved non-government secondary schools. Since the establishment of educational systems by the State governments, official policy has been largely against the provision of direct financial assistance to non-government schools, but in 1967 several States initiated such systems. Most States, moreover, have come to assist non-government schools in approved building projects. For details of Commonwealth finance for the building and equipping of science laboratories *see* page 550.

### Universities

Students qualify for entrance to Australian universities by passing a matriculation examination in one of the States after five or six years of secondary education. Each university has its own regulations for matriculation, specifying the number and combination of subjects to be passed for admission. Students entering the universities have the choice of undergraduate study in various faculties. All universities provide also postgraduate courses of study. The Australian universities, with their faculties or schools, are listed below in the order of their foundation.

**University of Sydney**, 1850, Sydney, New South Wales: Agriculture, Architecture, Arts, Dentistry, Economics, Engineering, Law, Medicine, Science, Veterinary Science.

**University of Melbourne**, 1853, Melbourne, Victoria: Agriculture, Applied Science, Architecture, Arts, Dental Science, Economics and Commerce, Education, Engineering, Law, Medicine, Music, Science, Veterinary Science.

**University of Adelaide**, 1874, Adelaide, South Australia: Agricultural Science, Architecture and Town Planning, Arts, Dentistry, Economics, Engineering, Law, Medicine, Music, Science, Technology and Applied Science.

**University of Tasmania**, 1890, Hobart, Tasmania: Agricultural Science, Arts, Commerce, Education, Engineering, Law, Medicine, Science.

**University of Queensland**, 1909, Brisbane, Queensland: Agriculture, Architecture, Arts, Commerce and Economics, Dentistry, Education, Engineering, Law, Medicine, Music, Science, Veterinary Science.

**University of Western Australia**, 1912, Perth, Western Australia: Agriculture, Architecture, Arts, Dental Science, Economics and Commerce, Education, Engineering, Law, Medicine, Science.

**Australian National University**, 1946, Canberra, Australian Capital Territory: Institute of Advanced Studies—John Curtin School of Medical Research, Research School of Physical Sciences, Research School of Social Sciences, Research School of Pacific Studies; School of General Studies (formerly Canberra University College, established in 1930)—Arts, Economics, Law, Oriental Studies, Science.

**University of New England**, 1954 (formerly New England University College, established in 1938), Armidale, New South Wales: Agricultural Economics, Arts, Economics, Rural Science, Science.

**University of New South Wales, 1958** (formerly the New South Wales University of Technology, established in 1948), Sydney, New South Wales: Applied Science, Architecture, Arts, Commerce, Engineering, Medicine, Science.

**Monash University, 1958**, Melbourne, Victoria: Arts, Economics and Politics, Education, Engineering, Law, Medicine, Science.

**University of Newcastle, 1965** (formerly Newcastle University College, established in 1951), Newcastle, New South Wales: Applied Science, Architecture, Arts, Economics, Engineering, Science.

**Flinders University of South Australia, 1966**, Bedford Park, South Australia: Language and Literature, Social Sciences, Physical Sciences, Biological Sciences.

**La Trobe University, 1967**, Bundoora, Victoria: Biological Sciences, Humanities, Physical Sciences, Social Sciences, Agriculture.

**Macquarie University, 1967**, Eastwood, New South Wales: Behavioural Sciences, Biological Sciences, Chemistry, Earth Sciences, Economic and Financial Studies, Education, English Studies, Historical, Philosophical and Political Studies, Mathematics and Physics, Modern Languages.

Each of the universities was established by a parliamentary Act as an autonomous institution, with its own Governing Council or Senate. Nevertheless, the Australian universities receive substantial government support from both State and Commonwealth sources, only part of their income being derived from students' fees, private donations and bequests.

There are also two university colleges. Townsville University College, founded in 1961, is a part of the University of Queensland. Full degree courses in Arts, Business Studies, Education, Science, and Civil Engineering are available. The first two years of all other branches of Engineering and of Applied Science may be taken and the first year is available in Agriculture, Forestry, Dentistry, Medicine, Pharmacy, Veterinary Science, and Law. Wollongong University College was opened in 1962 and is affiliated with the University of New South Wales. It offers some courses in the faculties of Arts, Commerce, Engineering, Science, and Medicine.

### Organisation of courses

Bachelor degree courses are from three to six years in length, depending on the faculty, and for the majority full-time attendance is required. Certain courses, however, may also be undertaken by part-time or evening students. The university academic year begins in March and finishes in early December. At most universities two short vacation periods divide the year into three terms, but there are four terms in some universities.

Several universities make provision for external tuition, whereby students living away from university towns may take a restricted number of courses by correspondence. The University of Queensland has developed a system of correspondence tuition which now caters not only for students within the State but also for those in the Northern Territory, in the Territory of Papua and New Guinea, and for Colombo Plan Scholarship holders in south-east Asia. External students living in Queensland receive tutorial assistance at university centres in the principal country towns.

The University of New England's Department of External Studies offers a wide range of subjects for external study, leading to the degrees of Bachelor of Arts, Bachelor of Letters, Bachelor of Education, the Diploma in Education, and the Diploma in Educational Administration. External students must attend short annual residential schools of instruction in their subjects, usually held at the university.

Post-graduate courses leading either to a Master's degree or to a Doctorate are available at all universities. Facilities cover the humanities, social sciences and pure and applied sciences. Additional courses are constantly being introduced by the universities at both the undergraduate and the post-graduate level to cover new fields of knowledge and specialisation. Macquarie University has also commenced courses for part-time external students who reside in New South Wales or in the Australian Capital Territory. At present, there is an emphasis on science programmes in this university's external courses.

### Research

A wide range of research work and training in research techniques is carried out by the universities as part of their normal functions. Post-graduate students and members of university staff are engaged in research, both as part of their work for post-graduate degrees and also as part of group and departmental research programmes. Support for research in universities is derived from public and private sources, including funds and foundations established to encourage research in a particular field.

### University expansion and development

Since the 1939-45 War the Australian universities have had to face greatly increased demands on their facilities, firstly from large numbers of ex-service personnel in the immediate post-war years and later from greatly increased numbers of students leaving secondary schools each year. By 1967 the total enrolments in Australian universities had reached approximately 95,000 compared with an early post-war peak of 32,453 in 1948.

To assist the universities to cope with these demands, increasing co-operation between the Commonwealth Government and the State Governments in university finance became necessary. The Commonwealth Government set up a Committee on Australian Universities, whose 1957 report ('The Murray Report') led to more finance becoming available to universities and to the setting up of a permanent body, the Australian Universities Commission, to advise the Commonwealth Government on university development. In the years since the Murray Report the following major developments have taken place in the Australian university structure: the University of New South Wales was created from the earlier University of Technology in 1958; in the same year Monash University was established in Victoria; in 1960 the Australian National University was reconstituted, combining both undergraduate and post-graduate facilities, and now consists of the Institute of Advanced Studies and the School of General Studies created from the Canberra University College; the University of Queensland set up the University College of Townsville in 1961; the University of New South Wales established the Wollongong University College in 1962; in 1965 the University of Newcastle was created from the Newcastle University College; in 1966 the University of Adelaide at Bedford Park became The Flinders University of South Australia; and in 1967 Macquarie University and La Trobe University were established in New South Wales and Victoria respectively.

The Queensland Government is proceeding with plans for the construction of a third university institution at Mount Gravatt. It is expected that the campus will be established within the next three years as a satellite of the University of Queensland.

Despite their expansion, the Australian universities are still faced with a problem in providing tuition for all students who reach matriculation standard and wish to take up university courses. As a result, several universities have found it necessary to impose quotas on enrolments in their courses.

### University teaching and research staff

#### UNIVERSITIES: TEACHING AND RESEARCH STAFF(a), 1967

<i>Full-time teaching and research staff</i>								
<i>University</i>	<i>Professors</i>	<i>Associate professors and readers</i>	<i>Senior lecturers and lecturers</i>	<i>Assistant lecturers, demonstrators, etc. (b)</i>	<i>Total</i>	<i>Part-time teaching and research staff(c)</i>	<i>Full-time research only staff</i>	<i>Part-time research only staff (d)</i>
Australian National .	34	27	145	60	266	171	710	.
Sydney .	91	91	505	234	921	1,325	384	8
New South Wales .	82	67	479	183	811	551	133	2
New England .	28	32	151	100	311	26	41	.
Newcastle .	18	7	108	11	144	115	10	1
Macquarie .	18	2	28	15	63	49	3	.
Melbourne .	87	106	543	142	878	824	242	26
Monash .	60	22	340	156	578	474	62	4
La Trobe .	18	1	35	8	62	9	11	.
Queensland .	69	76	470	261	876	661	173	7
Adelaide .	63	53	318	68	502	489	267	11
Flinders .	22	5	60	11	98	42	21	3
Western Australia .	47	41	224	58	370	385	150	4
Tasmania .	26	17	91	30	164	233	42	12
Total .	663	547	3,497	1,337	6,044	5,354	2,249	78

(a) Filled positions. Teaching and research staff includes all staff with teaching functions, but excludes research only staff which is shown separately. (b) Includes tutors and teaching fellows. (c) Teaching hours in units of 100 hours per annum. (d) In equivalent full-time units of 35 hours per week.

## UNIVERSITIES: TEACHING AND RESEARCH STAFF(a), AUSTRALIA, 1963 TO 1967

Year	Full-time teaching and research staff				Total	Part-time teaching and research staff(c)	Full-time research only staff	Part-time research only staff(d)
	Professors	Associate professors and readers	Senior lecturers and lecturers	Assistant lecturers, demonstrators, etc.(b)				
1963 . . .	404	374	2,663	848	4,289	3,817	1,481	35
1964 . . .	463	409	2,847	1,004	4,723	4,325	1,675	45
1965 . . .	522	449	3,048	1,085	5,104	5,116	1,744	63
1966 . . .	615	487	3,297	1,261	5,660	5,615	2,057	82
1967 . . .	663	547	3,497	1,337	6,044	5,354	2,249	78

(a) Filled positions. Teaching and research staff includes all staff with teaching functions, but excludes Research only staff which is shown separately. (b) Includes tutors and teaching fellows. (c) Teaching hours in units of 100 hours per annum. (d) In equivalent full-time units of 35 hours per week.

## University students enrolled

## UNIVERSITIES: STUDENTS ENROLLED, 1967

University	Degree courses	Diploma courses		Certificate courses	Miscellaneous subjects (a)	Adjusted total(b)
		Post-graduate	Sub-graduate			
Australian National	3,365	..	..	..	163	3,416
Sydney . . .	15,252	890	81	..	379	16,376
New South Wales . . .	11,554	432	83	303	468	12,812
New England . . .	3,928	435	..	..	71	4,402
Newcastle . . .	1,768	98	..	..	59	1,902
Macquarie . . .	1,190	..	..	..	81	1,271
Melbourne . . .	13,097	138	687	..	716	14,151
Monash . . .	6,850	342	..	..	43	7,117
La Trobe . . .	542	..	..	..	10	552
Queensland . . .	14,089	165	478	124	397	15,253
Adelaide . . .	7,856	168	734	15	210	8,828
Flinders . . .	808	15	..	..	8	830
Western Australia . . .	5,669	232	..	..	145	6,027
Tasmania . . .	2,038	160	30	53	202	2,443
Total . . .	88,006	3,075	2,093	495	2,952	95,380

(a) Includes *ad hoc* courses. (b) Adjustment made for students enrolled for more than one course.

Of the students enrolled in 1967, 68,979 were males and 26,401 females. Included in those enrolled for degrees were 9,181 enrolled for higher degree courses: Australian National University, 712; Sydney, 2,135; University of New South Wales, 1,405; New England, 265; Newcastle, 116; Macquarie, 147; Melbourne, 1,422; Monash, 475; La Trobe, 48; Queensland, 899; Adelaide, 727; Flinders, 62; Western Australia, 618; and Tasmania, 150.

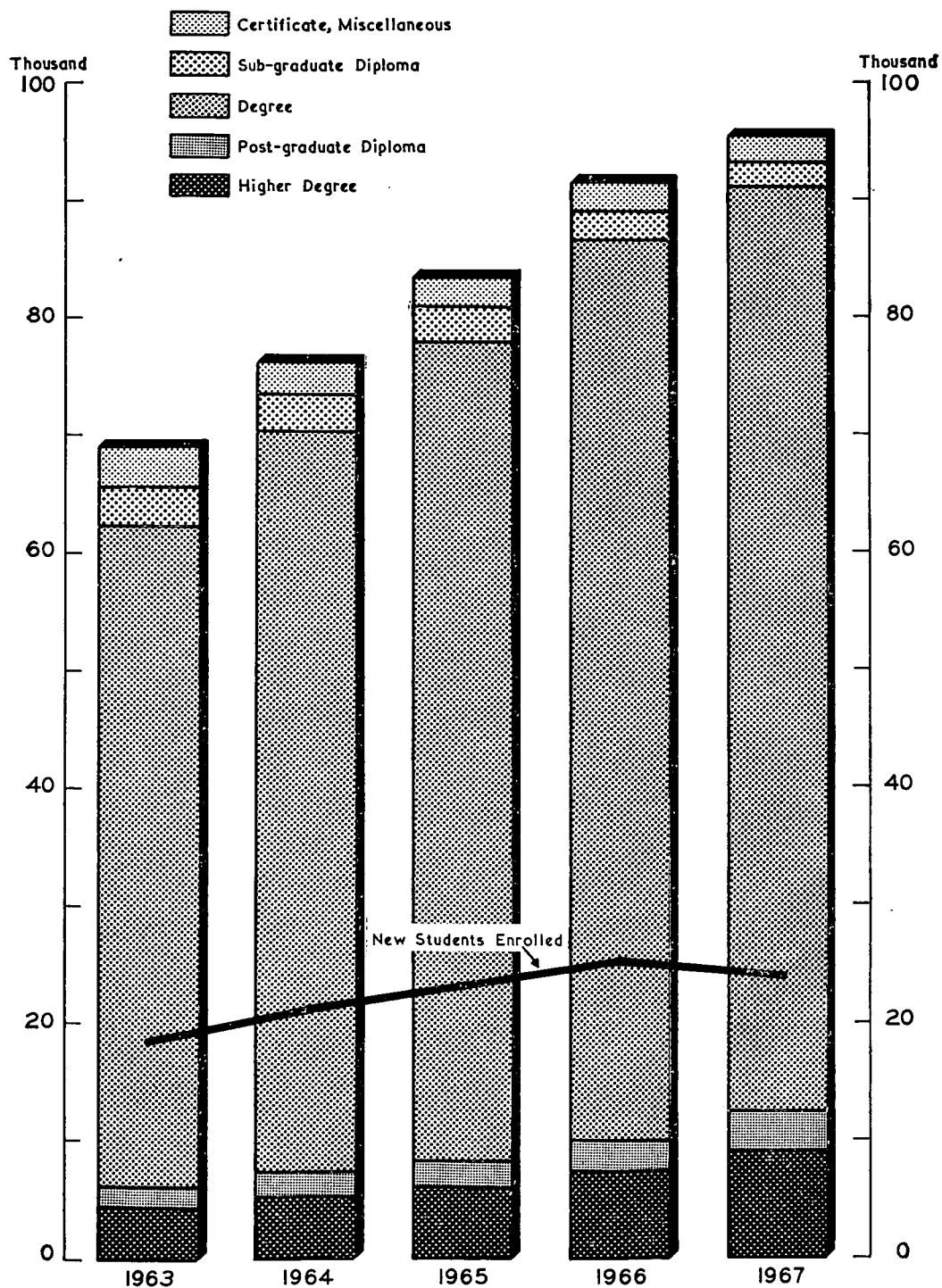
## UNIVERSITIES: STUDENTS ENROLLED, AUSTRALIA, 1963 TO 1967

Year	Degree courses		Diploma courses		Certificate courses	Miscellaneous subjects (a)	Adjusted total(b)
	Higher degrees	Bachelor degrees	Post-graduate	Sub-graduate			
1963 . . .	4,551	56,077	1,764	3,251	1,437	2,589	69,074
1964 . . .	5,383	62,936	1,984	3,377	650	2,854	76,188
1965 . . .	6,169	69,540	2,160	3,277	361	3,117	83,349
1966 . . .	7,560	76,453	2,472	2,625	267	3,244	91,291
1967 . . .	9,181	78,825	3,075	2,093	495	2,952	95,380

(a) Includes *ad hoc* courses. (b) Adjustment made for students enrolled for more than one course.

# UNIVERSITY STUDENTS ENROLLED: COURSES

AUSTRALIA, 1963 TO 1967





## University new students enrolled

## UNIVERSITIES: NEW STUDENTS ENROLLED, 1967

University	Degree courses	Diploma courses		Certificate courses	Miscellaneous subjects (a)	Adjusted total(b)
		Post-graduate	Sub-graduate			
Australian National	1,062	..	..	..	119	1,154
Sydney	2,741	179	2	..	149	3,069
New South Wales	1,819	161	35	303	242	2,560
New England	1,104	165	..	..	26	1,290
Newcastle	349	3	..	..	26	377
Macquarie	1,183	..	..	..	81	1,264
Melbourne	2,778	25	198	..	237	3,116
Monash	2,376	119	..	..	35	2,490
La Trobe	542	..	..	..	10	552
Queensland	3,323	13	99	44	81	3,560
Adelaide	1,618	11	95	1	85	1,809
Flinders	555	9	..	..	8	572
Western Australia	1,511	10	..	..	34	1,555
Tasmania	601	3	1	6	59	669
Total	21,562	698	430	354	1,192	24,037

(a) Includes *ad hoc* courses.

(b) Adjustment made for students enrolled for more than one course.

Of the new students enrolled in 1967, 16,514 were males and 7,523 females. Included in those enrolled for degrees were 1,248 enrolled for higher degree courses: Australian National University, 218; Sydney, 156; University of New South Wales, 238; New England, 32; Newcastle, 16; Macquarie, 140; Melbourne, 74; Monash, 122; La Trobe, 48; Queensland, 71; Adelaide, 59; Flinders, 38; Western Australia, 29; and Tasmania, 7.

## UNIVERSITIES: NEW STUDENTS ENROLLED, AUSTRALIA, 1963 TO 1967

Year	Degree courses		Diploma courses		Certificate courses	Miscellaneous subjects (a)	Adjusted total(b)
	Higher degrees	Bachelor degrees	Post-graduate	Sub-graduate			
1963	538	15,717	387	855	247	1,038	18,746
1964	603	18,339	462	885	178	1,184	21,528
1965	697	20,062	458	922	111	1,383	23,451
1966	962	22,185	607	490	63	1,395	25,520
1967	1,248	20,314	698	430	354	1,192	24,037

(a) Includes *ad hoc* courses.

(b) Adjustment made for students enrolled for more than one course.

## Full-time, part-time, and external university students

## UNIVERSITIES: FULL-TIME, PART-TIME AND EXTERNAL STUDENTS, 1967

University	Full-time	Part-time	External	Total
Australian National	1,825	1,591	..	3,416
Sydney	12,526	3,850	..	16,376
New South Wales	6,506	6,177	129	12,812
New England	1,286	215	2,901	4,402
Newcastle	861	1,041	..	1,902
Macquarie	349	701	221	1,271
Melbourne	9,707	4,023	421	14,151
Monash	5,801	1,316	..	7,117
La Trobe	448	104	..	552
Queensland	7,299	5,245	2,709	15,253
Adelaide	5,560	2,874	394	8,828
Flinders	738	92	..	830
Western Australia	3,796	1,926	305	6,027
Tasmania	1,623	643	177	2,443
Total	58,325	29,798	7,257	95,380

**UNIVERSITIES: FULL-TIME, PART-TIME AND EXTERNAL  
STUDENTS, AUSTRALIA, 1963 TO 1967**

<i>Year</i>	<i>Full-time</i>	<i>Part-time</i>	<i>External</i>	<i>Total</i>
1963 . . .	39,098	23,585	6,391	69,074
1964 . . .	44,500	25,143	6,545	76,188
1965 . . .	50,202	26,235	6,912	83,349
1966 . . .	56,279	27,860	7,152	91,291
1967 . . .	58,325	29,798	7,257	95,380

**Assistance to university students**

The Commonwealth Government, through the Commonwealth Scholarships Board, grants undergraduate and post-graduate scholarships to university students. (Details of the Commonwealth Scholarship Scheme are given on page 549.) Commonwealth, State and local governments also award cadetships and other assistance to their employees. Foreign students are assisted by the Commonwealth Government under arrangements such as the Colombo Plan. The universities themselves grant exhibitions and scholarships as well as special assistance to teachers, etc.

**UNIVERSITIES: ASSISTED STUDENTS, 1967**

<i>University</i>	<i>Source of assistance</i>					<i>Type of course</i>	
	<i>Common-wealth Government</i>	<i>State Governments</i>	<i>Universities</i>	<i>Other</i>	<i>Adjusted total (a)</i>	<i>Higher degrees</i>	<i>Other</i>
Australian National . . .	755	1	928	43	1,622	506	1,116
Sydney . . . . .	5,489	2,903	3,815	114	9,137	740	8,397
New South Wales . . .	2,802	1,105	2,016	759	5,658	677	4,981
New England . . . . .	457	513	1,774	49	2,780	234	2,546
Newcastle . . . . .	339	423	660	80	1,090	60	1,030
Macquarie . . . . .	62	7	309	10	384	24	360
Melbourne . . . . .	5,472	2,470	3,576	149	9,493	697	8,796
Monash . . . . .	2,497	2,316	419	29	5,236	414	4,822
La Trobe . . . . .	85	212	18	1	316	19	297
Queensland . . . . .	4,033	892	602	207	5,734	534	5,200
Adelaide . . . . .	2,656	2,079	1,259	164	5,892	466	5,426
Flinders . . . . .	248	363	37	7	630	58	572
Western Australia . . .	1,726	879	89	155	2,785	173	2,612
Tasmania . . . . .	699	537	114	46	1,322	93	1,229
<b>Total . . . . .</b>	<b>27,320</b>	<b>14,700</b>	<b>15,616</b>	<b>1,813</b>	<b>52,079</b>	<b>4,695</b>	<b>47,384</b>

(a) Adjustment made for students assisted from more than one source.

**UNIVERSITIES: ASSISTED STUDENTS, AUSTRALIA, 1963 TO 1967**

<i>Form of assistance</i>	<i>1963</i>	<i>1964</i>	<i>1965</i>	<i>1966</i>	<i>1967</i>
Government assistance . .	26,670	31,035	34,221	38,779	42,020
University assistance . . .	12,063	13,765	14,875	15,298	15,616
Other assistance . . . . .	1,620	1,771	1,904	2,161	1,813
<b>Adjusted total(a) . . .</b>	<b>33,678</b>	<b>39,416</b>	<b>43,406</b>	<b>48,175</b>	<b>52,079</b>

(a) Adjustment made for students assisted from more than one source.

**Resident university students**

In 1967, 8,401 full-time and 238 part-time students were in residence at affiliated colleges, halls of residence and university hostels. The 8,639 students in residence were distributed as follows: Australian National University, 921; Sydney, 1,197; New South Wales, 441; New England, 1,031; Melbourne, 1,676; Monash, 514; La Trobe, 111; Queensland, 1,358; Adelaide, 396; Flinders, 17; Western Australia, 645; and Tasmania, 332. There were 6,193 male students and 2,446 female students in residence.

**University degrees conferred, etc.****UNIVERSITIES: DEGREES CONFERRED, AND DIPLOMAS AND CERTIFICATES GRANTED  
YEAR ENDED 31 JULY 1967**

Course	Australian National		Sydney		New South Wales		New England		New- castle		Melbourne	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
<b>Degrees—</b>												
Arts . . . . .	105	97	447	479	66	99	191	81	45	62	276	372
Divinity . . . . .	..	..	3	..	..	..	..	..	..	..	..	..
Psychology . . . . .	..	..	..	..	15	1	..	..	..	..	..	..
Social studies and social work . . . . .	3	2	..	..	1	2	..	..	..	..	..	..
Education . . . . .	..	..	25	15	..	..	..	..	..	..	54	14
Music . . . . .	..	..	2	1	..	..	..	..	..	..	6	24
Law . . . . .	18	..	138	13	..	..	..	..	..	..	147	45
Commerce, economics	39	..	174	17	168	12	10	3	23	..	236	35
Medicine, surgery . . . . .	11	..	263	48	25	5	..	..	..	..	145	24
Optometry . . . . .	..	..	..	..	2	..	..	..	..	..	..	..
Pharmacy . . . . .	..	..	77	79	..	..	..	..	..	..	..	..
Physiotherapy . . . . .	..	..	..	..	..	..	..	..	..	..	..	..
Dentistry . . . . .	..	..	49	5	..	..	..	..	..	..	37	3
Science . . . . .	65	28	372	189	311	45	80	24	30	6	329	93
Applied science . . . . .	..	..	..	..	52	..	..	..	7	..	11	1
Engineering and tech- nology . . . . .	..	..	191	1	361	..	..	..	24	..	199	..
Surveying . . . . .	..	..	..	..	18	..	..	..	..	..	1	..
Architecture and town planning . . . . .	..	..	39	6	58	2	..	..	2	..	70	5
Building . . . . .	..	..	9	..	9	..	..	..	..	..	5	..
Agriculture . . . . .	..	..	55	10	..	..	33	2	..	..	33	4
Agricultural econom- ics . . . . .	..	..	..	..	..	..	24	3	..	..	..	..
Forestry . . . . .	28	..	1	..	..	..	..	..	..	..	7	..
Veterinary science . . . . .	..	..	43	6	..	..	..	..	..	..	1	..
<i>Total degrees</i> . . . . .	269	127	1,888	869	1,086	166	338	113	131	68	1,557	620
<b>Post-graduate diplomas—</b>												
Education, psycho- logy, etc. . . . .	..	..	147	308	31	78	63	65	22	35	62	43
Law . . . . .	..	..	5	1	..	..	..	..	..	..	2	..
Medical, etc. . . . .	..	..	40	5	..	..	..	..	..	..	11	1
Science, engineering, etc. . . . .	..	..	12	1	52	1	..	..	13	..	7	..
Agriculture . . . . .	..	..	5	..	..	..	2	..	..	..	7	..
<i>Total post-graduate diplomas</i> . . . . .	..	..	209	315	83	79	65	65	35	35	89	44
Sub-graduate diplomas . . . . .	..	..	2	29	4	4	..	..	..	..	32	71
Certificates . . . . .	..	..	..	..	268	3	..	..	..	..	..	..

Table continued on next page.

UNIVERSITIES: DEGREES CONFERRED, AND DIPLOMAS AND CERTIFICATES GRANTED  
YEAR ENDED 31 JULY 1967—*continued*

Course	Monash		Queens- land		Adelaide		Flinders		Western Australia		Tas- mania		All universities	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Degrees—														
Arts . . . . .	124	161	147	205	143	133	..	..	132	124	58	88	1,734	1,901
Divinity . . . . .	..	..	2	..	..	..	..	..	..	..	..	..	5	..
Psychology . . . . .	..	..	1	..	..	..	..	..	7	6	..	..	23	7
Social studies and social work . . . . .	..	..	12	23	..	..	..	..	..	..	..	..	16	27
Education . . . . .	3	..	70	7	..	1	..	..	39	4	..	..	191	41
Music . . . . .	..	..	..	..	5	8	..	..	2	1	..	..	15	34
Law . . . . .	31	3	30	1	40	12	..	..	32	4	17	1	453	79
Commerce, economics	84	8	126	14	67	2	..	..	61	10	26	..	1,014	101
Medicine, surgery . .	28	4	105	15	85	21	..	..	27	12	..	..	689	129
Optometry . . . . .	..	..	..	..	..	..	..	..	..	..	..	..	2	..
Pharmacy . . . . .	..	..	35	17	..	..	..	..	..	..	..	..	112	96
Physiotherapy . . . .	..	..	..	3	..	..	..	..	..	..	..	..	..	3
Dentistry . . . . .	..	..	28	..	18	1	..	..	11	2	..	..	143	11
Science . . . . .	56	11	290	74	301	46	3	1	144	23	58	8	2,039	548
Applied science . . .	..	..	3	..	12	..	..	..	..	..	..	..	85	1
Engineering and tech- nology . . . . .	41	..	150	..	156	..	..	..	37	..	18	..	1,177	1
Surveying . . . . .	..	..	7	..	..	..	..	..	..	..	..	..	26	..
Architecture and town planning . . . . .	..	..	27	1	16	3	..	..	..	..	..	..	212	17
Building . . . . .	..	..	..	..	..	..	..	..	..	..	..	..	23	..
Agriculture . . . . .	..	..	44	2	31	2	..	..	23	2	5	..	224	22
Agricultural econom- ics . . . . .	..	..	..	..	..	..	..	..	..	..	..	..	24	3
Forestry . . . . .	..	..	..	..	..	..	..	..	1	..	..	..	37	..
Veterinary science . .	..	..	74	6	..	..	..	..	..	..	..	..	118	12
<i>Total degrees</i> . . .	367	187	1,151	368	874	229	3	1	516	188	182	97	8,362	3,033
Post-graduate diplomas—														
Education, psycho- logy, etc. . . . .	86	76	44	32	38	19	..	..	44	28	23	24	560	708
Law . . . . .	..	..	..	..	..	..	..	..	..	..	..	..	7	1
Medical, etc. . . . .	..	..	2	1	..	..	..	..	..	..	..	..	53	7
Science, engineering, etc. . . . .	..	..	7	..	3	..	..	..	3	..	..	..	97	2
Agriculture . . . . .	..	..	5	..	..	..	..	..	..	..	..	..	19	..
<i>Total post-graduate diplomas</i> . . . . .	86	76	58	33	41	19	..	..	47	28	23	24	736	718
Sub-graduate diplomas .	..	..	22	82	86	106	..	..	..	..	7	..	153	292
Certificates . . . . .	..	..	208	55	..	..	..	..	..	..	19	17	495	75

Table continued from previous page.

No degrees were awarded at Macquarie or La Trobe universities in 1967.

## UNIVERSITIES: DEGREES CONFERRED, AUSTRALIA, 1963 TO 1967

Degree	1963			1964			1965			1966			1967		
	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.
Arts	936	947	1,883	1,103	1,107	2,210	1,231	1,251	2,482	1,466	1,54	3,008	1,734	1,901	3,635
Divinity	1	..	1	3	..	3	2	..	2	5	..	5	5	..	5
Psychology	12	1	13	4	1	5	13	4	17	13	5	18	23	7	30
Social studies and social work	6	8	14	4	9	13	14	6	20	15	12	27	16	27	43
Education	103	20	123	114	29	143	114	37	151	191	35	226	191	41	232
Music	8	25	33	13	19	32	12	26	38	15	24	39	15	34	49
Law	260	39	299	297	43	340	367	41	408	383	57	440	453	79	532
Commerce, economics	545	59	604	695	59	754	705	56	761	850	79	929	1,014	101	1,115
Medicine, surgery	538	74	612	572	83	655	605	99	704	673	114	787	689	129	818
Optometry	..	..	..	..	..	..	6	..	6	6	..	6	2	..	2
Pharmacy	53	39	92	76	52	128	119	71	190	123	110	233	112	96	208
Physiotherapy	1	3	4	..	1	1	..	1	1	..	10	10	..	3	3
Dentistry	145	3	148	143	17	160	139	6	145	103	3	106	143	11	154
Science	1,243	334	1,577	1,387	368	1,755	1,609	434	2,043	1,874	476	2,350	2,039	548	2,587
Applied science	37	..	37	36	..	36	53	3	56	78	4	82	85	1	86
Engineering and technology	829	1	830	912	..	912	969	3	972	1,031	7	1,038	1,177	1	1,178
Surveying	15	..	15	14	..	14	25	..	25	25	..	25	26	..	26
Architecture and town planning	133	8	141	128	13	141	156	15	171	208	17	225	212	17	229
Building	6	..	6	6	..	6	15	..	15	21	..	21	23	..	23
Agriculture and agricultural economics	205	17	222	204	18	222	227	31	258	221	17	238	248	25	273
Forestry	29	..	29	31	..	31	38	..	38	41	..	41	37	..	37
Veterinary science	79	4	83	93	7	100	119	5	124	109	4	113	118	12	130
Total—															
Higher doctorates	32	1	33	32	2	34	36	1	37	44	3	47	38	2	40
Ph.D. degrees	161	13	174	188	15	203	251	25	276	312	24	336	295	32	327
Master degrees	319	47	366	342	45	387	394	81	475	489	76	565	539	96	635
Bachelor degrees	4,672	1,521	6,193	5,273	1,764	7,037	5,857	1,982	7,839	6,606	2,413	9,019	7,490	2,903	10,393
Grand total	5,184	1,582	6,766	5,835	1,826	7,661	6,538	2,089	8,627	7,451	2,516	9,967	8,362	3,033	11,395

## University finance

Australian universities are incorporated by statute. Since their establishment they have come to depend greatly on government grants for their income. In recent years large amounts have been required for new buildings, as well as for current expenditure to provide staff and equipment to cope with increased student enrolments. In 1966 income from other than State and Commonwealth grants, including student fees, amounted to just over one-fifth of the total income. Income from non-government sources includes grants, mainly for research purposes, from businesses, international foundations and private individuals. Some income is also received from endowments.

## Financial assistance to universities from the Commonwealth Government

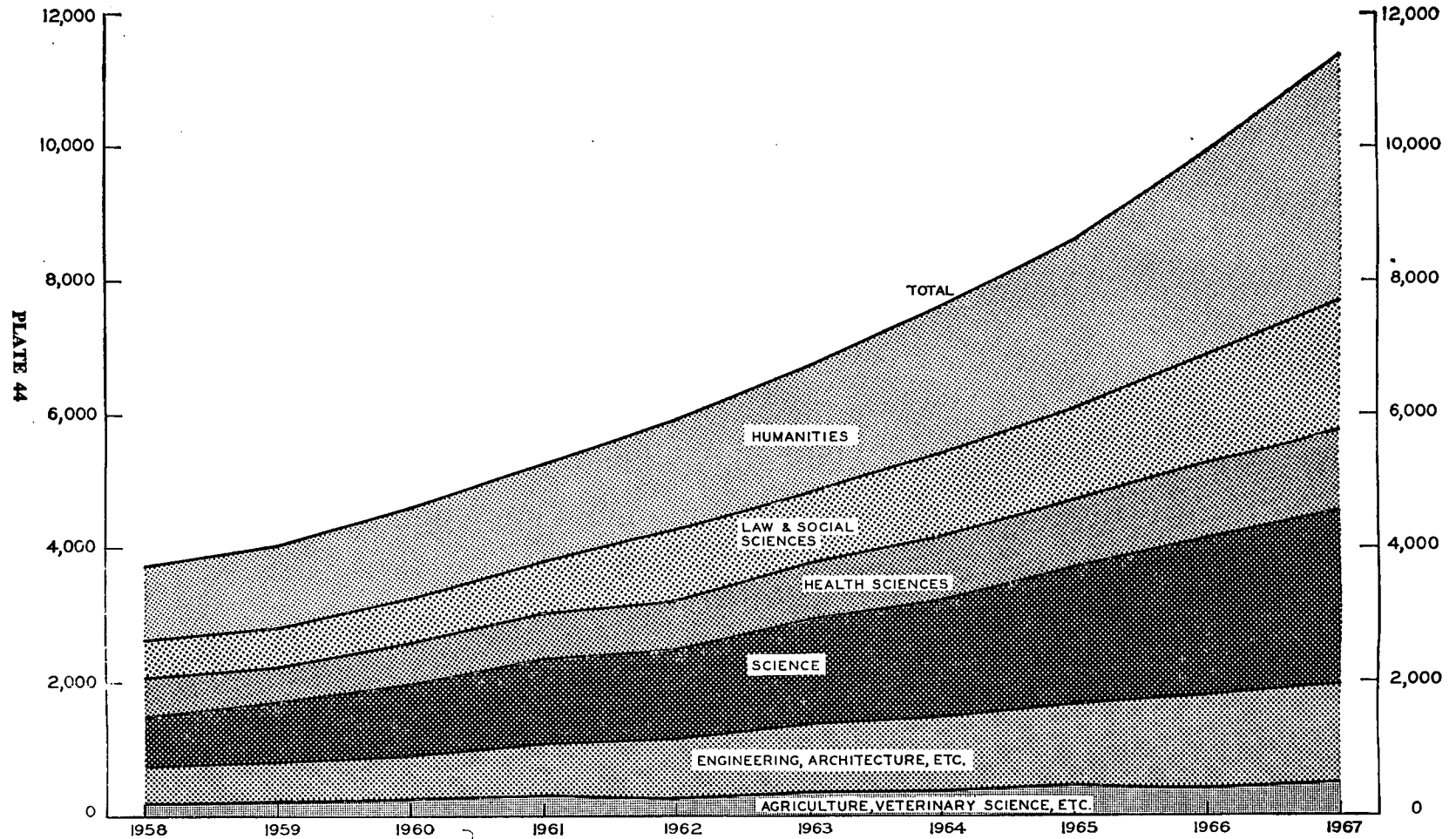
Prior to 1939 Commonwealth assistance was almost entirely concerned with research projects carried out by or in collaboration with the universities. During and since the 1939–45 War the Commonwealth extended assistance to university students, at first to increase the number of highly trained people required for the war effort, then with the object of rehabilitating ex-servicemen, and finally as a social service benefit to the community. For the purpose of reconstruction training the Commonwealth Government made available to the universities approximately \$2 million for buildings and \$1 million for equipment.

Following a report submitted by a committee of inquiry appointed to report on university finances and requirements, the Commonwealth, since 1951, has made matched grants to the States for recurrent expenditure on university purposes and unmatched grants for university halls of residence and affiliated residential colleges. Since 1958 the Commonwealth has also assisted with the capital needs of the universities for building projects and for equipment, and grants for the building programmes of residential colleges affiliated with universities, including university halls of residence. In the 1961–63 triennium the Commonwealth matched State grants for buildings at teaching hospitals and in 1960 instituted grants for research at universities. As well as making grants available for State universities, the Commonwealth has continued to support the university institutions for which it is responsible.

In 1959, following the Report of the Committee on Australian Universities, the Commonwealth Government established the Australian Universities Commission under the *Australian Universities Commission Act 1949*. The Commission's principal functions are to advise the Prime Minister on financial assistance to Commonwealth universities and to States in relation to their universities and also on the balanced development of Australian universities. The Commission commenced its work in July 1959. Since its establishment the Commission has produced three reports; the first, presented

# UNIVERSITY DEGREES CONFERRED: AUSTRALIA

1958 TO 1967



in October 1960 and covering the years 1961 to 1963, recommended Commonwealth grants totalling \$86 million for State universities. The Commission later recommended a Commonwealth grant of \$4 million for teaching hospitals. The *States Grants (Universities) Act 1960-1964* gave effect to the financial recommendations contained in the Commission's first report and subsequent recommendations for 1961-63. The Commission's second report was presented in August 1963, and recommended Commonwealth grants totalling more than \$121 million for State universities, subsequently increased by \$3.4 million for teaching hospitals, for the period 1964 to 1966. The *Universities (Financial Assistance) Act 1963-1966* gave effect to the financial recommendations contained in the Commission's second report and subsequent recommendations for 1964-66. In August 1966 the third report was presented. It recommended Commonwealth grants to the State universities of almost \$200 million for the period 1967-69, including almost \$6 million for teaching hospitals. The Commonwealth Government's grant, including \$5.7 million for teaching hospitals, was fixed following discussion with State governments, at \$181 million (including its share of the cost of increases in academic salaries as from 1 July 1967). The Act giving effect to these grants is the *Universities (Financial Assistance) Act 1966-67*.

*Commonwealth grants for recurrent expenditure in universities.* This is a continuation of matched grants provided since 1951. The maximum amounts available in 1964 to 1969 are shown in the following table. These amounts have been adjusted to allow for the recommendations of the Report of the Inquiry into Academic Salaries by Mr Justice Eggleston in 1964.

STATE UNIVERSITIES, ETC.: COMMONWEALTH GRANTS FOR  
RECURRENT EXPENDITURE, 1964 TO 1969  
(\$'000)

University, etc.	1964	1965	1966	1967	1968	1969
Sydney . . . . .	4,640	5,154	5,676	6,139	6,699	7,043
New South Wales(a) . . . . .	4,450	4,352	4,832	5,247	5,748	6,186
New England . . . . .	1,364	1,454	1,550	1,678	1,824	1,920
Newcastle . . . . .	..	618	704	809	938	1,028
Macquarie . . . . .	..	112	224	646	1,008	1,458
Melbourne . . . . .	3,868	4,298	4,796	5,265	5,763	6,032
Monash . . . . .	2,072	2,770	3,358	3,995	4,580	4,982
La Trobe . . . . .	..	106	218	554	924	1,275
Queensland . . . . .	2,808	3,238	3,644	4,153	4,696	5,068
Townsville . . . . .	160	192	278	378	489	608
Adelaide . . . . .	2,470	2,648	2,828	3,051	3,305	3,393
Flinders . . . . .	112	208	418	732	882	1,010
Western Australia . . . . .	1,794	1,974	2,166	2,398	2,668	2,857
Tasmania . . . . .	744	844	942	1,073	1,214	1,324
South Australian Institute of Technology . . . . .	230	258	290	(b)	(b)	(b)
<b>Total . . . . .</b>	<b>24,712</b>	<b>28,226</b>	<b>31,924</b>	<b>36,118</b>	<b>40,738</b>	<b>44,184</b>

(a) Includes grants for the university colleges at Wollongong and Broken Hill and, for 1964, the University College of Newcastle which became the University of Newcastle as from 1 January 1965. (b) In 1967-69 Commonwealth grants are made through the Commonwealth Advisory Committee on Advanced Education.

Since 1961 matched grants have been made on a basis of \$1 by the Commonwealth for every \$1.85 of income received by a university from fees and State grants. From 1951 to 1960 the ratio was, in general, \$1 to \$3.

*Commonwealth grants for the teaching and administrative costs of halls of residence and residential colleges.* From 1964 the grants consist of unmatched Commonwealth payments each year of \$5,000 (previously \$4,000) to each college affiliated with or administered by a university, plus the sum of \$30 for each resident student, and a further \$10 for each non-resident student receiving tutorial assistance. The total Commonwealth grant paid in 1966 was \$512,390. In the period 1967 to 1969 the basic grant for affiliated residential colleges will be varied according to the size of the colleges. Colleges with fewer than 100 students will continue to receive \$5,000 per annum, while colleges enrolling 100, 120, 140, 160 and 180 students will receive extra grants in increments of \$500 up to a maximum grant of \$7,500 for a college of 180 or more students. For university halls of residence a Commonwealth grant of \$5,000 per annum is payable without variation for the number of students.

*Commonwealth grants for recurrent expenditure in university teaching hospitals.* Since 1965 the Commonwealth Government has supported recurrent expenditure at teaching hospitals affiliated

with universities. During 1966 the Commission held discussions concerning capital and recurrent grants for the 1967-69 triennium with the eight universities having medical schools. The Commonwealth Government's support for recurrent grants in 1967 to 1969 relates to three items of expenditure. These are maintenance and service costs incurred on behalf of clinical students, administrative costs involved in clinical teaching, and books for students at libraries of teaching hospitals. The table below sets out the Commonwealth recurrent grants for teaching hospitals for 1965 and 1966 and those approved for each year of the 1967-69 triennium.

**STATE UNIVERSITIES: MAXIMUM COMMONWEALTH GRANTS FOR  
RECURRENT EXPENDITURE AT TEACHING HOSPITALS, 1965 TO 1969**  
(£)

<i>University</i>	<i>1965</i>	<i>1966</i>	<i>1967</i>	<i>1968</i>	<i>1969</i>
Sydney . . . . .	38,600	74,000	100,141	102,646	105,979
New South Wales . . . . .	7,800	19,000			
Melbourne . . . . .	26,200	54,400	51,228	52,912	53,860
Monash . . . . .	9,400	22,000	27,579	31,298	33,404
Queensland . . . . .	15,200	31,600	37,544	39,509	40,141
Adelaide . . . . .	13,600	27,600	20,505	20,315	20,315
Western Australia . . . . .	9,600	19,400	18,758	19,305	19,557
Tasmania . . . . .	..	1,400	4,211	4,617	6,196
<b>Total . . . . .</b>	<b>120,400</b>	<b>249,400</b>	<b>259,966</b>	<b>270,602</b>	<b>279,452</b>

The basis of these grants is \$1 from the Commonwealth for every \$1.85 of income received by a university from fees and State grants for these purposes.

*Commonwealth grants for building projects in universities.* These grants, for the period 1967 to 1969, are shown in detail in the Second Schedule to the *Universities (Financial Assistance) Act 1966*. Payments are made up to a given maximum for each project, on the basis of \$1 from the Commonwealth for every \$1 of State grants. Since 1964 the grant, where appropriate, has included an allowance for furnishings and equipment. Previously, separate grants were provided for these items. Also, since 1964 the schedule showing grants for university building projects includes grants for university computing facilities, but grants for the erection and alteration of buildings for halls of residence administered by universities are shown elsewhere. The total Commonwealth grant under this heading for each university is shown in the following table.

**STATE UNIVERSITIES: MAXIMUM  
COMMONWEALTH GRANTS FOR BUILDING  
PROJECTS, ETC., 1964 TO 1969**  
(£'000)

<i>University</i>	<i>1964-66</i>	<i>1967-69</i>
Sydney . . . . .	4,679	4,049
New South Wales . . . . .	3,800	3,799
Wollongong . . . . .	79	506
New England . . . . .	1,353	1,300
Newcastle . . . . .	1,020	1,800
Macquarie . . . . .	2,100	3,905
Melbourne . . . . .	4,813	4,080
Monash . . . . .	4,470	4,830
La Trobe . . . . .	1,410	5,838
Queensland . . . . .	2,737	3,280
Townsville . . . . .	380	1,768
Nathan . . . . .	100	100
Adelaide . . . . .	832	1,484
Flinders . . . . .	2,835	2,161
Western Australia . . . . .	1,921	2,000
Tasmania . . . . .	936	1,008
<b>Total . . . . .</b>	<b>33,465</b>	<b>41,908</b>



*Commonwealth grants for buildings for halls of residence and affiliated residential colleges.* The *States Grants (Universities) Act 1963* shows the grant available to each university for both types of student residence in the Fourth Schedule. Previously, grants for buildings for university-administered halls of residence were included in the Schedule showing university building projects. Payments were made up to a given maximum for each project. For halls of residence the grant comprised \$1 from the Commonwealth for every \$1 of State grants. For affiliated residential colleges Commonwealth grants were up to half of the cost of a project, the other half being met from college or State government sources. For the 1964-66 triennium, however, payments were made up to a given maximum for each project on the basis of \$1 from the Commonwealth for every \$1 of residential college funds and State grants. This basis is to be continued for the 1967-69 triennium. The maximum Commonwealth grants available for each State university in this triennium are shown in the following table.

**STATE UNIVERSITIES: MAXIMUM  
COMMONWEALTH GRANTS FOR BUILDINGS  
FOR HALLS OF RESIDENCE AND AFFILIATED  
RESIDENTIAL COLLEGES, 1964 TO 1969**

(\$)

<i>University</i>	<i>1964-66</i>	<i>1967-69</i>
Sydney . . . . .	773,250	528,000
New South Wales . . . . .	687,000	1,026,000
New England . . . . .	898,500	1,134,000
Melbourne . . . . .	1,015,791	1,062,000
Monash . . . . .	1,110,000	1,566,000
La Trobe . . . . .	440,000	586,000
Queensland . . . . .	647,259	926,000
Townsville . . . . .	400,000	919,000
Adelaide . . . . .	309,200	430,000
Flinders . . . . .	35,000	..
Western Australia . . . . .	756,500	374,000
Tasmania . . . . .	262,500	401,000
<b>Total . . . . .</b>	<b>7,335,000</b>	<b>8,952,000</b>

*Commonwealth grants for building projects in teaching hospitals.* Since 1961 the Commonwealth Government has supported building grants recommended by the Commission for teaching hospitals. The total Commonwealth grants under this heading for 1961-63, 1964-66 and those approved for 1967-69 are shown in the following table. Payments are made on the basis of \$1 from the Commonwealth for every \$1 of income received by universities from fees and State grants for this purpose. Where appropriate the grants include an allowance for furnishings and equipment.

**STATE UNIVERSITIES: MAXIMUM COMMONWEALTH  
GRANTS FOR BUILDING PROJECTS, ETC. AT  
TEACHING HOSPITALS, 1961 TO 1969**

(\$)

<i>University</i>	<i>1961-63</i>	<i>1964-66</i>	<i>1967-69</i>
Sydney . . . . .	746,370	582,700	} 900,000
New South Wales . . . . .	588,920	179,500	
Melbourne . . . . .	685,475	617,500	1,417,000
Monash . . . . .	832,195	384,600	673,300
Queensland . . . . .	565,310	525,150	269,300
Adelaide . . . . .	216,510	640,400	92,500
Western Australia . . . . .	65,106	63,350	795,000
Tasmania . . . . .	..	118,500	780,000
<b>Total . . . . .</b>	<b>3,699,886</b>	<b>3,111,700</b>	<b>4,927,100</b>

*Commonwealth grants for special research projects in universities.* A Commonwealth grant of \$1 million was made in the 1961-63 triennium for research equipment on the basis of \$1 from the Commonwealth for every \$1 of State grants. For the 1964-66 triennium the Australian Universities

Commission recommended a Commonwealth grant for special research purposes of \$5 million for the State universities on the basis of \$1 from the Commonwealth for every \$1 of State grants. Of this amount a Commonwealth grant of \$3 million was allocated by the Commission in agreement with State governments. The remaining \$2 million was allocated by the Australian Research Grants Committee (*see* page 549) to individuals or research teams whether inside or outside universities. For the 1967-69 triennium the Commonwealth is providing \$9 million for allocation by the Committee. Grants to universities for general research purposes are being made by the States.

#### University income and expenditure

The following tables show particulars of the income and expenditure of each university in 1966 and the totals for 1962 to 1966.

#### UNIVERSITIES: INCOME, 1966 (\$'000)

University	Government grants(a)		Other income				Total income
	Cwlth Government grants	State Government grants	Donations and endowments (b)	Student fees (c)	Other income		

INCOME FOR SPECIFIC CAPITAL PURPOSES(d)							
Australian National	.	.	4,589	..	..	133	4,722
Sydney	.	.	1,976	2,713	287	..	4,976
New South Wales	.	.	1,527	1,775	40	..	3,341
New England	.	.	438	591	..	30	1,059
Newcastle	.	.	99	728	62	..	889
Macquarie	.	.	1,221	2,753	..	..	3,974
Melbourne	.	.	1,997	3,706	184	140	6,027
Monash	.	.	1,245	1,245	96	..	2,585
La Trobe	.	.	1,474	1,669	..	..	3,143
Queensland	.	.	2,194	2,377	..	..	4,571
Adelaide	.	.	217	217	..	..	435
Flinders	.	.	553	558	..	74	1,185
Western Australia	.	.	1,226	1,237	..	..	2,463
Tasmania	.	.	93	93	41	..	227
Total	.	.	18,847	19,663	710	377	39,597

#### INCOME FOR OTHER PURPOSES

Australian National	13,563	..	276	318	1,169	15,326
Sydney	6,388	7,939	4,043	3,236	538	22,144
New South Wales	5,763	7,012	852	2,412	814	16,852
New England	1,863	2,466	183	456	870	5,838
Newcastle	760	1,184	48	271	27	2,289
Macquarie	224	566	90	..	55	935
Melbourne	6,282	6,391	1,376	3,187	981	18,217
Monash	3,608	5,097	599	1,371	383	11,057
La Trobe	246	430	18	..	19	713
Queensland	4,133	4,894	2,379	2,530	489	14,425
Adelaide	3,927	4,421	501	1,227	543	10,620
Flinders	539	807	16	63	9	1,435
Western Australia	2,782	3,080	639	1,155	633	8,288
Tasmania	1,169	1,457	107	426	146	3,305
Total	51,245	45,743	11,127	16,653	6,676	131,444

For footnotes *see* next page.

UNIVERSITIES: INCOME, 1966—*continued*  
(\$'000)

University	Government grants(a)		Other income				Total income
	Cwlth Government grants	State Government grants	Donations and endowments (b)	Student fees (c)	Other income		
TOTAL INCOME							
Australian National	18,152	..	276	318	1,302	20,048	
Sydney	8,364	10,652	4,329	3,236	538	27,120	
New South Wales	7,289	8,787	892	2,412	814	20,194	
New England	2,300	3,057	183	456	901	6,897	
Newcastle	859	1,912	110	271	27	3,178	
Macquarie	1,445	3,319	90	..	55	4,909	
Melbourne	8,279	10,097	1,560	3,187	1,120	24,244	
Monash	4,852	6,342	695	1,371	383	13,642	
La Trobe	1,720	2,099	18	..	19	3,855	
Queensland	6,327	7,271	2,380	2,530	488	18,996	
Adelaide	4,144	4,638	501	1,227	544	11,055	
Flinders	1,092	1,366	17	63	83	2,620	
Western Australia	4,008	4,317	638	1,155	634	10,751	
Tasmania	1,262	1,549	148	426	147	3,532	
Total	70,092	65,406	11,838	16,653	7,053	171,042	

(a) Includes funds expended by various government departments and other bodies in respect of universities but not controlled by the universities. (b) In the case of endowments, only income from property and other investment of these endowments is included. The treatment of donations depends on the terms of the gift, etc. When the capital sum is specified to be expended over several years, only the portion of the capital sum allocated to each year is shown as income in that year, but if the capital sum is available for spending without limitation as to time, the full amount is recorded as income in the year it is received, irrespective of whether it is spent in that year or not. The capital value of land and buildings donated to the universities is not recorded as income, unless these properties are sold, in which case the amounts realised are included. (c) Excludes fees collected on behalf of student unions. (d) Income received specifically for new buildings, major alterations and additions to buildings, installation of services, purchase of land and buildings and major equipment.

UNIVERSITIES: EXPENDITURE, 1966  
(\$'000)

University	Teaching and research	Administration and general overhead	Libraries	Buildings, premises, grounds	Sundry auxiliary expenditure	Total expenditure
Australian National	11,649	1,660	649	4,172	1,250	19,380
Sydney	15,465	1,774	980	7,429	646	26,294
New South Wales	12,088	1,523	728	4,189	894	19,422
New England	3,317	787	256	1,930	1,085	7,375
Newcastle	1,694	235	189	737	86	2,942
Macquarie	294	272	250	3,294	..	4,109
Melbourne	13,193	1,464	832	4,813	1,129	21,431
Monash	7,640	1,103	694	2,812	502	12,752
La Trobe	265	278	300	2,619	4	3,466
Queensland	10,715	906	656	5,415	507	18,199
Adelaide	8,139	765	548	1,344	660	11,456
Flinders	1,161	190	189	1,035	24	2,599
Western Australia	5,528	626	402	2,249	765	9,571
Tasmania	2,263	333	184	459	227	3,466
Total	93,410	11,915	6,857	42,498	7,779	162,459

**UNIVERSITIES: INCOME AND EXPENDITURE, 1962 TO 1966**  
(*\$'000*)

<i>University</i>	<i>1962</i>	<i>1963</i>	<i>1964</i>	<i>1965</i>	<i>1966</i>
Australian National—					
Income . . .	11,181	12,991	16,609	19,627	20,048
Expenditure . . .	12,251	13,938	16,126	18,666	19,380
Sydney—					
Income . . .	16,439	19,232	21,710	22,398	27,120
Expenditure . . .	16,342	17,302	20,547	20,624	26,294
New South Wales					
Income . . .	15,623	16,295	19,105	18,621	20,194
Expenditure . . .	15,801	15,247	17,278	20,365	19,422
New England—					
Income . . .	4,167	5,533	6,358	6,945	6,897
Expenditure . . .	4,675	4,887	6,154	6,561	7,375
Newcastle—					
Income . . .	..	..	..	3,725	3,178
Expenditure . . .	..	..	..	3,458	2,942
Macquarie—					
Income . . .	..	..	..	3,765	4,909
Expenditure . . .	..	..	..	3,832	4,109
Melbourne—					
Income . . .	14,613	15,389	16,911	18,918	24,244
Expenditure . . .	15,270	15,131	16,908	18,975	21,431
Monash—					
Income . . .	8,509	8,294	11,335	13,612	13,642
Expenditure . . .	9,055	8,254	10,701	12,693	12,752
La Trobe—					
Income . . .	..	..	..	857	3,855
Expenditure . . .	..	..	..	536	3,466
Queensland—					
Income . . .	9,889	10,441	12,812	16,822	18,996
Expenditure . . .	8,727	9,985	12,727	16,980	18,199
Adelaide—					
Income . . .	7,837	9,152	11,226	9,887	11,055
Expenditure . . .	7,478	10,020	10,749	9,843	11,456
Flinders—					
Income . . .	..	..	(a)	4,141	2,620
Expenditure . . .	..	..	(a)	4,384	2,599
Western Australia—					
Income . . .	6,045	7,414	7,352	9,511	10,751
Expenditure . . .	5,707	7,566	7,672	9,257	9,571
Tasmania—					
Income . . .	3,304	2,763	3,235	3,369	3,532
Expenditure . . .	3,264	2,829	2,995	3,526	3,466
<b>Total income . . .</b>	<b>97,606</b>	<b>107,503</b>	<b>126,652</b>	<b>152,198</b>	<b>171,042</b>
<b>Total expenditure . . .</b>	<b>98,570</b>	<b>105,160</b>	<b>121,857</b>	<b>149,701</b>	<b>162,459</b>

(a) Included with the University of Adelaide.

### Other advanced level institutions

In addition to the degree-granting universities, various other institutions offer courses which may lead to a certificate, diploma, or similar qualification. Included among these institutions are technical colleges, which have been described on pages 521-3, and teachers colleges referred to on pages 524-6.

#### Colleges of advanced education

The Committee on the Future of Tertiary Education in Australia recommended that interim capital grants be made by both the States and the Commonwealth to twelve specified institutions in five States during 1965-66 preliminary to an arrangement for the expansion and development of tertiary education outside the universities.

This recommendation was accepted by all governments, and the colleges of advanced education are receiving substantial governmental financial support during the 1967-69 triennium. Commonwealth grants are conditional on the States providing \$1 for every \$1 of Commonwealth money for capital purposes and \$1.85 of State money and student fees combined for every \$1 of Commonwealth money for recurrent purposes. The Commonwealth has also established the Commonwealth Advisory Committee on Advanced Education to advise it on the development of the colleges. It is envisaged that the colleges will provide mainly tertiary education and training with a vocational emphasis, as distinct from the academic education provided by the universities. In some States, colleges of advanced education are being developed from existing technological institutions. In the Australian Capital Territory and Tasmania, separate colleges of advanced education are being established. The following table shows maximum Commonwealth grants for the triennium 1967 to 1969 and also maximum grants for capital purposes during the triennium 1964 to 1966.

COLLEGES OF ADVANCED EDUCATION: MAXIMUM COMMONWEALTH GRANTS, 1964 TO 1969  
(\$'000)

State	1964-66	1967-69		
	Grants for capital purposes	Grants for capital purposes	Grants for recurrent purposes	Grants for libraries (a)
New South Wales . . .	1,000	7,834	2,069	160
Victoria . . . . .	1,600	6,312	8,981	180
Queensland . . . . .	950	3,090	1,826	60
South Australia . . . .	250	2,721	1,809	50
Western Australia . . .	1,000	2,743	2,577	40
Tasmania . . . . .	..	1,300	554	10
<b>Total . . . . .</b>	<b>4,800</b>	<b>24,000</b>	<b>17,816</b>	<b>500</b>

(a) A special unmatched grant for the improvement of library facilities in colleges.

The following colleges are to be supported with Commonwealth funds during the 1967-69 triennium. *New South Wales*—Hawkesbury Agricultural College, New South Wales College of Nursing, New South Wales College of Occupational Therapy, New South Wales State Conservatorium of Music, New South Wales Institute of Technology, New South Wales Institute of Business Studies, National Art School, School of Physiotherapy at the Royal Prince Alfred Hospital, Speech Therapy Training School at the Royal Alexandra Hospital for Children, Sydney Technical College, and Wagga Agricultural College; *Victoria*—Ballarat School of Mines and Industries, Bendigo Technical College, Burnley Horticultural College, Caulfield Technical College, College of Nursing, Dookie Agricultural College, Emily McPherson College of Domestic Economy, Footscray Technical College, Gordon Institute of Technology, Longerenong Agricultural College, Occupational Therapy School of Victoria, Physiotherapy School of Victoria, Preston Technical College, Royal Melbourne Institute of Technology, School of Forestry, Swinbourne Technical College, Victorian School of Speech Therapy, Victoria Institute of Colleges, Victorian College of Pharmacy, and Yallourn Technical College; *Queensland*—Queensland Agricultural College, Queensland Conservatorium of Music, Queensland Institute of Technology (Brisbane, Capricornia, and Darling Downs); *South Australia*—South Australian Institute of Technology, and South Australian School of Art; *Western Australia*—Royal Perth Hospital School of Occupational Therapy, School of Mines, School of Physiotherapy, and Western Australian Institute of Technology; and *Tasmania*—Burnie Technical College, Hobart Technical College, Launceston Technical College, and Tasmanian College of Advanced Education.

#### Agricultural colleges

There are seven State agricultural colleges—Hawkesbury and Wagga (New South Wales), Longerenong and Dookie (Victoria), Lawes (Queensland), Roseworthy (South Australia), and Muresk (Western Australia), offering a comprehensive course of two or three years leading to the award of a Diploma in Agriculture or in a specialised field such as animal husbandry, dairy manufactures or horticulture. The School of Horticulture, Burnley, Victoria, offers a three-year diploma course. Diploma courses are also offered by two independent institutions, the C. B. Alexander Presbyterian Agricultural College in New South Wales and the Marcus Oldham Farm Agricultural College in Victoria.

Most agricultural colleges are government institutions. The government institutions are administered by the State Departments of Agriculture in New South Wales, Victoria, South Australia, and Western Australia, and by the State Department of Education in Queensland. Their purpose is to teach the principles and practices of agriculture and its specialised branches to those intending to take up farming as a career and to those who propose to enter such occupations as agricultural field officer or technical officer in food processing industries.

The minimum entrance standard is usually the penultimate major secondary examination of the State concerned, except in Western Australia where it is the sub-leaving examination. As entry is competitive, there is a tendency for students to hold better than the minimum qualifications. All the colleges are fully residential and the minimum age at which students may enter them varies from fifteen to seventeen years, depending on the college and the type of course.

In addition to their formal courses of training, agricultural colleges offer short courses of from three days to one month to farmers and teachers in country districts.

State expenditure on agricultural education from Consolidated Revenue and certain special funds is shown in the following table. The figures exclude expenditure on pay-roll tax and superannuation and expenditure out of Commonwealth grants to the States for this purpose.

EXPENDITURE ON AGRICULTURAL EDUCATION: STATES, 1962-63 TO 1966-67  
(\$'000)

State	1962-63	1963-64	1964-65	1965-66	1966-67
New South Wales . . . . .	828	954	974	1,025	1,504
Victoria . . . . .	654	590	664	697	822
Queensland . . . . .	626	618	641	655	799
South Australia . . . . .	234	236	232	232	261
Western Australia . . . . .	152	176	208	213	258
Tasmania . . . . .	2	2	3	3	2
<b>Total . . . . .</b>	<b>2,496</b>	<b>2,576</b>	<b>2,722</b>	<b>2,825</b>	<b>3,646</b>

#### Schools of forestry

Since 1965, tertiary training in forestry, previously carried out by the Australian Forestry School, Canberra, has been provided by a Department of Forestry in the Faculty of Science within the Australian National University's School of General Studies. A four-year degree course is offered. At the Creswick School of Forestry in Victoria a diploma course can be taken.

#### Conservatoria of music

There are conservatoria of music in five States. Those in Victoria and South Australia are attached to the Universities of Melbourne and Adelaide respectively. The New South Wales State Conservatorium, the Queensland State Conservatorium and the Tasmanian Conservatorium are controlled by the respective Departments of Education. All five conservatoria offer diploma courses for entry to which matriculation status is not required; at the universities of Sydney, Melbourne, Adelaide, and Western Australia degree courses are also available.

The Canberra School of Music, established in July 1965, is administered by the Department of Education and Science. A three-year full-time diploma course, consisting of both practical and theoretical studies, is available.

#### Educational training in the defence services

Each of the three defence services maintains institutions for the training of officers. The Royal Military College, Duntroon, Australian Capital Territory, became a college of the University of New South Wales in 1968. The Royal Australian Air Force Academy, Point Cook, Victoria, has evolved from the Royal Australian Air Force College, which was established in 1948 as a tertiary training centre to provide a professional education for permanent officers of the Air Force. It is affiliated with the University of Melbourne and has adopted that University's Bachelor of Science course. The Academy is also permitted to present students for higher degrees in science and the degree of Doctor of Philosophy. Students may also proceed to the University of Sydney to take a degree in

aeronautical engineering. In 1967 the total enrolments in the several officer training Service establishments, which provide academic as well as service training, were as follows: Royal Australian Naval College, Jervis Bay, New South Wales, 115; Royal Military College, Duntroon, Australian Capital Territory, 238; Royal Australian Air Force Academy, Point Cook, Victoria, 67; Royal Australian Air Force Diploma Cadet Squadron, 105. Educational training is also provided in the apprentice training schools conducted by each of the defence Services. The total enrolments in 1967 were: Royal Australian Navy, 763; Royal Australian Army, 472; Royal Australian Air Force, 475. In addition, there were 624 junior recruits in training at H.M.A.S. *Leeuwin*, Western Australia. The Royal Australian Air Force School of Languages, Point Cook, Victoria, conducts courses in French and Asian languages. In 1967 there were 70 students enrolled, of whom 9 were Royal Australian Air Force personnel.

#### **The Australian School of Pacific Administration**

The Australian School of Pacific Administration, controlled by the Department of Territories, trains students in the various aspects of service and administration in Commonwealth Territories, including teaching.

#### **Australian Administrative Staff College**

Opened in 1957, the Australian Administrative Staff College is a private organisation working in close co-operation with government and other public bodies, the armed services and the trade union movement. It was founded, and is owned, by a large group of leading Australian companies and has its permanent premises at Mount Eliza, near Melbourne. The College conducts residential courses for administrators to further the study of the problems which arise in managerial work.

### **Commonwealth activities in education**

#### **Fields of activity**

Although education is primarily the responsibility of the States, the Commonwealth, has instituted a number of measures of direct assistance to educational institutions and to students. It is responsible for public education in its own Territories and is engaged in educational activities incidental to its responsibilities in such areas as defence, external relations, immigration and social services. Education in Commonwealth Territories is described in the chapter *The Territories of Australia*; various schools and colleges for the defence Services are referred to in the chapter *Defence* and on pages 547–8 and other activities which may be considered broadly as educational are referred to in the section on *Broadcasting and Television* in the chapter *Transport, Communication and Travel*.

#### **Department of Education and Science**

A new Commonwealth Department known as the Department of Education and Science was created in December 1966. The new Department, which has absorbed the former Education Division of the Prime Minister's Department including the Commonwealth Office of Education, is concerned with direct grants for educational purposes, e.g. for universities, colleges of advanced education, technical schools, and science buildings, as well as with the new grants for building teachers colleges. It is responsible for assistance to students for the scheme of Queen Elizabeth II Fellowship and for special scholarships offered by overseas countries for Australians. Among the Department's responsibilities are matters in the field of international relations in education, including Unesco and Commonwealth Co-operation in Education, and liaison with State and other education bodies throughout Australia. The Department provides professional advice on education to other Commonwealth departments and authorities. It administers grants to such bodies as the Academy of Science, the Humanities Research Council, the Social Sciences Research Council, and the Institute of Aboriginal Studies, and is responsible for grants for scientific research such as those recommended by the Australian Research Grants Committee. It administers educational services in the Australian Capital Territory.

The *Australian Universities Commission* and the *Commonwealth Advisory Committee on Advanced Education* are responsible to the Minister for Education and Science. The Minister is also responsible for the *Commonwealth Scientific and Industrial Research Organization*, the *National Standards Commission*, the *Australian National University*, the *Institute of Aboriginal Studies*, and the *College of Advanced Education* to be established in Canberra. The Prime Minister's Department continues to be responsible for the National Library and for art, literature and other cultural activities in which the Commonwealth is interested.

### Commonwealth Scholarships Board

This Board, under its former title of the Universities Commission, was established by the *Education Act* 1945. Prior to 1945 the Commission had functioned under wartime National Security Regulations. The Board consists of a chairman and three other members. The main responsibilities of the Board at present are advising the Government on the policy and administration of Commonwealth university and advanced education scholarships and Commonwealth post-graduate awards. The Board is responsible for arranging and supervising the training of ex-service personnel and war widows at university and university type institutions under the Korea and Malaya Training Scheme and the Disabled Members' and Widows' Training Scheme.

### Advisory bodies

The Commonwealth Government has established various advisory bodies whose fields of concern relate to matters of education. Already mentioned (pages 538-40) is the Australian Universities Commission, which advises the Commonwealth Government on university development. The Commonwealth Advisory Committee on Advanced Education advises the Minister on the balanced development of tertiary education outside universities. Within financial limits nominated by the Minister, the Committee recommends grants to the States for colleges of advanced education and directs grants to any such colleges established by the Commonwealth. The Australian Research Grants Committee advises the Minister on the merit of applications for research grants from individuals and research teams, and suggests the allocation of funds. The Queen Elizabeth II Fellowships Committee advises the Minister on the merit of applicants for these Fellowships, which are awarded for post-doctoral study in the physical and biological sciences, and advises generally on the administration of this scheme of Fellowships.

The Commonwealth Government appointed in 1965 a committee of inquiry into the need for a college of advanced education in the Australian Capital Territory. The committee's report was presented to Parliament in October 1966 and the Government accepted its recommendation that a college, to be known as the Canberra College of Advanced Education, should be established. The construction of the college was commenced in December 1967.

The report of the Advisory Committee on Educational Television appointed in 1964 by the Australian Broadcasting Commission was tabled in Parliament in May 1966.

### Assistance to students

The Commonwealth Government provides financial assistance to students through five major scholarship schemes. A total of 22,000 new awards are made available annually under these schemes.

The Commonwealth University Scholarship Scheme makes provision for 8,000 scholarships annually. Of these, 6,000 are open entrance scholarships which are allocated amongst the States in proportion to population and are awarded on the basis of results achieved in Australian matriculation examinations. A small quota of open entrance awards is set aside as Mature Age Scholarships for students who have reached the age of twenty-five years. The remaining 2,000 scholarships are Later Year Awards for students who have already completed one or more years of a university course. Scholarship holders have their fees paid and may receive a living allowance subject to a means test. As from 1 January 1968 the maximum rates of living allowance were \$904.80 per annum in the case of scholars living away from their parents and \$559 for scholars living with parents.

The Commonwealth Advanced Education Scholarship Scheme provides 1,000 scholarships each year for students taking approved courses of advanced education at institutions other than universities. Conditions for selection and benefits are similar to those for university scholarships.

Under the Commonwealth Post-graduate Awards Scheme 500 new awards are made available annually for students taking courses leading to higher degrees at Australian universities. The awards are for full-time study and may be renewed annually up to a maximum period of four years. The Commonwealth contributes an amount of \$2,300 per annum towards the cost of each award. Rates of stipend are fixed by each university and may vary from one university to another. Allowances are not subject to any means test.

Under the Commonwealth Secondary Scholarship Scheme students compete each year for 10,000 scholarships to assist them during the final two years at secondary school. Secondary scholarship benefits are free of means test and comprise a yearly living allowance of \$200, a textbook and equipment allowance of \$50 per annum and reimbursement of compulsory fees up to a maximum of \$150 per annum.

In 1964 the Commonwealth Government also introduced the Commonwealth Technical Scholarship Scheme under which it makes available 2,500 new awards annually to assist students to take approved technical courses. Most of these courses are at certificate level in technical colleges (*see*



page 522). Full-time Technical Scholarship holders receive the same benefits as Commonwealth Secondary scholars. The benefits paid each year to part-time technical scholars are an allowance of \$100, free of means test, and reimbursement of compulsory fees up to a maximum of \$100.

#### **International relations**

The Commonwealth has been involved in the considerable extension which has taken place in relations and exchanges with other countries in the field of education. A significant encouragement to this growth has been membership of Unesco, to which Australia has belonged since 1946, when the organisation was founded.

Twelve specialist Unesco committees in Australia are responsible for a wide programme of activities. The Committees' projects include the organisation of Australian and regional seminars, information programmes, and the preparation and circulation of travelling exhibitions which deal with subjects forming part of Unesco's programme. The Australian National Advisory Committee for Unesco co-ordinates the work of the specialist committees and advises the Commonwealth Government on Australian participation in Unesco.

With the co-operation of educational institutions, State Education Departments and other bodies, the Commonwealth has accepted increasing commitments in schemes of international assistance and co-operation. The Colombo Plan Technical Co-operation Scheme, the United Nations Expanded Programme of Technical Assistance, the Australian International Awards Scheme, the Australian South Pacific Technical Assistance Programme, and the Special Commonwealth African Assistance Plan are some of the programmes through which the Commonwealth Government is providing training for overseas students in Australia and is sending Australian experts and equipment to many of the newly developing countries, especially in Asia and Africa. Australia is also actively sharing with other Commonwealth countries in the scheme of Commonwealth Co-operation in Education, which includes the Commonwealth Scholarship and Fellowship Plan. There were some 1,850 sponsored foreign students in Australian educational institutions at 30 June 1967, compared with about 800 in 1956. Over three-quarters of these were Colombo Plan trainees, most of whom were studying in various fields of engineering, science, medicine, education, and economics.

In 1964, by agreement between the United States and Australian Governments, the Australian-American Educational Foundation, financed jointly by the two Governments, was established to operate a scheme of educational exchanges between the United States and Australia. This new scheme has similar aims and purposes to the Fulbright Scheme which it replaces and which had operated wholly on American funds.

Support is given to Australian participation in many international governmental and non-governmental organisations. For example, Australian educationists have attended yearly meetings of the International Bureau of Education, and regular contributions are made to the Bureau's international surveys into various aspects of education. Assistance has been given to bodies such as the Australian Teachers' Federation in sending delegates to meetings of the World Confederation of Organisations of the Teaching Profession.

#### **Grants for science laboratories in schools**

During the period 1 July 1964 to 30 June 1968 a total of \$39,623,200 was provided by the Commonwealth Government for the building and equipping of science laboratories in both government and non-government schools. Non-government schools in the Australian Capital Territory and the Northern Territory no longer receive this assistance. In these areas the Commonwealth Government now meets interest charges on loans raised for approved building projects and also repays the amounts of capital borrowed in equal annual instalments over periods of twenty years.

#### **Grants for technical education**

The present series of Commonwealth technical training grants will provide \$40,000,000 to the States over the four years 1964-65 to 1967-68. The technical training grants are designed to assist trade and technician training, outside the normal secondary school system and below the tertiary level, conducted in State institutions. Agricultural colleges have been assisted as well as technical colleges. The grants, which do not have to be matched by the States, were made available at a rate of \$10 million a year. They are apportioned between the States on a population basis. In October 1967 an announcement was made that the technical training grants would be continued for a further three years, i.e. to 1970-71, making in all a Commonwealth provision of \$70 million for this sector of education. The new grants will be made under the same general arrangements as for present grants, i.e. at a rate of \$10 million a year and with no matching expenditure required by the States.

The following table shows the provision of the Commonwealth grants for technical education for each State.

**COMMONWEALTH GRANTS FOR TECHNICAL EDUCATION**  
(£)

<i>State</i>	<i>Commonwealth funds available under existing legislation (1964-65 to 1967-68)</i>	<i>Commonwealth funds available over the next three years (1968-69 to 1970-71)</i>
New South Wales . . . . .	14,976,000	11,127,000
Victoria . . . . .	11,303,200	8,462,400
Queensland . . . . .	5,793,600	4,368,600
South Australia . . . . .	3,732,800	2,868,300
Western Australia . . . . .	2,857,600	2,197,500
Tasmania . . . . .	1,336,800	976,200
<b>Total . . . . .</b>	<b>40,000,000</b>	<b>30,000,000</b>

### Grants for other educational purposes

The Commonwealth gives assistance to various educational schemes and institutions. Grants are made each year by the Commonwealth to the Australian Pre-school Association for the development of kindergarten education, to the Commonwealth National Fitness Council, to the Australian Council for Educational Research, to the Department of Adult Education at the University of Sydney for the publication of the *Current Affairs Bulletin*, and to assist in the provision of training in occupational therapy, physiotherapy and nursing.

### Migrant education

The Commonwealth Government's post-war immigration policy has brought to Australia a large number of immigrants with little or no knowledge of English. To assist the assimilation of these newcomers into the Australian community, a system of migrant education has been developed to teach them English and to give them information about Australia. This service is provided free of charge to immigrants above school leaving age.

Before arriving in Australia settlers who do not speak English are given some instruction in English by shipboard education officers. Some may have attended classes in Europe organised by the Inter-governmental Committee for European Migration, with which the Australian Government co-operates. In Australia, evening classes are arranged by State Education Departments wherever nine or more migrants in country areas, or twelve or more migrants in city areas, wish to learn English. There is also available through State Education Departments a free correspondence course in English. In addition, English lessons are broadcast regularly by the Australian Broadcasting Commission. The Commonwealth Office of Education provides technical advice on all aspects of migrant education and is responsible for the preparation of teaching materials, while responsibility for the overall supervision of the programme rests with the Department of Immigration, which also meets the costs.

In November 1967, 12,840 migrants were enrolled in classes, and 6,761 were enrolled in radio and correspondence courses. From the inception of the programme in 1948 until June 1968, 647,862 migrants have been enrolled for English tuition.

### Technical training by government departments

Although most needs of departments for trained staff are met by apprenticeship schemes and other technical college courses and by the universities, some departments provide training which is not available elsewhere. The most important field for which such training is provided is the training of telephone, telegraph, radio, and television technicians by the Postmaster-General's Department.

## Commonwealth expenditure on education

An analysis of Commonwealth expenditure is provided in the following table. Under the heading of 'Direct expenditure on goods and services' current expenditure includes the cost of the Department of Education and Science, the Australian Universities Commission and other administrative expenditure, expenditure by the Australian National University, and the provision of educational

services in the Australian Capital Territory and the Northern Territory (including re-imbursements to States for educational services in these Territories, such amounts being excluded from State expenditure). This expenditure is net of receipts in the form of fees, etc. 'Capital' expenditure, i.e., Commonwealth gross fixed capital expenditure, relates mainly to expenditure on new buildings and equipment by the Australian National University and for schools, etc. in the Northern Territory and the Australian Capital Territory.

COMMONWEALTH GOVERNMENT EXPENDITURE ON EDUCATION, 1962-63 TO 1966-67  
(\$'000)

	1962-63	1963-64	1964-65	1965-66	1966-67
<b>Direct expenditure on goods and services—</b>					
Department of Education and Science—					
Current . . . . .	1,234	1,417	1,656	1,878	2,532
Capital . . . . .	..	..	..	..	9
Australian Universities Commission—					
Current . . . . .	88	122	159	155	195
Australian Capital Territory—					
Current . . . . .	2,659	3,060	4,044	4,451	5,254
Capital . . . . .	1,645	2,271	2,772	3,506	4,663
Northern Territory—					
Current . . . . .	833	960	1,209	1,472	1,641
Capital . . . . .	812	845	1,356	1,504	1,242
Other—					
Current . . . . .	434	503	587	617	694
Capital . . . . .	37	29	20	18	76
Total—					
Current . . . . .	5,248	6,062	7,655	8,573	10,316
Capital . . . . .	2,494	3,145	4,148	5,028	5,990
<i>Total, direct expenditure, goods and services</i>	<i>7,743</i>	<i>9,205</i>	<i>11,803</i>	<i>13,600</i>	<i>16,306</i>
<b>Grants to Australian National University—</b>					
Current . . . . .	7,019	8,639	11,400	12,658	14,223
Capital . . . . .	2,896	4,678	5,392	5,062	5,316
<i>Total, grants to A.N.U.</i>	<i>9,915</i>	<i>13,317</i>	<i>16,792</i>	<i>17,720</i>	<i>19,539</i>
<b>Grants to Canberra College of Advanced Education—</b>					
Capital . . . . .	..	..	..	..	25
<i>Total, grants to Canberra College of Advanced Education</i>	<i>..</i>	<i>..</i>	<i>..</i>	<i>..</i>	<i>25</i>
<b>Payments to the States(a)—</b>					
Current . . . . .	18,546	21,080	28,529	32,929	38,772
Capital . . . . .	12,872	12,780	32,652	32,074	40,091
<i>Total, payments to States</i>	<i>31,418</i>	<i>33,859</i>	<i>61,180</i>	<i>65,003</i>	<i>78,864</i>
<b>Cash benefits to persons—</b>					
Commonwealth scholarship schemes—					
Post-graduate . . . . .	602	834	1,236	1,733	2,432
University . . . . .	6,468	6,897	7,903	10,064	13,890
Advanced education . . . . .	..	..	..	198	660
Secondary . . . . .	..	..	3,382	5,197	6,243
Technical . . . . .	..	..	212	600	816
Soldiers' children education scheme . . . . .	1,967	2,302	2,311	2,534	2,462
Other . . . . .	387	433	573	812	816
<i>Total, cash benefits to persons</i>	<i>9,424</i>	<i>10,464</i>	<i>15,617</i>	<i>21,140</i>	<i>27,319</i>
<b>Grants towards private capital expenditure—</b>					
Australian Capital Territory . . . . .	..	..	86	237	249
Northern Territory . . . . .	..	..	28	5	7
Other . . . . .	..	..	210	..	..
<i>Total, grants towards private capital expenditure</i>	<i>..</i>	<i>..</i>	<i>324</i>	<i>242</i>	<i>256</i>
	<b>58,500</b>	<b>66,847</b>	<b>105,716</b>	<b>117,703</b>	<b>142,309</b>

(a) Specifically for education.

The foregoing table excludes expenditure on certain items which are related to education, such as payments for the Australian Broadcasting Commission education series, Australian Agricultural Council scholarships and the education of Aborigines. In the Australian National Accounts these items are classified to other appropriate headings. If such expenditure were added to the grand total in the table above the amounts would be: 1962-63, \$59,098,000; 1963-64, \$67,522,000; 1964-65, \$106,461,000; 1965-66, \$118,551,000; 1966-67, \$143,185,000.

Commonwealth figures shown in the table on page 555 differ from those shown here because: education grants to the States by the Commonwealth (mainly for universities, science facilities in State schools, technical schools and colleges of advanced education) are included here, while expenditure by the States from these education grants is included in the State education expenditure figures on page 555; grants by the Commonwealth Government to the Australian National University are shown here, while only the actual net expenditure by that university is included in Commonwealth direct expenditure on page 555.

### Adult education

The term 'adult education' as used in Australia refers mainly to non-vocational educational and cultural activities for adults. While the nature of the recognised adult education authorities varies from State to State, their major activities have many common features. Regular courses of lectures are organised on such topics as literature, music, drama, international affairs, languages, and crafts. Some authorities also organise discussion groups, festivals and summer schools, and provide special services for groups in remote areas. In 1960 an Australian Association of Adult Education was formed, and its first annual conference was held in Adelaide in 1961. The Association handles matters pertaining to adult education at a national level and arranges liaison with similar bodies in other countries.

One of the first bodies active in the field of adult education in Australia was the Workers' Educational Association, which formed associations in all States in 1913. Its aims are to bring the universities into closer relationship with the community in general and to provide for higher education in civic and cultural subjects. These associations have been superseded by Adult Education Boards or Councils set up by the State Governments in Victoria, Queensland and Tasmania, and by the University in Western Australia. In the other two States, New South Wales and South Australia, the associations continue to co-operate with the universities in their extension work and are given direct grants by the Governments concerned.

There are throughout Australia various other organisations which are active in the field of adult education. The World Education Fellowship, for example (*see* page 554) has since its inception in Australia been interested in adult education.

The organisation of adult education and some of the activities in each State are described in Year Book No. 53, pages 625 to 627.

### Overseas students in Australian educational institutions

The development of closer ties in education between Australia and other countries and the demand for education in many countries in Asia, Africa and the Pacific have brought about a remarkable growth in the number of overseas students who come to Australia to further their education. Part of the growth and much of the awareness of the facilities available may be attributed directly to the schemes mentioned on page 550. Since 1955, when there were about 3,500 overseas students in Australia, the number has increased to more than 13,000 in 1967. More than half attend institutions of higher education such as universities and technical colleges. Between 1955 and 1967 the numbers of overseas students in institutions of higher education had risen from about 1,800 to 7,300, most of whom came from Asian countries. Australian institutions have shown a readiness to accept overseas students, and in many cases special provisions have been made to suit their needs. Nevertheless, population growth and the demand for education, especially for higher education, within Australia have forced many institutions to restrict the admission of overseas students in common with Australian students.

### Organisations associated with education

#### Australian Council for Educational Research

The Australian Council for Educational Research, a non-governmental body, is engaged on educational research in a wide variety of fields, ranging from tertiary to pre-school education. It conducts surveys and inquiries, makes grants to approved educational investigators, serves as a centre for disseminating educational information, provides training for research workers, and standardises and distributes educational and psychological tests for use in Australia. Although this council is an autonomous body, the Commonwealth and State Governments give substantial financial support.

### World Education Fellowship

The World Education Fellowship, formerly known as the New Education Fellowship, is a world organisation of parents, educators and other citizens interested in the development of new educational practices. It was founded in London in 1915 and spread to Australia at the time of a regional conference held here in 1937. There are now sections in each State. Its Australia-wide journal *New Horizons in Education* is published twice a year.

### Australian College of Education

The Australian College of Education was formed in 1959. Its aim is to bring together leading teachers and administrators in every field of education, to raise the standard of the profession of education in Australia, to establish and proclaim fundamental educational values, and to recognise outstanding contributions to educational practice. Chapters of the College have been set up in all States, and several of the addresses and papers delivered at meetings of the College have been issued in published form.

### Parent and citizen organisations

In Australia, where all government schools are administered by central departments, there is limited opportunity for local participation in education. Public interest is expressed through parents committees or organisations of parents and other citizens interested in supporting their local school. The Education Acts of all States provide for the formation of groups of this type, whose aims are to promote an interest in the school by bringing parents and teaching staff together, to help provide supplementary teaching aids and recreation materials, to foster the regular attendance of children at school, and to help find accommodation for teachers. In several States the general maintenance of school buildings, equipment and grounds is a statutory responsibility of the parent groups, costs being covered by government grants. Lunch canteen services at local schools are maintained by groups in some States. Parent groups have established school children's insurance schemes, operated through State Government insurance offices or private insurance companies. These schemes cover accidents to children which occur between the time of leaving home for school and returning home by the usual direct route.

State-wide councils or federations of parents groups are associated in a federal body, the Australian Council of School Organisations.

## Expenditure on education

The presentation in the following tables is based on the Australian National Accounts. The figures *exclude* expenditure on goods and services which do not enter the market, such as education provided in the home, or for which it is not practical to impute a value, such as the unpaid services of some teachers, or certain educational services which cannot be separated readily from other services, such as instruction on the job. Most of the education services provided by public authorities are included. Some education services are provided by trading enterprises, such as business colleges, but it is not possible to provide separate figures of their transactions. Nor is it possible to provide separate figures for the expenditure of non-profit organisations, such as non-government schools. Information for these organisations is insufficient to make direct estimates of the cost value of their services. Their contribution is included as part of personal consumption expenditure on education.

Current and capital transactions are shown separately. Current expenditure by public authorities on goods and services classified to education is measured net of receipts, such as fees. These fees are included in private consumption expenditure. Gross fixed capital expenditure represents the value of new capital assets, such as new buildings and additions to buildings, equipment, etc. While it is possible to show to some extent details of education expenditure incurred by the various public authorities, it is not possible to provide consistent figures in total of expenditure on various types of education. Generally, expenditure on libraries, cultural activities, and the like is excluded from 'education', as are most education services provided in the armed forces, at health and welfare institutions, prisons, and the like. Identifiable expenditure on education administration and educational research is, however, included. In many cases strict definitions cannot be applied. Thus it is not possible to differentiate between the components of scholarships which are intended for education fees, textbooks, etc. (clearly education expenditure) and those intended as living allowances. University research cannot be separated from universities' expenditure on teaching. With the exception of expenditure on fees, private expenditure on education (such as for books, equipment provided by parents' associations, and the like) cannot be identified and is therefore excluded.

**ESTIMATES OF EXPENDITURE ON EDUCATION: AUSTRALIA**  
**1962-63 TO 1966-67**  
(\$ million)

	1962-63	1963-64	1964-65	1965-66	1966-67p
<b>PUBLIC AUTHORITY SECTOR</b>					
Direct expenditure on goods and services classified to education(a)—					
Net current expenditure—					
Commonwealth authorities . . . . .	12	13	18	20	24
State and local government authorities . . . . .	355	399	458	503	556
Total net current expenditure . . . . .	367	412	476	523	580
Gross fixed capital expenditure—					
Commonwealth authorities . . . . .	7	8	8	8	12
State and local government authorities . . . . .	106	114	127	151	157
Total gross fixed capital expenditure . . . . .	112	121	135	159	169
Total direct expenditure—					
Commonwealth authorities . . . . .	19	21	26	28	36
State and local government authorities . . . . .	461	513	585	654	713
Total, public authority sector . . . . .	479	533	611	682	749
<b>PRIVATE SECTOR(a)</b>					
Personal consumption expenditure on education . . . . .	83	91	101	111	124
Gross private fixed capital expenditure on education . . . . .	19	25	26	32	38
Total, private sector . . . . .	102	116	127	143	162
<b>TOTAL EXPENDITURE ON EDUCATION</b>					
Grand total . . . . .	581	649	738	825	911

(a) Transfer payments from the public authority to the private sector are included in personal consumption expenditure and therefore excluded from the public authority sector.

Direct expenditure of public authorities excludes government payments to persons and non-profit organisations. Such transfer payments from the public authority to the private sector consist mainly of scholarships to persons and grants to non-government schools. They include all scholarship payments, whether or not they are intended towards the payment of fees or towards living expenses. Total government expenditure on education, including such transfer payments, is set out in the following table.

**ESTIMATES OF PUBLIC AUTHORITY EXPENDITURE ON EDUCATION: AUSTRALIA**  
**1962-63 TO 1966-67**  
(\$ million)

	1962-63	1963-64	1964-65	1965-66	1966-67p
Direct expenditure of public authorities . . . . .	479	533	611	682	749
Transfer payments to the private sector—					
Cash benefits—					
From Commonwealth authorities . . . . .	9	10	16	21	27
From State and local government authorities . . . . .	5	7	8	13	14
Grants towards private capital expenditure—					
From Commonwealth authorities . . . . .	..	..	..	..	..
From State and local government authorities . . . . .	..	..	3	3	3
Total transfer payments . . . . .	14	17	27	37	44
Total expenditure on education by public authority sector . . . . .	493	550	638	719	793

Because of conceptual and accounting differences the figures above are not strictly comparable with figures of State expenditure on schools, technical education, etc., Commonwealth expenditure on education, and university expenditure shown in other sections of this chapter.

## CULTURAL ACTIVITIES

### Libraries

The Munn-Pitt report of 1935 greatly stimulated interest in libraries and librarianship throughout Australia. This is seen in the rapid development of libraries, the passing of legislation in all States to increase library services, and the establishment in 1937 of the Australian Institute of Librarians to improve the standard of librarianship. This body was reconstituted in 1949 as the Library Association of Australia and incorporated by Royal Charter in 1963, and its functions now include the promotion and improvement of libraries and library services. The Association conducts annual examinations in all States, for which students are prepared by courses of instruction. Formal library schools are conducted by the National Library of Australia, Canberra, the Library Board of New South Wales (held at Newcastle Public Library), and the State Library of Victoria, Melbourne. In 1960 the first library school to be attached to an Australian University was opened in the University of New South Wales, and the Royal Melbourne Institute of Technology set up a library school in 1963.

#### **Commonwealth libraries**

*National Library of Australia.* This Library grew directly from the Library of the Commonwealth Parliament established in Melbourne in 1901, the Committee of which soon afterwards announced its intention of developing a library patterned on the Library of Congress at Washington, U.S.A., capable of serving purposes beyond those essential to the Parliament itself, appropriate to a national library and on a national scale. This policy was steadily pursued, so that, in addition to its primary function of serving Parliament, it gradually became a central source of information for the Government and its departments and other agencies, and assumed increasing reference and bibliographical responsibilities in relation to scholarship and research in Australia and abroad. It was also influenced by the basic elements of the national library concept of the older countries of Europe: namely, that a national library is the proper place to collect the national literature systematically and to make it known and available for use, and that it is a place to which scholars may turn for what is most significant in the literature of other countries. For these growing extra-Parliamentary activities the Parliamentary Library Committee, in 1923, adopted the title of Commonwealth National Library.

In 1957 a committee appointed to examine the future control and functions of the Commonwealth National Library recommended its establishment as the National Library of Australia separate from the Parliamentary Library, with wide functions and controlled by a board subject to a Minister; the transfer, as a separate agency to an appropriate department, of its Archives Division, which constituted the Commonwealth's agency for the custody and organisation of departmental records of permanent value which need no longer be held within departmental offices; and that the Parliamentary Library be a separate library under separate Parliamentary control. Continuing co-operation, where possible, between the two libraries was also proposed.

Effect was given to these recommendations by the *National Library Act 1960*, which created the National Library of Australia as a body corporate under the control of a Council of nine members, of whom one is a Senator elected by the Senate, one a member of the House of Representatives elected by that House, and seven appointed by the Governor-General. Its functions are: to maintain and develop a national collection of library material, including a comprehensive collection relating to Australia and the Australian people; to make the national collection available to such persons and institutions in such manner and subject to such conditions as the Council determines with a view to its most advantageous use in the national interest; to make available such other services in relation to library matters and material, including bibliographical services, as the Council thinks fit, particularly for the purposes of the library of the Parliament, the departments and authorities of the Commonwealth, and the Territories of the Commonwealth; and to co-operate in library matters (including the advancement of library science) with authorities or persons, whether in Australia or elsewhere.

The National Library comprehensively collects and preserves Australian books, periodicals, newspapers, government publications, pictures, prints, manuscripts, maps, moving picture films, and sound recordings. It is assisted in this by the deposit provisions of the *Copyright Act 1912-1966* and has also been enriched by the acquisition of such notable collections as the Petherick collection of 16,500 items in 1911, the Cook manuscripts in 1923, the Cumpston collection on Public Health in Australia in 1936, the Mathews Ornithological collection in 1940, the Nan Kivell collection of 16,000 items of Australian and Pacific interest including original paintings, prints, manuscripts, and printed material in 1959, and the Ferguson collection which is still under transfer. A feature of the Library's Australian work is the copying on microfilm, in association with the Public Library of New South Wales, of all important unique material overseas relating to Australia, including over three million pages in the Public Record Office in London. Compilation of a Guide to

Collections of Manuscripts Relating to Australia began in 1964. The Library maintains a permanent exhibition of selected paintings, prints and other historical material from its collections. This exhibition is displayed in Parliament House, Canberra.

The Library publicises Australian publications, both at home and abroad, through select lists, the *Australian Books* (annual), the *Australian Public Affairs Information Service*, which is a subject index to current literature (monthly with an annual cumulation), and by collections of Australian books maintained by it at all posts at which Australia is officially represented abroad. In London and New York the National Library maintains and staffs Australian reference libraries supervised by its own Liaison Officers in those centres. In the discharge of its wider bibliographic responsibilities, the Library publishes the *Australian National Bibliography* (weekly with monthly and annual cumulations), which lists books, pamphlets, sheet music, government publications and the first issue of each new periodical or newspaper. Commonwealth and State official documents, both monographic and serial, are listed in *Australian Government Publications* (annual). The Library is also building up union catalogues of serials in the social sciences and humanities, and of monographs in Australian libraries. A three volume loose-leaf edition of *Serials in Australian Libraries: Social Sciences and Humanities; a Union List* was completed in 1967 and will be continuously revised. A second, single volume edition of *Newspapers in Australian Libraries: a Union List* was also issued in 1967.

In 1956 the Australian Bibliographical Centre was established within the National Library to serve as the secretariat of the Australian Advisory Council on Bibliographical Services. The Council, made up of representatives of the National Library, State Libraries and library boards, Parliamentary libraries, public libraries, college libraries, school libraries, special libraries, the Commonwealth Scientific and Industrial Research Organization, each of the universities, the Library Association of Australia and archivists, plans the further development and co-ordination of bibliographical services and co-operates with Unesco and its committees. In recent years the Council has also concerned itself with the adequacy of the book resources within Australia as a whole. The Centre organises bibliographical projects recommended by the Council and operates as a centre for bibliographical information in Australia and overseas. It has published *Resources of Australian Libraries*, a summary report of a survey conducted for the Council in 1961 by Maurice F. Tauber (1963), and *The Development of National Book Resources* (1965), which examines the problems in dealing with the deficiencies revealed by the Tauber Survey. The first edition of *Current Projects in Library Automation: an Australian Directory* appeared in 1967.

The Library acts as a central library of documentary and educational films, its film collection containing approximately 8,000 titles, together with Australian historical films and a great number of film strips. It published *Australian films: a Catalogue of Scientific, Educational and Cultural Films, 1940-58* in 1959 and annual supplements in succeeding years. A revised edition of the *Catalogue of 16-mm. Films*, which lists all films available for loan, was published in 1960. It was supplemented in 1964 and annual accession lists are issued. Special efforts are made to discover and preserve samples of early Australian film production.

Through its Extension Services Section the Library conducts the Canberra Public Library Service for residents of the Australian Capital Territory, to whom 873,492 books were lent during 1966-67. It also assists in the provision of similar services in the Northern Territory, the Territory of Papua and New Guinea, and Norfolk Island.

The National Library's collections contain approximately 1,000,000 volumes, 26,500 paintings, pictures and prints, 23,500 reels of microfilm, 1,860 running feet of manuscripts, 25,000 motion picture stills, 16,000 reels of moving picture films, 160,000 maps, and 450,000 aerial photographs. Special features of the book collection are its strong holdings of Australiana, materials relating to the Pacific area and east and south-east Asia, the publications of foreign governments and international organisations, and works in the social sciences, particularly in political theory and economics.

*Patent Office Library.* The Library of the Commonwealth Patent Office, Canberra, contains approximately 11,250 books and a wide variety of periodicals and other literature relating to pure and applied science, industrial technology and the industrial property (patent, trade mark, design and copyright) laws and practice of most countries. Patent specifications of inventions are received from the principal countries of the world; present holdings are more than 9,989,500. Indexes include a microfilm of a classified index to 3,000,000 U.S.A. patents and translations of abstracts of U.S.S.R. patents.

*Commonwealth Scientific and Industrial Research Organization.* The library holdings of the Organization cover the pure and applied sciences. In addition to the Central Library in East Melbourne, each of the Divisions and Sections has a specialised collection covering such subjects as food preservation, forest products, chemistry, physics, animal health, and fisheries. The collections are particularly strong in the publications of overseas scientific and technical research institutions, with many of which extensive exchange arrangements have been made.



The Central Library maintains a union catalogue of the holdings of all C.S.I.R.O. libraries and is responsible for the following publications: *Scientific Serials in Australian Libraries*; *Australian Science Index*, an index of articles published in Australian scientific and technical periodicals; a *Directory of Scientific and Technical Research Centres in Australia*; and *C.S.I.R.O. Abstracts*, which include abstracts of papers published by C.S.I.R.O. officers, C.S.I.R.O. translations, translations available from other Australian organisations, and additions to the British Commonwealth Index of Scientific Translations. The larger libraries in the Organisation have photocopying facilities which, while normally for internal use, provide a service for the public when a publication is not held elsewhere in Australia.

*The Australian War Memorial Library.* In the War Memorial library are housed the documentary and pictorial records of Australia's fighting services in the 1914-18 and 1939-45 Wars, together with collections covering the war in Korea, 1950-53, and earlier wars in which Australian troops participated—Sudan, 1885; South Africa, 1899-1902; and the Boxer Rebellion in China, 1900-01. Books, periodicals and other records covering contemporary trends and events in the fields of military history and military science are constantly being added, including a coverage of operations in South Vietnam.

The printed records section contains approximately 70,000 volumes, a large collection of military maps, newscuttings and newspapers, sound recordings of war leaders, personalities and events, war posters, and postage stamps. Many personal collections by distinguished soldiers and historical documents relating to the wars have also been placed in the Memorial's custody for preservation. Written records comprise correspondence files of headquarters and units of both World Wars, and the original war diaries compiled from day to day by each unit during its service. The collection of official war photographs covering the 1914-18, 1939-45 and Korean Wars numbers over 250,000, and a collection of official motion picture film depicts Australia at war. Facilities for public research are not yet fully developed, but requests for information are met where practicable.

*Other Commonwealth Government libraries.* Most Commonwealth authorities have specialised collections in their own fields and in addition draw largely on the National Library.

*Northern Territory Library Service.* The Northern Territory Library Service maintains five centres in the Territory. At 30 June 1967 stocks totalled 55,792 volumes which were held at the following centres: Darwin, 25,234; Nightcliff, 5,015; Alice Springs, 16,431; Tennant Creek, 4,892; Katherine, 4,220.

### State libraries

*State Public Libraries.* In each of the capital cities there is a well-equipped public library, the libraries in Melbourne and Sydney especially comparing very favourably with similar institutions elsewhere in the world. The following paragraphs describe these libraries and other library services in each State.

*New South Wales.* The Free Library Movement in New South Wales, founded for the establishment of a system of public libraries on the basis suggested in the Munn-Pitt Report of 1935, helped to pave the way for the Library Act, 1939-1959, which was fully proclaimed as from 1 January 1944. At 30 June 1967, 178 councils had established libraries in terms of the Library Act. During 1967 they spent on their libraries \$4,559,411 including \$1,079,722 received in subsidy. There are 239 libraries, of which 72 are in the metropolitan area and 167 in the country. There are also 23 bookmobiles, of which 2 are in Sydney, 7 in the suburbs of Sydney, and 14 in country municipalities and shires. These libraries contain 3,490,349 volumes.

New South Wales departmental libraries are staffed by officers attached for duty from the State Library, which also provides a central cataloguing service for municipal and shire libraries constituted under the 1939-1959 Act. The State Library maintains an adult education section servicing adult education activities for the universities of Sydney and New England and the Workers' Educational Association.

The Circulation Department lends books to municipal and shire libraries and to individual borrowers. The total stock of the Department is 65,098 volumes, and 44,663 books were lent to public libraries and individual borrowers during 1966-67.

The State Library, known as the Public Library of New South Wales, includes a general reference department of 537,574 volumes, together with the Shakespeare Tercentenary Memorial Library, and the Mitchell and Dixon Libraries and Galleries which are mainly devoted to Australian and Pacific material. The Mitchell Library, with more than 60,000 volumes and pamphlets and 300 paintings, was bequeathed to the trustees of the Public Library in 1907 by Mr D. S. Mitchell, together with an endowment of \$140,000. In 1967 there were 226,904 volumes in the library, in addition to valuable manuscripts, maps and other material. In 1929 Sir William Dixon gave a collection of historical pictures then valued at \$50,000. These were subsequently added to and at his death in 1952 Sir William bequeathed the whole of his collection of books, manuscripts, pictures and other material,

together with an endowment of more than \$226,000, mainly for the printing or reprinting of historical documents relating to Australia and the Pacific. The total number of volumes in the State Library now exceeds 880,000 apart from manuscripts, historical pictures and other material. The maintenance and control of the ordinary lending branch of the Public Library were transferred in 1908 to the Sydney Municipal Council to become the City of Sydney Public Library. The State Library, which had previously been the repository for State archives, transferred this responsibility to an Archives Authority in June 1961. The Authority consists of nine members, of whom the Trustees of the Public Library have a right to nominate one.

Other important libraries in New South Wales are: Teachers' Colleges, 308,853 volumes; the City of Sydney Public Library, 279,682; Railway Institute 169,657; Technical Education Branch, 217,688; Australian Museum, 35,207; Government Transport Institute, 27,204; New South Wales Teachers' Federation Library, 21,000; Workers' Educational Association, 14,920; and the Library at the National Herbarium, 10,969 volumes. At 30 June 1966 the Parliamentary Library contained 157,821 volumes.

*Victoria.* The modern movement in municipal library service dates from the inception of the Free Library Service Board in 1947. The Free Library Service Board was a State Government instrumentality which planned, encouraged and subsidised the development of municipal library services. Under the *Library Council of Victoria Act 1965* the control of the Board passed to the Library Council of Victoria and in 1966 its office was redesignated the Library Services Division of the Library Council.

In 1968, 143 Councils, representing 2,624,000 Victorians, shared Government library grants amounting to \$1,199,000. Of this amount, \$1,121,483 was direct municipal library subsidy. With the addition of expenditure from these Councils' own funds the total expenditure on municipal library services for 1967-68 will be nearly \$3,000,000, representing an average expenditure of approximately \$1.11 cents per head of the population served. In 1967, 600,000 borrowers used their free library services, now totalling 2,033,000 books, to the extent of almost 12 million issues.

Particularly in the country, service has been developed by means of regional libraries. These services, of which there are 20 at present, comprising a total of 86 councils, consist of groups of councils which pool their resources, book-stocks and trained staff. A development since 1962 has been the formation of three Metropolitan Regional Library Services. The Victorian Government provides an Establishment and Regional Library Development Grant of \$50,000 per annum. In 1967 this was increased by \$10,000.

There are 9 bookmobile services operating in Victoria, 6 in country regions and 3 in the metropolitan area.

The State Library of Victoria was established in 1856. It is controlled by the Library Council of Victoria and receives its finance from the State Government. The reference collections now total about 850,000 items, and the lending and travelling libraries have another 185,000 volumes. In addition, the library files 4,500 current periodicals, about 2,000 government publications from Australia and overseas, and 500 newspapers, in all about 50,000 volumes. Special collections include the J. K. Moir Collection of Australiana, the M. V. Anderson Chess Collection, and the Green and Brodie Shipping Collections. The Victorian Historical Collection contains pictures, drawings, prints, and objects of historical interest. The Archives Division is responsible for the preservation of government records.

*Queensland.* The Library Board of Queensland was established in 1945 under the provisions of 'The Libraries Act of 1943'. Its duty is to attain the fullest co-operation and improvement of the library facilities of the State, with the object of placing such facilities on a sound basis for the benefit and educational improvement of the citizens generally. The Board consists of six members including the State Librarian as *ex officio* member and secretary. A general function of the Board is to ensure that the fullest co-operation exists with the Department of Education, the University of Queensland, local bodies, and other bodies having for their object the encouragement of education, literature and the arts and sciences. A specific function of the Board is the control and management of the Public Library of Queensland. Its policy is to build up the main collection of the Library as the State's reference centre.

The Country Extension Service, which is administered as a department of the Public Library, lends books of non-fiction to adults and children residing outside the metropolitan area and to municipal libraries in areas of low population.

The Oxley Memorial Library, established in 1923, has been administered as a department of the Public Library since 1946, but the collection has been kept separate. It contains books, manuscripts, pamphlets, and other graphic material relating to the history and literature of Australia, and of Queensland in particular, and provides facilities for research students in Queensland literature and history.

In 1958 the section of the Libraries Act dealing with the preservation of public records was proclaimed, and in 1959 an Archives Section of the Public Library was instituted and an archivist appointed.

The Library Board staffs the libraries of the Teachers' Colleges and the Queensland Institute of Technology as well as the libraries of eleven government departments, of which the largest is the Department of Primary Industries. The work is co-ordinated by an officer-in-charge, who also gives assistance and advice to independently staffed departmental libraries.

Since 1948 a course in librarianship has been held annually at the Public Library for the purpose of preparing trainees for the examinations of the Library Association of Australia, up to 1961 for its Preliminary Examination, and from 1962 for subjects 1 to 3 of its re-organised Registration Examination. In 1959 a course covering some subjects of the Association's Registration Examination was inaugurated at the Central Technical College, Brisbane.

The holdings of the Public Library of Queensland and its extension services in 1966-67 were: main reference collection, 188,428 volumes and 11,032 maps and pamphlets; Country Extension Service, 89,700 volumes; Oxley Memorial Library, 25,049 volumes and 28,230 maps, pamphlets and miscellaneous items.

Local authorities are empowered by the Libraries Act to establish and conduct library services as a function of local government. The Board encourages local authorities to use these powers. In 1966-67, 79 local authorities were conducting 137 library services. The Brisbane City Council has established 18 of these libraries. There were 112 libraries in Queensland free to adults. To help overcome the problems of a large area and sparse population, various local authorities provide library services on a regional basis. By 30 June 1967, 4 regional library services had been established; the South Western (7 shires), the Central Western (8 shires), the North Western (10 shires), and the Central Highlands (5 shires), with headquarters at Charleville, Barcaldine, Mount Isa, and Emerald respectively. During 1966-67 the Board received a grant of \$561,397 from consolidated revenue to finance the activities of the Public Library and to pay subsidies to local bodies conducting free library services of 50 per cent of endowable expenditure on books and the acquisition or improvement of library buildings and equipment with an upper limit of \$8,000 in respect of new library buildings, and 50 per cent of endowable expenditure on books, equipment and maintenance to local bodies conducting subscription libraries. Subsidies were paid to 4 regional library service boards, 52 local authorities and 39 other bodies.

The Queensland Parliamentary Library was established by the first Parliament in 1860. At 30 June 1967 it contained 96,309 volumes and pamphlets. Included in its valuable collection are long sets of periodicals, newspapers, statutes and government publications, which are currently maintained. The books are devoted largely to the social sciences, although history, geography and biography are well represented. Among the features of its service to Members of Parliament are its newspaper clippings file and copying facilities.

*'The Libraries Act Amendment Act of 1949'* provides for the Public Library and the Parliamentary Library each to receive a copy of all books, pamphlets, maps, and other printed material published in Queensland.

*South Australia.* In the reference department of the State Library of South Australia there are about 247,416 volumes, most of which may be borrowed. Approximately 5,000 periodical titles are filed and the collection of newspapers includes every newspaper printed in South Australia. There are 49,020 volumes in the Adelaide Lending Service; these books are available to persons living in the metropolitan area. The Country Lending Service has 345,351 volumes, of which more than one-third are suitable for children. The Adelaide Lending Service lent 283,563 books in 1966-67, and the Country Lending Service, 219,133. The Library has an active programme for the publishing of facsimile editions of early Australian texts.

The Research Service specialises in scientific and technical inquiries and supplements the resources of the State Library by borrowing from other libraries and by obtaining microfilm copies of material not available locally. It has an extensive collection of trade catalogues and standards.

The library of the Parliament of South Australia held approximately 60,000 volumes at 31 December 1967.

There are 28 local public libraries in South Australia provided by 22 local government and other authorities. The libraries are subsidised on a \$1 for \$1 basis by the State Government. The Libraries Board of South Australia, through the State Library of South Australia, provides various central services. Book-stocks are pooled in the State Library of South Australia and are interchanged between the libraries.

At the end of June 1967 these local public libraries contained 195,684 books. There were 111,205 registered borrowers. During 1966-67, 1,808,768 books were lent.

*Western Australia.* In 1955 the Library Board of Western Australia was made responsible for all public library services throughout the State to which the State Government contributes funds. The Board has the following major functions: to encourage local authorities throughout the State to establish public libraries and to provide as a State subsidy all books and bibliographical services necessary for such libraries when established; to administer the State Reference Library; to advise the Government on all matters relating to libraries; and to provide for the training of librarians.

Local public libraries are subsidised on a \$1 for \$1 basis, the local authority providing accommodation and staffing and the Board all books and related services. The Board provides at least one volume per head of the population. All non-fiction books may be made available at any public library throughout the State on request to the Board. All cataloguing is done by the Board. The first library under this scheme was opened in August 1954. By 31 December 1967, 106 libraries had been established.

The State Reference Library, established in 1887, is the reference division of the Library and Information Service of Western Australia. In addition to providing the normal facilities of a reference library for the metropolitan area, it extends its service throughout the State through local public libraries. It is divided into three divisions responsible for service in the subject fields of Western Australian history, science and technology, and the humanities.

The State Bibliographical Centre and the Central Music Library are housed in the State Reference Library Building, and there is also a commercial information centre. The State archives are maintained by the State Reference Library and managed by the staff of the Battye Library. The State Reference Library is fully equipped with microfilm and photocopy apparatus.

The book-stock of the Board at 30 June 1967 was: 780,932 volumes, comprising circulation stock (including books in public libraries), 536,757 volumes; State Reference Library, 229,943 bound volumes; Central Music Library, 3,200 books on music and 11,032 scores.

The University of Western Australia, through its Adult Education Board, manages the Adult Education Library of some 18,500 volumes of general reading and fiction. Books are sent to country readers each month.

There are over 130 special libraries in government departments and industrial firms. Union catalogues of periodicals and books received in the libraries in Western Australia are maintained by the Library Board of Western Australia in the Bibliographical Centre in the State Reference Library building.

*Tasmania.* The Tasmanian Library Board administers the State Library in Hobart, the extension of library services throughout the State and State aid to libraries, and controls the State Archives. State Government expenditure on library services in 1966-67 was \$497,344.

Through the State Library, the Board provides reference and information services, documentary film and recorded music libraries, and arranges recorded music recitals, film screenings, displays, and exhibitions, etc. Two bookmobiles, based in Hobart, provide a library service to the rural areas of thirteen southern municipalities. All municipalities receive loans of childrens books, the number of books being dependent on the child population of each municipality.

To qualify for State aid for an adults library, a municipal council is required to spend on library services an amount equal to a rate of 0.25 cents in the dollar of the assessed annual value of all rateable property in the municipality. In 1967 all municipalities except Glamorgan received assistance. The Board's aid consists of the loan of collections of books at least equal in value to municipal expenditure from rates. Most of the books supplied this way are exchanged by the Board each year.

A regional library, formed by the Board to give a more efficient and comprehensive service, operates in the north-western municipalities of Penguin, Burnie, Circular Head, Wynyard, and Waratah, with headquarters in Burnie. The regional scheme has a reference library in Burnie, small libraries in the larger towns and a bookmobile for rural areas.

The Hobart City Council library service is amalgamated with the State Library in Hobart and is run by the Board. In addition, a bookmobile serves schools in the metropolitan area. The libraries of the cities of Glenorchy and Launceston are administered by the Board; a bookmobile serves municipalities close to Launceston. At 30 June 1967 the State Library in Hobart held 109,512 reference volumes and 103,412 lending volumes. Municipal libraries (which include Launceston and Glenorchy) had 368,396 books, of which 156,507 were children's books. The State Library works closely with the Parliamentary Library and provides a reference officer to help with Member's queries when Parliament is in session.

#### **University libraries**

These libraries provide material not only for the education of graduates and undergraduates, but also for research workers and practical investigators all over the continent. Much of the material

they contain is not available elsewhere, for although in most cases smaller, they are in many directions more highly specialised than the public libraries. They lend to one another and to State and private institutions as well as to individual investigators. Each of them is governed by a librarian, who is responsible as a rule to an executive sub-committee and a committee which is practically co-extensive with the professorial staff.

The following table shows the volumes held, accessions during the year, and expenditure of the Australian university libraries.

## UNIVERSITY LIBRARIES

<i>University</i>	<i>Volumes (a)</i>	<i>Accessions during year (b)</i>	<i>Expenditure (c)</i>
	'000	'000	\$'000
Australian National . . .	435	37	649
Sydney . . . . .	1,054	67	980
New South Wales . . .	373	28	728
New England . . . . .	228	20	256
Newcastle . . . . .	116	13	189
Macquarie . . . . .	93	42	250
Melbourne . . . . .	511	40	832
Monash . . . . .	252	37	694
La Trobe . . . . .	55	14	300
Queensland . . . . .	485	41	656
Adelaide . . . . .	443	32	548
Flinders . . . . .	96	23	189
Western Australia . . .	307	26	402
Tasmania . . . . .	155	9	184
<b>Total . . . . .</b>	<b>4,603</b>	<b>429</b>	<b>6,857</b>

(a) 31 July 1967. (b) Year ended 31 July 1967. (c) During year ended 31 December 1966.

*Australian National University.* This library comprises three main sections attached to the Institute of Advanced Studies, the School of General Studies, and the Centre of Oriental Studies. The Advanced Studies collection of some 236,000 volumes is closely related to the special interests of the six Research Schools in the Institute. It has a wide range of periodical literature and is strong in the fields of anthropology and linguistics, mathematics, mathematical statistics, physics, chemistry, and the non-clinical medical sciences, and has sought to acquire a good working collection of secondary material of high standard in the social sciences. The General Studies collection (approximately 143,000 volumes) is designed to further teaching at all levels in the Faculties of Arts, Economics, Law, and Science, and to provide research facilities in the humanities. The Oriental collection (mainly Chinese, Japanese, and Indonesian) is primarily a research collection and at present contains approximately 79,000 volumes. The resources of the National Library of Australia are available to members of the University, who also have access to many specialised collections of material held by government instrumentalities in Canberra.

*University of Sydney.* The library consists of the central collection which is known as the Fisher Library, the Law Library, the Medical Branch Library, the Burkitt Library for pre-clinical medicine, and some 49 departmental libraries. The University Library holds a total of more than one million volumes.

The first books were acquired in 1851, and shortly afterwards the library of Sydney College was added. The collection of Nichol D. Stenhouse was acquired in 1878 as the gift of Thomas Walker. In 1885 Thomas Fisher bequeathed the sum of \$60,000, the income from which is used as a book fund. The Fisher Fund was matched in 1961 by establishment of the W. H. and Elizabeth M. Deane Library Fund. Perhaps the finest collection in extent and importance which has been given to the University is that of Sir Charles Nicholson. There have been numerous other benefactions, among which may be mentioned the library of Sir Francis Anderson, the W. H. Deane collection of books and manuscripts and the Dalley-Scarlett music library. In 1961 the University acquired the English literature collection of the late Hugh Macdonald, and the late Professor J. Stewart's library, an outstanding collection on archaeology and numismatics, was acquired in 1963. The Sydney University Library has an extensive collection of mediaeval manuscripts and early printed books.

*University of New South Wales.* The libraries in this university consist of the Central Library and a Bio-medical Library at Kensington. There is also a library at Wollongong University College and the Broken Hill Division. In December 1967 the university had 491,119 volumes in its libraries.

*University of New England.* The library was founded in 1938, when the New England University College was established. Sir William Dixon was its first benefactor. The library, which contains 200,000 bound volumes, is adding to its collection at the rate of approximately 20,000 volumes a year. It receives approximately 5,000 current periodicals annually. It is housed in a three-storied, air-conditioned building, which also makes provision for a bindery and photographic and archives division. A post-graduate and research library is planned as an extension of the present building. The library has its own lecturer in bibliography and library service and conducts formal courses in librarianship. A multi-copy collection of 36,000 volumes for external teaching is housed in the Public Library of New South Wales in Sydney.

*University of Newcastle.* Beginning in 1951 with science-technology materials and associated, through common staffing and housing, with Newcastle Technical College Library until 1961, the library now has a collection of 121,000 volumes and is increasing at the rate of about 12,000 volumes per year. More than 3,000 periodicals are received regularly by subscription and donation. The resources of the library are used extensively on inter-library loan both within the Newcastle district, particularly by local industries, and increasingly, as the library's resources grow, by the other research libraries of the country.

In January 1968 a major part of the library's collections was transferred to temporary premises at the new site of the University at Shortland. The first stage of the permanent library building was completed in January 1968. To it will be brought, as the departments move to Shortland, the one-sixth of the collection still at Tighes Hill. There are no departmental libraries.

*Macquarie University.* The library began in 1965 to acquire books and to plan for its opening in 1967. It occupied temporary quarters in North Sydney until mid-1967, when it moved into the first stage of a new air-conditioned building, which is centrally situated on the university site at Eastwood and planned to house eventually 800,000 volumes. The library subscribes to 1,700 serials and has an audio-visual area. When the library opened in March 1967, approximately half of its total collection of 70,000 volumes had been donated by private individuals, firms and other libraries. In March 1968 its stock stood at 143,618 and its acquisition programme was still being heavily supported by donors. The library staff conducts an extensive programme of lectures and tutorials in bibliography and library use for both undergraduate and post-graduate students.

*University of Melbourne.* Early in 1854 the first allocation for books was made, but the library was housed in temporary quarters until 1959. The W. L. Baillieu Trust made available the first instalments of a \$200,000 gift for building purposes, which have been followed by subsequent gifts and substantial grants from the Commonwealth and State Governments, and a new building was occupied at the beginning of 1959, the first in the university to be designed specifically for library purposes. Since 1959 the use of the library has increased fourfold, and during the academic year admissions of readers to the building averaged 8,000 a day. The building has become inadequate for all purposes and a doubling of its present floor area is required urgently. The resources of the library are also used extensively on inter-library loan by government instrumentalities, industries and other organisations throughout Australia. The University Library, including 13 branch libraries in various departments, is administered from the centrally situated Baillieu Library. The large medical branch library is specially rich in periodicals.

*Monash University.* The library contains about 273,500 volumes and subscribes to some 6,400 journals. It has been decided that the library organisation will develop into four large units—the main library, a bio-medical library, a law library, and a library for the physical sciences and technology. The physical sciences and technology library has been named the Hargrave Library and was opened in December 1962. The main library, catering mainly for the humanities, was occupied in November 1963. The bio-medical library was occupied in 1966, and the law library in February 1968.

*La Trobe University.* The university was founded in December 1964 and the first books were acquired in 1965. Library activities began at 474 St Kilda Road, the temporary headquarters of the university itself. The move to the new building at the university site at Bundoora was completed in the first week of February 1967. The library is housed in a three-storey air-conditioned building which is designed to be extended horizontally in two stages by 1977. The first stage has accommodation for about 130,000 volumes and 420 readers. By the end of 1967 the library had acquired about 70,000 volumes and received about 1,400 periodicals and serials, catering for the Schools of Agriculture, Biological Sciences, Humanities, Physical Sciences and Social Sciences.

*University of Queensland.* The library was founded in 1911. There is a main library and a number of departmental libraries at St Lucia, and medical libraries at the Medical School and at teaching

hospitals. The library receives more than 14,000 current periodicals. It has notable collections in geology, the history, development and culture of the Pacific region, and tropical aspects of agriculture, veterinary sciences and biological sciences. The total collection numbers some 480,000 volumes.

*University of Adelaide.* The main library is the Barr Smith Library which commemorates its first benefactor, Robert Barr Smith, who, with members of his family in and after 1892, gave the university over \$100,000 for the library. Seats are provided for 1,000 readers, including 270 in the main reading room. There are branch libraries for medicine, law and music, with seats for 450 readers. The South Australian branches of the Australian Medical Association, the Australian Physiotherapy Association, and the Australian Dental Association make annual contributions towards the maintenance of the medical library in return for borrowing privileges for their members. The Waite Agricultural Research Institute has a separately administered library of about 22,500 volumes in agricultural science. Total holdings of the university libraries at the end of 1967 were 459,000 volumes. Some 15,375 serial titles are received.

*The Flinders University of South Australia.* The acquisition of books for the library commenced in 1963 when the first library staff were appointed. By the time teaching began in March 1966 a collection of some 60,000 volumes had been assembled. At the end of 1967 the collection contained over 100,000 volumes. Approximately 20,000 volumes are being added each year, and the library receives currently about 3,000 periodical titles. During the early development of the library emphasis is being placed on material to support the current teaching and research programmes of the university. Special attention is being paid to fields where little material is available elsewhere in Australia, for example Spanish literature. The first stage of the library building was occupied at the end of 1965, and the second stage extension which completed the building was finished late in 1967.

*University of Western Australia.* The first full-time library staff was appointed in 1927. Provision for a permanent library building was not possible when the university moved to its present site, and space and facilities were inadequate for many years. A new four-storey building was completed at the end of 1963. The building provides facilities for microfilm readers, typewriting booths and photo-copying facilities. The University Library developed very slowly in the early years, but recently has been adding about 20,000 volumes a year to its stock. In addition to the main library there are a number of departmental libraries of which the more important are engineering, agriculture, pre-clinical, and law. There is also a medical library, in accommodation provided by the Royal Perth Hospital, for the use of the medical school.

*University of Tasmania.* To cater for an anticipated enrolment during 1968 of 2,600 students, the library currently has a collection of 171,788 volumes, and files 4,786 serial titles. The 1968 vote for all purposes is \$109,000, of which \$40,500 is allocated for books and \$59,500 for serial publications and back sets. The university library collects private and business archives and has a small rare book collection.

#### **Children's libraries and school libraries**

*New South Wales.* Children's libraries are being developed as departments of municipal and shire libraries. The Education Department maintains a school library service for the fostering of State school libraries, which are maintained partly by parents and citizens associations and partly by departmental subsidy. Secondary and central schools, and an increasing number of primary schools, have teacher librarians.

*Victoria.* Throughout Victoria an essential feature of libraries is the service for children; 129 municipal libraries share in a special children's library grant of \$10,000, and on the staff of the Library Services Division is a professional children's librarian who supervises and advises on work with children.

The Education Department is making provision for the building of library rooms in new schools. Where accommodation is available in existing schools, library furniture is provided free of costs to the schools, and the Government subsidises the purchase of books. In June 1967, 619 schools had central libraries. The Education Department has a library service officer with a small staff to advise and assist schools in the establishment and organisation of libraries. A one-year course for the training of teacher-librarians was established at Melbourne Teachers' College in 1955. Approximately 30 teachers are trained each year.

*Queensland.* The Library Board of Queensland stresses to local bodies the importance of providing adequate library services for children. There are in Queensland 135 libraries free to children, of which 18 are conducted by the Brisbane City Council. The children's libraries at Rockhampton, Toowoomba and Townsville are particularly active. Country children who are not catered for locally may borrow from the Country Extension Service which possesses a separate children's collection. The purchase of books for State school libraries in Queensland is financed by school

committees and parents associations, with a subsidy from the Department of Education on a \$1 for \$1 basis. Trainees at the teachers colleges are instructed in school library organisation and management.

*South Australia.* A children's library of 38,965 volumes is used by school classes and individual children living in the metropolitan area. In 1966-67, 209,245 books were lent. There is a large collection of historical children's books assembled for the use of research workers. In August 1957 a youth lending service was opened for young people from thirteen to eighteen years of age. It has a stock of 15,374 volumes, and in 1966-67, 99,304 loans were recorded.

*Western Australia.* The Education Department provides library services, issues of books and subsidies on library books to schools. School libraries are supplied with shelving, furniture, stationery, and library supplies. The Library Services Branch of the department provides advisory services to assist schools in all aspects of library organisation and service. It also relieves schools of the professional and routine tasks of book preparation by providing a central cataloguing service for both new books and those previously uncatalogued in school libraries, a central processing service to cover books in plastic and prepare them for use, and a library book repair and binding service. Book selection in schools is assisted by a model library and by lists of recommended books.

The teachers colleges provide courses in school library organisation and service and have developed college libraries directed by qualified librarians. At the Perth Technical College part-time courses are provided on the syllabus for the examinations of the Library Association of Australia and are attended by many school librarians. The Perth Technical College and technical schools are equipped with libraries, and an allocation of funds is provided annually to each school and college department for the purchase of books and periodicals. Books for technical schools other than Perth Technical College are centrally ordered, catalogued and processed by the Library Services Branch.

All high schools are provided with library accommodation and furniture. New high schools have been provided with a main library, reading room, study room and librarian's office. High school libraries are staffed by one or two trained school librarians according to the size of the school. New high schools are issued with books to a value of \$1,000 in each of their first three years. All high schools receive annually an issue of books, as well as being entitled to a subsidy for the purchase of library books. A number of primary schools have organised school libraries in rooms which have become available, or in premises provided by the parents and citizens associations. Annual issues of books are made to all primary schools, varying according to the size of the school, and a subsidy is provided for the purchase of library books. The Charles Hadley Travelling Library provides 400 boxes of books which are circulated to all small schools, mission schools and special classes. Children who are unable to attend school, mainly those in isolated areas, are provided with books from the Correspondence School's library.

*Tasmania.* All the State's municipal libraries have Lady Clark Memorial Children's Libraries. The Lady Clark Memorial Children's Library in the State Library in Hobart has 27,000 books and serves schools in the Hobart metropolitan area by bookmobile. More than 150 schools which are not close to a municipal library have collections of books on loan from the Lady Clark Memorial Children's Library.

### Special libraries

Before the 1939-45 War the number of special libraries, apart from those maintained by government departments, was small, but during recent years many manufacturing, commercial, research and other firms, as well as statutory bodies, have found it necessary to establish special libraries to serve their staff. These libraries, which are most numerous in Sydney and Melbourne, are being increasingly administered by trained librarians.

## Archives

General interest in archives in Australia was aroused in 1888, when the Colony of New South Wales celebrated its centenary, the occasion being marked by official publication in 1889-1894 of the *History of New South Wales from the Records* by G. B. Barton and A. Britton, and in 1893-1898 of the series of *Historical Records of New South Wales*, edited by A. Britton and F. M. Bladen. Both publications were based on transcripts of documents in London which had been made by Mr James Bonwick, appointed Archivist by the Government of New South Wales in 1884.

In 1902 Mr F. M. Bladen presented to the Commonwealth Government a report on European Archives (see *Parliamentary Papers*, 1903, Vol. II, p. 993), in which he recommended the establishment of a Commonwealth Archives Office and the copying of further official records in London. The copying project continued and some of its results were embodied in the volumes of *Historical Records of Australia*, published by the Commonwealth in 1914-1925, under the editorship of Dr J. F. Watson.



Measures for the preservation and storage of original documents were not taken until later years. In the absence of duly constituted archives offices, the various major libraries throughout Australia undertook the collection of historical records, both from official and private sources. An Archives Department of the Public Library of South Australia was established in 1920, and other institutions formed archives branches in 1944 (Commonwealth National Library), 1945 (Public Library of Western Australia), 1948 (State Library of Victoria), 1949 (State Library of Tasmania), 1953 (Public Library of New South Wales), and 1959 (State Library of Queensland). Legislation to govern arrangements for official records was passed in South Australia in 1936 and in 1943 in Tasmania and Queensland. Since 1961, separate authorities for official archives have been established: Commonwealth Archives Office, 1961; Archives Office of New South Wales, 1961; Archives Office of Tasmania, 1965. A Business Archives Council was established in 1954 to co-ordinate activities in the field of company records.

### **Commonwealth Archives Office**

In 1943, following a report by an inter-departmental committee, the Prime Minister directed the formation of a War Archives Committee to arrange for the preservation of war records. This Committee recognised that war archives could not be separated from peace-time archives, and in 1946 the name was changed to the Commonwealth Archives Committee. In 1952 the National Library became the sole archival authority for the Commonwealth and the Chief Archives Officer became the Executive Officer for the Committee. In March 1961, in accordance with a recommendation of the National Library Inquiry Committee, the Archives Division of the National Library was reconstituted as the Commonwealth Archives Office within the Prime Minister's Department. The Archives Office functions, in part, as a central agency for the control of those records created by the Commonwealth Government which are no longer required for frequent use in the day-to-day business of government and which, in many cases, contribute towards the development of a unique record of the heritage of the Australian nation. As a complementary function the Office also provides services for members of the public. These functions are carried out through the following basic activities.

*Registration of record series.* The Office maintains the Commonwealth Register of Record Series, in which details of all Commonwealth records are entered, including those in government departments as well as archival holdings. The records of the Commonwealth are particularly varied, ranging from early Customs, Post Office, Defence, and other material transferred from the Australian Colonies and States, to records of territories now under Australian administration, in addition to those of the Commonwealth Government proper from 1901. Some papers from non-official sources are also held, such as the records of enemy firms expropriated during the two World Wars, records of the Chaplain of Norfolk Island, and papers of former Commonwealth ministers and officials.

*Control of destruction.* No Commonwealth records may be destroyed without the concurrence of the Chief Archivist, whose responsibility it is to safeguard broader national interests as distinct from those of the department which compiled the records. This concurrence is given as far as practicable through continuing disposal authorities which enable Commonwealth departments to destroy certain routine classes of records automatically, but records not covered by such continuing authorities are checked before destruction is authorised. Records selected for permanent preservation are assessed as having evidential or informational value to the nation. In the first category are all records documenting the democratic, constitutional, and legal basis of the Commonwealth Government; the origin, development, organisation, functions, policies, and substantive activities of Commonwealth departments; and the rights and entitlements of Australian citizens. These range from the signed copies of Acts of Parliament to duplicate certificates of naturalisation. The second category, while including many records from the first, also covers source material considered of value to researchers in social, economic, and scientific affairs (such as migrant documentation preserved for demographic purposes) and the nation's cultural and technological heritage (represented, for example, in records of copyrights and patents).

*Provision of accommodation.* Any records which are no longer in active use but which are considered by the originating department or by the Archives Office to warrant preservation, either permanently as national archives or temporarily for a further specified period, may be transferred to an archives repository. While in archival custody they are analysed, arranged, and described, as resources permit, by a wide variety of processes, so that the broadest range of research interests may be served by a comprehensive system of information retrieval. At 30 June 1967 the total holdings of the Archives Office throughout Australia amounted to 300,000 shelf feet of records, including 120,000 feet of permanent material, such as files, manuscripts, registers, cards, books, maps, plans, models, paintings, films, photographs, microfilms, recordings, and tapes, conservatively estimated to be more than 5,000,000 items.

*Provision of information.* Records in the custody of the Archives Office are available for use by depositing and other departments of the Commonwealth Public Service. During 1966-67 some 248,000 items were lent to departments. The Office also provides departments with special searches and information from the records in its custody (12,500 requests in 1966-67). In accordance with the Commonwealth Government's access rules, the Office also supplies information to members of the public engaged in academic or other forms of research. Records may be consulted by holders of a search ticket in the public search rooms provided. During 1966-67 enquiries were received from 164 researchers. There were 3,500 daily visits to archives search rooms by officials and the public, and 24,500 items were produced for consultation.

### Museums and art galleries

In 1964 an annual collection of statistics on a uniform basis was commenced from Australian museums and art galleries. The following paragraphs provide summarised results of the collection and refer individually to the more important museums and art galleries.

A museum or art gallery is considered to be a building, group of buildings or parts of buildings, managed as a unit and intended predominantly for the permanent display of objects of interest (museum) or objects of art (art galleries) to the general public. Institutions displaying live exhibits are excluded (the more important of these are mentioned on pages 571-2), as are buildings used for temporary displays (exhibitions, commercial galleries exhibiting only for sale) without a permanent stock of exhibits; permanent exhibitions which are ancillary to other activities such as exhibits at council chambers, libraries, hotels, and other commercial enterprises providing services to tourists and sightseers; collections which are not readily accessible to the general public, such as university collections for the use of students and research workers; and historic homes, etc. not specifically intended for the permanent display of objects of interest (i.e. where the building itself and its normal fittings are essentially on display).

#### Museums and art galleries, 1967

The following table classifies by States and Territories and by ownership the institutions in Australia which have been identified in 1967 as museums and art galleries (branches of museums and art galleries are not shown separately).

MUSEUMS AND ART GALLERIES: STATES AND A.C.T., AND OWNERSHIP, 1967  
(Number)

	Major institutions			Other institutions			
	Museums	Art galleries	Mixed institutions	Museums	Art galleries	Mixed institutions	All institutions
<b>State or Territory—</b>							
New South Wales . . . .	3	1	..	5	2	2	13
Victoria . . . . .	2	1	..	2	5	2	12
Queensland . . . . .	1	1	..	..	3	..	5
South Australia . . . . .	1	1	..	6	1	..	9
Western Australia . . . .	1	1	..	1	1	..	4
Tasmania . . . . .	..	..	2	..	..	..	2
Northern Territory . . . .	..	..	..	..	..	..	..
Australian Capital Territory .	1	..	1	..	..	..	2
<b>Ownership—</b>							
Commonwealth Government .	1	..	1	..	..	..	2
State Governments . . . .	8	5	1	2	..	1	17
Municipal authorities . . . .	..	..	1	4	5	2	12
Private trusts . . . . .	..	..	..	2	5	1	8
Universities . . . . .	..	..	..	2	1	..	3
Private . . . . .	..	..	..	4	1	..	5
<b>Total museums and art galleries . . . . .</b>	<b>9</b>	<b>5</b>	<b>3</b>	<b>14</b>	<b>12</b>	<b>4</b>	<b>47</b>

The following table sets out particulars of staff, display areas and expenditure for all museums and art galleries identified in 1967.

MUSEUMS AND ART GALLERIES: STAFF, DISPLAY AREA, ATTENDANCE, AND EXPENDITURE, STATES AND A.C.T., 1967

	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>A.C.T.</i>	<i>Aust.</i>
Total staff—								
Museums . . . . .	169	130	34	83	48	..	16	480
Art galleries . . . . .	45	67	20	29	19	..	..	180
Mixed institutions . . . . .	15	8	..	..	..	48	61	132
<i>All institutions</i> . . . . .	229	205	54	112	67	48	77	792
Display area used—								
Museums . . . . . '000 sq ft	104	71	28	51	19	..	11	284
Art galleries . . . . . " "	51	87	20	29	12	..	..	199
Mixed institutions . . . . . " "	13	9	..	..	..	65	80	167
<i>All institutions</i> . . . . . " "	168	167	47	80	32	65	91	650
Estimated attendance during year—								
Museums . . . . . '000	666	817	136	264	147	..	171	2,201
Art galleries . . . . . " "	401	518	98	101	122	..	..	1,240
Mixed institutions . . . . . " "	69	70	..	..	..	142	513	794
<i>All institutions</i> . . . . . " "	1,136	1,405	234	365	269	142	683	4,234
Estimated expenditure during year(a)—								
Museums . . . . . \$'000	569	337	108	198	198	..	38	1,448
Art galleries . . . . . " "	83	383	39	115	112	..	..	732
Mixed institutions . . . . . " "	27	177	..	..	..	170	333	707
<i>All institutions</i> . . . . . " "	679	897	147	312	310	170	371	2,886

(a) Excludes funds not controlled by the institution.

The following table gives figures for staff, display area, etc., for each of the seventeen institutions identified in 1967 as major because of the size of their exhibits, their popularity and the extent of the information and investigation services they provide.

MUSEUMS AND ART GALLERIES, MAJOR INSTITUTIONS: OWNERSHIP, STAFF, DISPLAY AREA, ATTENDANCE, EXPENDITURE, ETC., 1967

	<i>Australian War Memorial, Canberra</i>	<i>Australian Institute of Anatomy, Canberra</i>	<i>Australian Museum, Sydney</i>	<i>Museum of Applied Arts and Sciences, Sydney</i>	<i>Geological and Mining Museum, Sydney</i>	<i>Art Gallery of N.S.W., Sydney</i>	<i>National Museum of Victoria, Melbourne</i>	<i>Institute of Applied Science of Victoria, Melbourne</i>	<i>National Gallery of Victoria, Melbourne</i>
Ownership . . . . .	Cwlth	Cwlth	State	State	State	State	State	State	State
Staff—									
Scientific, professional, teaching, preparational	8	8	35	21	9	12	46	57	26
Administrative and clerical, attendants, cleaners, other	53	7	42	36	12	21	14	9	27
<i>Total staff</i> . . . . .	61	15	77	57	21	33	60	66	53
Display area used . . . . . '000 sq ft	80	9	51	29	12	40	41	26	44
Annual attendance . . . . . '000	513	171	382	250	24	350	(a)380	397	391
Expenditure . . . . . \$'000	333	38	301	200	2	50	185	148	265
Number of lectures . . . . .	52	..	600	4,793	184	140	227	1,120	696
Total attendance at lectures . . . . . '000	1	..	32	140	6	4	9	63	14
Field-work . . . . . man-days	..	..	950	150	45	..	234	20	..
Books, periodicals, etc. in library '000	77	7	35	16	..	5	n.a.	4	n.a.

	<i>Queensland Museum, Brisbane</i>	<i>Queensland Art Gallery, Brisbane</i>	<i>South Australian Museum, Adelaide</i>	<i>National Gallery of South Australia, Adelaide</i>	<i>Western Australian Museum, Perth</i>	<i>Western Australian Art Gallery, Perth</i>	<i>Tasmanian Museum and Art Gallery, Hobart</i>	<i>Queen Victoria Museum and Art Gallery, Launceston</i>
Ownership . . . . .	State	State	State	State	State	State	State	Municipal
Staff—								
Scientific, professional, teaching, preparational	12	5	37	8	18	8	10	9
Administrative and clerical, attendants, cleaners, other	22	10	21	17	26	10	14	15
<i>Total staff</i> . . . . .	34	15	58	25	44	18	24	24
Display area used . . . . . '000 sq ft	28	7	35	28	17	9	29	36
Annual attendance . . . . . '000	136	69	190	83	136	114	(a)60	82
Expenditure . . . . . \$'000	108	38	187	110	198	112	109	61
Number of lectures . . . . .	100	9	56	97	449	40	n.a.	240
Total attendance at lectures . . . . . '000	8	1	2	4	17	2	n.a.	16
Field-work . . . . . man-days	149	..	740	..	431	..	80	88
Books, periodicals, etc. in library '000	39	1	26	n.a.	13	1	..	11

(a) Estimated.

Some descriptive detail follows in respect of the seventeen major institutions listed in the foregoing table.

### **Australian Capital Territory**

*The Australian War Memorial, Canberra.* The memorial comprises the national collection of war relics and the building in which these are preserved. The building was opened in 1941. The memorial is administered by a director responsible to a board of twelve trustees. There is a collection of 4,000 art works and a museum collection of more than 40,000 war relics, the gathering of which began on the battlefields of the 1914-18 War and was continued during the subsequent campaigns in which Australian forces have participated. The collection has been enhanced by gifts of relics from the governments of Great Britain, the sister dominions and allied countries, and also by presentations made by ex-servicemen and relatives of those who died. The collection consists of items such as tanks, aeroplanes, submarines, field-guns, boats, and the widest possible range of war trophies down to the smallest items, each relic dependent for its value on its historical background. The works of art, all by Australian artists, depict battle scenes, individual officers and men, etc., and include oil and water colour paintings, drawings, statuary, bronzes, dioramas, and mosaics. There is also a library, which is described on page 558.

*The Australian Institute of Anatomy, Canberra.* The Institute is described in the chapter Public Health, pages 493-4. It contains displays of biological and anatomical aspects of man and the anatomy of Australian animals. A display of Aboriginal and Melanesian artefacts from the National Ethnographic Collections is temporarily housed in the Institute.

### **New South Wales**

*The Australian Museum, Sydney.* Founded in 1836, this is the oldest museum in Australia. It is administered by a director and a board of twenty-five trustees as a Government Department attached to the New South Wales Department of Education. It has fine collections of all groups of animal, including insect, fossils as well as mineral and ethnological collections, particularly in relation to Australia and the Pacific.

*Museum of Applied Arts and Sciences, Sydney.* This museum, with branches at Bathurst, Goulburn, Broken Hill, and Albury, is administered by a director and a board of seven trustees appointed by the Governor of New South Wales. The museum specialises in applied arts (ceramics, glass, oriental arts, costumes, musical instruments, furniture, etc.), applied science and technology (engineering, transport, textiles, electronics, etc.), and among its special features are a Watt beam engine of 1785, No. 1 New South Wales locomotive, Lawrence Hargrave models, colour television, and a planetarium.

*Geological and Mining Museum, Sydney.* This museum is administered as a branch of the Department of Mines by a curator under the control of the Government Geologist. It is the only one in Australia devoted solely to geology and mining. The display contains a unique collection of ores and economic minerals from New South Wales with material from the other States and from overseas for comparison. Its most important functions are the identification of mineral and rock specimens, several thousands of which are received annually, and the supply of some 20,000 to 30,000 specimens free of charge to schools.

*Art Gallery of New South Wales, Sydney.* The Gallery originated in the Academy of Art founded in 1871. It is administered by a director and secretary under a board of thirteen trustees responsible to the New South Wales Minister for Education. The gallery has 7,957 exhibits, including 1,664 oils and 161 pieces of sculpture. Australian art in all aspects (except early colonial and native) and modern European painting and sculpture are featured. An Aboriginal art collection includes a unique set of large Melville Island graveposts. Assistance is provided to governments and private organisations in the design of books, coins, notes, etc., the preparation and judging of exhibitions, and the supply of research material and information.

### **Victoria**

*National Museum of Victoria, Melbourne.* The museum was founded in 1854. It is administered by a director and board of seven trustees. It houses substantial collections in the fields of zoology, geology and anthropology. There is a small branch at Tidal River, Victoria.

*Institute of Applied Science of Victoria, Melbourne.* The Institute was founded in 1870. It is administered by a director and board of seven trustees. Its collections are concerned with aspects of application of all science subjects, but with special emphasis on transport, astronomy, public health, arms, agriculture, and electronics. A planetarium was opened in December 1965.

*National Gallery of Victoria, Melbourne.* The gallery is administered by a director and board of seven trustees. Its large collections of over 20,000 items feature paintings by Rembrandt, Tiepolo and the Flemish primitives, Dürer engravings, Blake drawings, and English 18th century furniture.

### Queensland

*Queensland Museum, Brisbane.* The museum, founded in 1855, is the State Museum of Natural Science. It is administered by a director as a sub-department of the Queensland Department of Education. The collections are in the fields of the natural sciences, ethnology and history, and include extensive collections of fossil vertebrates.

*Queensland Art Gallery, Brisbane.* This gallery was established in 1895. It is administered by a director and board of thirteen trustees. The gallery especially features Australian art of all periods, British modern art, French sculpture, and French paintings from the Rubin collection. The Art Gallery has 1,790 display items, including 559 oils.

### South Australia

*The South Australian Museum, Adelaide.* The museum is a department of the South Australian Public Service and is administered by a director and board of five trustees. It features natural science and anthropological collections. The latter refer to the Australasian and Pacific regions and include an outstanding collection of Aboriginal artefacts.

*National Gallery of South Australia, Adelaide.* The gallery originated in 1881. It is administered by a director and board of seven trustees. Apart from the usual art gallery collections, devoted chiefly to British and Australian works, it features a large collection of prints containing examples from European, British, Oriental, and Australian schools, and a numismatic collection which is widely regarded as the finest in Australia. It also contains the South Australian Historical Collection and a small collection of weapons. It has 56,626 exhibits, including 2,084 oils and watercolours, and 12,029 engravings and prints.

### Western Australia

*Western Australian Museum, Perth.* The museum was established in 1895. It is administered by a director and board of five trustees appointed by the Western Australian Government. The zoological collections cover all vertebrate and most invertebrate fields, particularly marine. There are collections relating to vertebrate palaeontology and meteorites, fossil invertebrates, and some fossil plants. There are extensive collections of Aboriginal artefacts and European arms and armour.

*The Western Australian Art Gallery, Perth.* The gallery was established in 1895 and is administered by a director and government-appointed board of five trustees. It features especially collections of Australian paintings, drawings, ceramics and sculpture, a fine collection of Australian contemporary art, and a major Henry Moore sculpture. It has collections of coins and of Western Australian stamps. Altogether there are 3,444 items, including 444 oils and 43 pieces of sculpture.

### Tasmania

*Tasmanian Museum and Art Gallery, Hobart.* Opened in 1887, the Tasmanian Museum and Art Gallery is administered by a board of trustees. It has a branch at Zeehan, namely the West Coast Pioneers' Memorial Museum. The museum part contains zoological, anthropological and geological displays relating to Tasmania. The art displays contain an excellent holding of Tasmanian historical works.

*Queen Victoria Museum and Art Gallery, Launceston.* This institution, opened in 1891, is owned and administered by the Launceston City Council through a director and a sub-committee of aldermen. It has a branch at Cradle Mountain. Attention is concentrated on collections relating to the natural, biological and historical environment of Tasmania, featuring Tasmanian fauna, Aboriginal relics and historical material. The arts associated with Tasmania are represented by an excellent collection of early colonial period painting and also by a fine collection of costumes, lace and ceramics.

### Other museums and art galleries

A short description of some of the thirty remaining museums and art galleries is given in the following paragraphs. The institutions are grouped into those owned by the States, by municipalities and private trusts, by universities, and by private persons.

*State-owned institutions.* The Dixon and Mitchell Libraries (sections of the Public Library of New South Wales) have galleries in which paintings, drawings, engravings, photographs, coins and postage stamps, all related to Australian and south-west Pacific history, are exhibited. The main area of display comprises 7,051 square feet. Only a fraction of the many thousands of items can be shown. There is a geological museum, maintained by the Victorian State Mines Department, with a comprehensive collection of geological specimens. In South Australia there is a small museum of local and tourist interest—the Old Government House, Belair, displaying furniture, etc. of the colonial era.

*Municipal and private trust institutions.* In 1967 there were eleven institutions owned by various non-metropolitan municipalities throughout Australia. These range from the Mildura Art Centre with expenditure of more than \$174,000 in 1967, to the Fred and Lucy Gould collection of 319 paintings, drawings and antiques at Toowoomba. Similar institutions are often maintained in major provincial cities by private trusts. These and the municipal institutions often exhibit artistic, historical and other items of special local interest, and as a rule there are associated with them various local societies devoted to the exploration and encouragement of the arts, local history and the like. Thus the Lionel Lindsay Art Gallery and Library at Toowoomba, Queensland, is administered by a board of trustees, originally appointed in 1959 by deed of trust.

*University institutions.* Most university collections, some of them comprehensive and containing unique material, are reserved essentially for the use of students and research workers, and are therefore not included as museums or art galleries. However, the John Darnell Art Gallery of the University of Queensland, originating from a bequest in 1930, the Macleay Museum of Natural History at the University of Sydney, stemming from a gift to the university in 1888, and the Nicholson Museum of Antiquities at the University of Sydney are open to the public.

*Private museums and art galleries.* Only five establishments of this nature are included here as museums or art galleries. Four are in South Australia and one in the Australian Capital Territory.

### Botanical and zoological gardens

In addition to the zoological gardens referred to in the following paragraphs there are numerous privately owned zoos and sanctuaries, many of them at tourist resorts, which maintain collections of Australian flora and fauna. There are also various national parks, forests, reserves, etc., dedicated for public use, which are preserved largely in their natural condition.

#### New South Wales

The Sydney Botanic Gardens are situated on the shores of Farm Cove, Sydney Harbour, close to the heart of the city and on the site of the first farm established in 1788 by Governor Phillip. Now occupying sixty-six acres, they contain a large and varied collection of flowering plants, shrubs and trees as well as hothouses of orchids and ferns.

The Zoological Gardens at Taronga Park, on the northern side of Sydney Harbour, were opened in 1916. The area is about seventy acres. The natural formation has been retained as far as practicable, with the object of displaying the animals in natural surroundings, and an aquarium has been built within the gardens. In 1966-67 admissions to the grounds were 782,118 and to the aquarium 268,538. The receipts of the zoological department of the Taronga Park Trust amounted to \$428,336 in 1966-67, excluding an annual State grant of \$50,000, and expenditure amounted to \$446,568. Exhibits at 30 June comprised 1,024 mammals, 2,700 birds, 189 reptiles, and 957 fish.

#### Victoria

The main botanical gardens in the State are the Royal Botanic Gardens, an area of eighty-eight acres within one mile of the centre of the City of Melbourne, containing over 12,000 species of plants, of which there are some 30,000 individual specimens. Many species of native birds breed on islands in lakes within the gardens.

The Zoological Gardens are situated in Royal Park, and contain a wide selection of animals, birds and reptiles. A wild life sanctuary is also maintained at Healesville and contains specimens of indigenous fauna.

#### Queensland

Botanical gardens have been established in Brisbane and in several other cities. The Brisbane Botanic Gardens were established in 1855 by the Government of New South Wales. In 1925 the Queensland Government transferred them to the Brisbane City Council. They occupy approximately forty-six acres on the banks of the Brisbane River in the central city area and are noted for their collections of palms, tropical trees and shrubs, and succulents; they contain over 7,500 plants.

#### South Australia

The Botanic Garden was established in 1855 and opened to the public in 1857. It covers forty-five acres, on which are established collections of Australian and exotic plants from low rainfall and sub-tropical regions. In a large range of glasshouses are collections of tropical, ornamental, and economic plants. Special collections include cacti and succulents, bromeliads, and begonias. An up-to-date and comprehensive botanical and horticultural library is maintained.

Mount Lofty Botanic Garden, of approximately 180 acres, was established in 1960 and is to be opened to the public in the early 1970s.

The State Herbarium was established in 1952 and moved to the present building in 1965. It contains about 250,000 specimens.

The Zoological Gardens, opened in 1883, have an area of approximately 19 acres, and contain a fine collection of animals, reptiles, and birds. There were approximately 373,000 visitors in 1966-67.

#### **Western Australia**

A botanic garden and arboretum for the native plants of Western Australia were commenced in 1962 and officially opened in October 1965. The site of this development is in King's Park, a reserve of almost 1,000 acres close to the centre of Perth. The Botanic Garden is the counterpart of the Museum in the botanical field, maintaining living collections of plants for scientific and educational purposes. The West Australian collections at present comprise a total of 1,200 species of trees and wildflowers. Virtually all trees native to the southern half of the State, with the exception of some rare mallees, are represented in the arboretum.

Parties from the Botanic Garden are regularly in the field for the collection of propagating material and contribute to the botanical exploration of the State. Special attention is devoted to locating rare species or species threatened with extinction. Vegetation maps of the State are being built up. Seed of native plants collected is distributed to botanical institutions throughout the world and to private growers and nurserymen. A seed list which normally offers from 900 to 1,000 species is published annually. In 1966-67 almost 5,000 packets of seed were distributed.

Research on propagation of native plants is carried on in the nursery and information acquired is passed on to growers through State branches of the Society for Growing Australian Plants, using the medium of the Society's Journal. Within Western Australia members of the staff constantly lecture and demonstrate, and the nursery is open to conducted parties at regular intervals. Official guides may be engaged by parties of visitors, and as the Botanic Garden develops it is designed to become of value for nature study groups. A Wildflower Exhibition is held in the Park each spring. Facilities are provided for the employment and ancillary training of students enrolled in the three-year course for the Western Australian Certificate of Horticulture and Park Administration.

The Zoological Gardens, which were opened in 1898 at South Perth, have an area of 44 acres and are under the control of the Acclimatisation Committee. Animals, birds and reptiles are exhibited. During the year 1966-67, 151,417 adults and 133,784 children visited the zoo.

#### **Tasmania**

The Royal Tasmanian Botanical Gardens adjoining Government House on the Queen's Domain contain a fine collection of exotic trees and shrubs and a small aviary. The gardens are controlled by a board appointed by the State Government, which supports the gardens by annual grants.

There are two privately owned wildlife sanctuaries and zoos, each with a few exotic animals. One is at Granton near Hobart, the other is at Punch Bowl near Launceston. The Launceston City Council keeps a small collection of animals and birds at City Park.

#### **Northern Territory**

The Darwin Botanical Gardens were established in 1873 and were planted with imported exotic plants and trees. The gardens now occupy eighty acres and feature tropical plants of both native and overseas origin. They are controlled by the Darwin City Council.

#### **Australian Capital Territory**

The Canberra Botanic Gardens have been under development on the lower slopes of Black Mountain since 1950. The gardens are on a 100-acre site and are being developed by the Department of the Interior for the study of the botany, propagation, and cultivation of Australian native plants with the aim of promoting scientific and educational interest in these plants. The gardens were opened for public inspection in 1967 and will be officially opened in 1970.

### **Book publishing**

#### **Australian book publishing**

Statistics about Australian book publishing are prepared from data supplied by the National Library of Australia (see page 557). Through the deposit provisions of the *Copyright Act* 1912-1966, its overseas collection agents and its own efforts, the National Library receives practically all books and pamphlets published in Australia (including the External Territories), although not necessarily

in the year of publication. Because the statistics compiled and shown hereunder are classified according to the year of publication, the figures are subject to revision as publications come to hand subsequent to the year of publication.

The method of counting conforms with international practice. Each title is counted as one unit. The figures cover all non-periodical publications published in Australia. They refer to all publications of five pages or more and include pamphlets, new translations and re-editions. They include government publications, educational textbooks, published university theses, etc., but exclude publications not available to the general public, advertising material, publications of transitory interest, musical works, and maps and charts.

#### Number of publications

The first table following shows the number of books and pamphlets published in Australia during the years 1963 to 1967 and received by the National Library, and the second table the number published during the years 1964 to 1967 classified according to State or Territory of publication.

**NUMBER OF AUSTRALIAN PUBLICATIONS (1963 TO 1967)  
RECEIVED BY THE NATIONAL LIBRARY**

<i>Received by the National Library to the end of—</i>	<i>Published during—</i>				
	1963	1964	1965	1966	1967
1963 . . .	1,416	..	..	..	..
1964 . . .	2,167	1,385	..	..	..
1965 . . .	2,312	1,934	2,039	..	..
1966 . . .	2,312	2,117	3,180	1,712	..
1967 . . .	2,312	2,122	(a)3,306	(a)2,659	(a)2,339

(a) Incomplete—see text in first paragraph of section.

**NUMBER OF AUSTRALIAN PUBLICATIONS (1964 TO 1967) RECEIVED  
BY THE NATIONAL LIBRARY, BY STATE OR TERRITORY  
OF PUBLICATION**

<i>State or Territory</i>	<i>Published during—</i>			
	1964	1965	1966	1967
New South Wales . . . . .	722	1,263	1,177	966
Victoria . . . . .	539	710	583	600
Queensland . . . . .	208	286	180	146
South Australia . . . . .	146	252	161	146
Western Australia . . . . .	105	168	53	70
Tasmania . . . . .	59	98	48	41
Northern Territory . . . . .	9	19	9	6
Australian Capital Territory . . . . .	313	478	424	329
Papua-New Guinea . . . . .	21	30	19	27
Nauru . . . . .	..	2	5	8
<b>Total . . . . .</b>	<b>2,122</b>	<b>(a)3,306</b>	<b>(a)2,659</b>	<b>(a)2,339</b>

(a) Incomplete—see text in first paragraph of section.

The next table shows the numbers of books and pamphlets published during the years 1964 to 1967 and received by the National Library, classified by subject-matter.



**NUMBER OF AUSTRALIAN PUBLICATIONS (1964 TO 1967) RECEIVED  
BY THE NATIONAL LIBRARY, BY SUBJECT-MATTER(a): AUSTRALIA**

<i>Subject-matter</i>	<i>Published during—</i>			
	<i>1964</i>	<i>1965</i>	<i>1966</i>	<i>1967</i>
Bibliography, libraries, general . . . . .	42	101	109	69
Philosophy, psychology . . . . .	18	23	19	10
Religion . . . . .	78	117	62	67
Social sciences . . . . .	775	1,233	917	990
Philology . . . . .	32	45	63	35
Science . . . . .	215	302	274	184
Technology, business . . . . .	427	607	457	371
Art, amusement . . . . .	115	142	168	102
Literature—				
Criticism, anthologies, school editions . . . . .	20	137	45	15
Australian poetry . . . . .	33	29	32	39
Australian drama . . . . .	22	5	4	4
Australian fiction . . . . .	156	236	185	178
Australian essays . . . . .	4	2	3	..
Australian humour and miscellany . . . . .	3	12	9	14
Other literature . . . . .	20	21	71	73
<i>Total, literature</i> . . . . .	<i>258</i>	<i>442</i>	<i>349</i>	<i>323</i>
Travel, biography, history . . . . .	162	294	241	188
<i>Total</i> . . . . .	<i>2,122</i>	<i>(a)3,306</i>	<i>(a)2,659</i>	<i>(a)2,339</i>

(a) The classification is based on the divisions of the Dewey Decimal Classification. (b) Incomplete—see text in first paragraph of section.

### Commonwealth Literary Fund

In 1908 the Commonwealth Government, under Alfred Deakin, first established the Commonwealth Literary Fund. The Fund was entirely a compassionate one devoted to literary pensions for aged or infirm authors, for the families of literary men who died in poverty, and for writers who were unable for financial reasons to continue their activities.

In 1939, in an endeavour to encourage the development of Australian literature and to foster appreciation of it, the Commonwealth Government greatly enlarged the scope of the Fund. The Fund now awards fellowships each year, assists in the publication of manuscripts of high literary merit, makes annual grants for lectures in Australian literature, and awards pensions to writers who have achieved a nation-wide reputation for their work in the field of creative literature. The fellowships are awarded each year to writers who have proved their capacity in the field of creative literature and to writers of promise, to enable them to devote their time to working on a literary project they specify. A fellowship carries a maximum value of \$6,000 a year. The Fund does not seek out people on whom to bestow fellowships, but considers only those who submit applications.

The Fund also assists in the publication of manuscripts which have outstanding literary merit, but which, in the opinion of publishers, may constitute a commercial risk. This assistance takes the form of a guarantee of assistance to the publisher. The Fund does not itself enter the field of publishing, nor does it make outright grants to authors to enable them to arrange publication.

From 1940 to 1965 the Fund made grants to universities for special lectures in Australian literature. In 1940, with rare exceptions, universities ignored Australian writing, but by 1964 the majority of them were actively engaged in its study, and Australian literature had become an accepted field of university scholarship. The Commonwealth Literary Fund lectures played an important role in stimulating interest in Australian literature. At present universities may apply for a grant to enable lectures to be given on special occasions.

In 1956 the Fund initiated a scheme of lectures to the general public and to schools, mainly in country areas, with the co-operation of State adult education authorities and Education Departments. All States receive grants for this purpose. The Fund also assists certain literary magazines of recognised literary value.

The Fund is administered by a committee consisting of one representative of each of the three main political parties in the Parliament, the chairman being nominated by the Prime Minister. The committee is advised on all literary matters by an advisory board of six persons with literary qualifications.

### Commonwealth assistance to Australian composers

In 1967 the Commonwealth Government appointed an advisory board to advise it on projects to encourage Australian composers. The purpose of Commonwealth aid in this field is to assist any project which will facilitate the performance of Australian music composition and to promote a better understanding of Australian music, thereby improving the status of Australian composers.

### National Literature Board of Review

On 1 January 1968 the Commonwealth Government introduced legislation to provide for a National Literature Board of Review of nine members. The Board replaces the Commonwealth Literature Censorship Board and Appeal Board, both of which were advisers to the Commonwealth only in respect of imported literature. A brief history of these Boards appears in Year Book No. 53, page 646.

The National Literature Board of Review was established following Commonwealth-State agreement in 1967, to achieve uniformity in the administration of laws relating to blasphemous, indecent, or obscene publications of *prima facie* literary, artistic, or scientific merit. In terms of the Agreement the Board is established under the Customs (National Literature Board of Review) Regulations. Appropriate Ministers of any State may, under the Agreement, refer works published or distributed locally to the Board for advice. Subject to retention of final responsibility by each Minister it is the intention of the Governments concerned not to act against a publication of merit which the Board advises is suitable for distribution in Australia.

## Film production

### Australian film production

Australia was one of the pioneers in the history of film-making, *Soldiers of the Cross*, a multi-reel story film, having been made in 1900, three years before America's *The Great Train Robbery*, which is generally considered to be the first genuine story-film. It has been claimed that *The Kelly Gang*, made in 1905-6, was the first full-length feature film produced in the world. Following the outbreak of the 1914-18 War a series of short patriotic films were produced. In 1917 the first of a successful series of rural comedies was made, featuring a family called the Hayseeds. In the same year *The Kelly Gang* was remade and the first film version of *For the Term of His Natural Life* appeared. A first film version of C. J. Dennis's *The Sentimental Bloke* was made in 1919.

The year 1920 was notable for a number of productions with an authentic Australian flavour: *On our Selection*, a first version of *Robbery Under Arms*, another remake of *The Kelly Gang*, and C. J. Dennis's *Ginger Mick*. Production continued at about the same level until the coming of sound in 1928. Altogether, approximately 255 theatrical films were produced by Australian units in the silent period (1900-1930). Lack of equipment hampered the commencement of production of sound films in Australia, but during the 1930's nearly 60 sound films were produced.

During the 1939-45 War, commercial film production combined with the Commonwealth Government in making films. Since the war, a number of British and American companies have made films in Australia. Altogether, about 134 feature films were produced in Australia between 1930 and 1967.

### Australian National Film Board

The Australian National Film Board was inaugurated in April 1945, on the recommendation of a Commonwealth Government inter-departmental committee. It was attached for administrative purposes to the Department of Information. With the abolition of that Department in March 1950, administration of the Board was transferred to the News and Information Bureau, Department of the Interior.

In November 1950 the Board was reconstituted as an advisory body to the Minister for the Interior on matters concerned with the production, acquisition and distribution of films required by Commonwealth departments for use within Australia on important matters of national interest and welfare, such as school and adult education, rehabilitation, social development, international understanding, trade and tourist expansion, and immigration; and for dissemination abroad to expand trade and commerce with other countries, to encourage tourist traffic with Australia, to improve Australia's relations with other countries and, where necessary, to explain Australia's national policies, and to encourage immigration.

The constitution provides for a membership of twelve, with the Director of the News and Information Bureau as chairman and the remainder representative of Commonwealth departments, State government instrumentalities, and organisations interested in the production, distribution or utilisation of films for national publicity.

### Film Division of the News and Information Bureau

Official government film production originated with the appointment in May 1913 of a cinematographer and photographer in the Department of External Affairs. A later development was the establishment, in Melbourne in 1920, of the Cinema and Photographic Branch of the Department of Commerce, and a Government film unit has existed in one form or another to the present day. Early in the 1939-45 War the newly-established Department of Information was made responsible for the operation of the Cinema Branch and for an Official War Photography Unit. When the Australian National Film Board was established in 1945, the Film Division of the Department of Information became the official film production and distribution agency for Commonwealth departments and instrumentalities. In 1950, with the closing down of the Department of Information and the transfer of its functions, the Division became the Film Division of the News and Information Bureau then set up within the Department of the Interior. The Film Division is also known as the Commonwealth Film Unit. Theatrical and television distribution in Australia, and both theatrical and non-theatrical distribution overseas, of all Film Division productions are organised by the Bureau's home office or its overseas representatives. Non-theatrical distribution in Australia is organised through the National Library, Canberra, in co-operation with State film distribution agencies.

Since 1946 the Film Division has produced films for general exhibition, as well as training and special purpose films. In 1967-68 the Film Unit produced approximately 100 reels of new films and 82 reels of foreign versions of existing films. Prints are distributed through 70 overseas embassies and diplomatic posts. While many films are released commercially in Britain, the emphasis is on distribution of educational and information films through non-theatrical circuits. Films are frequently shown on television both in Britain and continental Europe. A similar situation exists in the U.S.A., where there is wide non-theatrical distribution and considerable use of the films by television networks. Selected films have been recorded in French, Dutch, German, Italian, Swedish, Russian, Spanish, Japanese, Malay, Thai, Danish, Greek, Portuguese, Esperanto, and Pidgin.

In addition to films made on its own initiative, the Film Division produces films under the sponsorship of, or with the co-operation of, Commonwealth departments and many other bodies such as the Australian Road Safety Council, the Snowy Mountains Hydro-electric Authority, the Australian National University, the Australian Broadcasting Commission, the Victorian State Electricity Commission, the National Capital Development Commission, the Atomic Energy Commission, the British Broadcasting Corporation, the Australian National Shipping Line, and the Institute of Aboriginal Studies.

### Film censorship

*Legislation.* The Commonwealth Government's powers over censorship of films extend only to imported films and imported advertising matter, and stem from the Customs Act. Under that Act the Customs (Cinematograph Films) Regulations provide for the appointment of a Film Censorship Board whose function is to ensure that films and related advertising material coming within certain defined categories are not admitted into Australia. Under those regulations the Film Censorship Board may pass films in their original form, reject them, or pass them after eliminations have been made. Legislation passed by the State Governments of Victoria, Queensland, Western Australia, and Tasmania names the Commonwealth Film Censorship Board as the censorship authority and vests in it the power to classify films as suitable for general exhibition or not. The State Acts give the Commonwealth Board the authority to censor films made in Australia for commercial exhibition and advertising matter made in Australia.

The censorship organisation comprises a Censorship Board of seven persons and an appeal censor, the headquarters being in Sydney. Importers have a right of appeal to the Minister against decisions of the Board and the Appeal Censor.

*Thirty-five mm films for exhibition in motion picture theatres.* In 1967, 1,212 films comprising approximately 5 million feet were censored. This represented approximately 950 hours screening time. Of these films, 390 originated in the United Kingdom, 336 in the United States of America, and 486 in other countries. Principal suppliers among the last mentioned were: U.S.S.R. 95, Italy 72, Greece 63, France 43, Germany 28, Japan 22, and Poland and Yugoslavia 13 each. Included in these figures were 477 full-length feature films which constitute the main theatrical attractions. This was a decrease of 77 from imports for 1966. Feature films came from: the United States of America, 138; the United Kingdom, 83; Italy, 64; Greece, 59; France, 28; U.S.S.R., 41; Yugoslavia, 8; and Japan, 6. Thirty-four feature films were rejected and cuts were made from 126. There were 29 appeals, 18 against rejection, 4 against proposed cuts, 2 against classification, and 5 against rejection of advertising matter. Ten appeals were allowed and 19 were disallowed.

Feature films classified as suitable for general exhibition numbered 175, and 268 were considered not suitable for children. Of the latter, 50 carried the special condition that all advertising should indicate that they were suitable only for adults. These classifications are advisory only and are designed to enable picture-goers and particularly parents to obtain a general idea of the nature of any particular film. In addition to these imported films, 133 35 mm films of 130,940 feet produced in Australia were cleared. These were mainly newsreels and documentaries intended for commercial exhibition or export.

*Sixteen mm films.* Excluding those imported for television use, 6,475 16 mm films of approximately 5 million feet were examined. These were films commercially produced for screening in theatres used by business undertakings for advertising and instructional purposes, and for screening in churches, schools, and universities. They also included home movies and a number of 16 mm theatrical features, some of the latter having been previously imported in 35 mm. Four were rejected.

*Eight mm and 9.5 mm films.* Approximately 119,000 feet of these small dimension type films were examined. One hundred and seventy-one films with an approximate footage of 13,000 feet were rejected.

*Television films.* In 1967, 7,584 films, all 16 mm, of approximately 9 million feet, for use on television, were censored. The number of films is not a true indication of volume because many of these were of short duration. In terms of screening time the films censored for television amounted to approximately 4,426 hours. On a footage basis the United States of America supplied 67 per cent of the total imports and the United Kingdom 24 per cent. One hundred and thirteen television films were rejected outright and an additional 11 were classified as unsuitable for televising. Eliminations were made from 1,079. There were 34 appeals, 25 against rejection and 9 against classification, of which 11 were allowed and 23 disallowed.

*Foreign language films.* Countries other than the United Kingdom and the United States of America supplied 486 of the 35 mm films imported for theatrical exhibition, of which 276 were feature films. Generally, the dialogue is in a foreign language with explanatory English captions. A few have an English commentary and in some cases English 'dubbed' dialogue. Of 6,475 16 mm commercial films censored, 1,356 originated from non-English speaking countries. The chief supplying countries were: France, 194; Germany, 247; Japan, 178; Poland, 83; Holland, 45; Switzerland, 32; Malaysia, 34; Italy, 105; China and India, 29 each; U.S.S.R., 41.

*Export of films.* The quantity of films exported for the year was approximately 2.5 million feet, consisting mainly of newsreels, advertising films and documentaries. This footage included in many cases several prints of the one film. It also included large quantities of exposed negatives sent overseas for processing.

## Cultural organisations

### Arts Council of Australia

Patterned on the Council for the Encouragement of Music and Arts which operated in the United Kingdom during the Second World War, an Australian organisation was brought into being in 1943. In 1945 it became The Arts Council of Australia. Originating in New South Wales, Divisions are active now in the Australian Capital Territory, New South Wales, Northern Territory, Queensland, South Australia, and Tasmania. A Federal Council was formed in 1964. New South Wales has a country branch network of over fifty centres. Rapid development in Queensland has resulted in the formation of over thirty-five branches.

The Arts Council Divisions receive State Government grants through the Departments of Education in New South Wales, Queensland, South Australia, and Tasmania. From 1963 to 1966 substantial contributions were received from a private organisation. Some activities of the Council are supported financially by non-metropolitan local government bodies, and grants were made by the Gulbenkian Foundation in 1964 to 1966 to help in re-establishing the Federal Council. The New South Wales Division is a member of the Adult Education Advisory Board in that State, representing the 'live art' section of adult education. The Tasmanian Division is represented on, and works closely with, the Adult Education Board of that State.

Activities of the Arts Council are directed towards decentralisation of the arts for the benefit of country centres and metropolitan and country schools. It is greatly concerned with taking the arts to children as a basic cultural development. Tours of high standard companies in opera, ballet, drama, puppets, etc. are operating throughout the year. The Young Elizabethan Players Company was formed jointly by the Arts Council and the Australian Elizabethan Theatre Trust in 1958 to take Shakespeare to schools in New South Wales and Queensland. This has now been replaced by the Young Tote Company sponsored by the Arts Council and the University of New South Wales

Drama Foundation. The Council handles a wide range of art exhibitions, both for city and country areas. Summer schools and other courses for drama, painting, pottery, music, and other arts are an established feature of the work of the New South Wales and Queensland Divisions.

Yearly drama festivals are conducted for the Little Theatre movement. In 1963 and again in 1965 the New South Wales Division sponsored the first arts festivals for Sydney (North Side Arts Festival), with a wide range of cultural activities concentrated on the north side of Sydney Harbour. The festival is now a biennial event with the fourth festival being planned for August 1969.

#### **Australian Elizabethan Theatre Trust**

Inaugurated in 1954 to commemorate the first visit to the Commonwealth of Her Majesty the Queen, the Australian Elizabethan Theatre Trust has since presented drama, opera, ballet and puppetry throughout the Commonwealth. The Trust receives annual grants from the Commonwealth Government, the State Governments and city councils. Its income also includes subscriptions from members and donations from business houses.

In the field of drama it has presented, *inter alia*, the works of Australian playwrights, including plays which were subsequently presented overseas. The Elizabethan Trust Opera Company has given seasons of opera and has presented overseas guest artists, conductors and producers. From 1956 to the end of 1967 more than 1,300 performances of opera have been given by the Trust Opera Company in all States and the Australian Capital Territory. Thirty-one operas have been the repertoire in this period. The Australian Ballet, which commenced its inaugural season in November 1962, has visited all mainland capitals and New Zealand and presented world premiere productions of three commissioned ballets during 1964. The Commonwealth Government gave financial assistance for the Ballet to represent Australia at the Commonwealth Festival of Arts in Britain in 1965. The company also danced at Baalbek, Nice, Paris, Berlin, Copenhagen and Honolulu. It toured New Zealand, Canada and major Latin American cities during 1967 and is touring a number of Asian countries during 1968. The Trust has also been associated with commercial managements in the presentation of overseas attractions and large-scale musicals.

In 1965 the Trust and Arts Council of Australia jointly formed the Marionette Theatre of Australia to promote puppetry, and one puppet company with sponsorship from the Department of External Affairs completed a twelve-nation tour of Asia during 1966-67.

Country areas have been visited by Trust companies presenting opera, drama, ballet, and puppetry, in association with the Council of Adult Education in Victoria and the Arts Council of Australia. During 1968 five special companies will present Shakespeare and other curricular plays for schools in all States, this being an extension of similar work undertaken annually since 1958.

In Victoria the Trust is associated with the University of Melbourne in the Melbourne Theatre Company (formerly known as the Union Theatre Repertory Company). It is also associated with the University of New South Wales Drama Foundation in the Old Tote Theatre Company. The corresponding activity in Adelaide, the South Australian Theatre Company, was introduced by the Trust in 1965. Assistance is given to the Adelaide Festival of Arts, the Festival of Perth, the Perth Playhouse, the National Theatre and Fine Arts Society of Tasmania, and other companies. From a special commissioning fund the Trust commissions theatrical works in all major forms from Australian creative artists.

An important activity of the Trust is its association with the University of New South Wales and the Australian Broadcasting Commission in maintaining the National Institute of Dramatic Art, which they jointly established. This provides a training ground for young Australian actors, producers and technicians. Performing a similar function for selected ballet students, the Australian Ballet School is maintained by the Trust in Melbourne.

#### **Australian Council of National Trusts**

The Australian National Trusts were founded to further the general objectives of preservation and conservation of lands, places, buildings, works, and articles which are of national importance by reason of educational, aesthetic, historic, architectural, artistic, scientific, cultural, or other special interest.

The first Australian National Trust, the National Trust of Australia (New South Wales), was formed in 1945. Since then National Trusts have been formed in each of the other States. The Trusts in New South Wales, Queensland, South Australia, and Western Australia have statutory authority, and those in Victoria and Tasmania are incorporated under the Companies Acts of their respective States. The Australian Council of National Trusts was incorporated in 1965 to co-ordinate the activities of the State National Trusts and represent them at the federal level and internationally.

Membership of the National Trusts is open to all individuals and organisations. Total membership throughout the Commonwealth is approximately 21,000. The Trusts are financed by members' subscriptions and donations from individuals and commercial and industrial organisations, the proceeds of charges for entry to Trust properties and the fund-raising activities of members, including inspections of historic houses. In some States the Trusts are subsidised by the State Governments.

The number of properties owned or controlled by the Trusts exceeds sixty. These include houses, natural reserves, a powder magazine, a police station, two paddle steamers and a hulk, a joss house, and a garden. The Trusts have also established a register of buildings (totalling several thousand) including public buildings, churches and buildings in private ownership which they consider should be preserved in the national interest because of their historical and or architectural significance.

#### Historic Memorials Committee

The Historic Memorials Committee was established in 1911 for the purpose of securing portraits of distinguished Australians who had taken an active part in Federation. Later the Committee decided to obtain portraits of all Governors-General, Prime Ministers, Presidents of the Senate, Speakers of the House of Representatives, and other notable Australians. In addition the Committee may commission, and has in fact commissioned, paintings recording special events connected with the Commonwealth Parliament.

The Committee comprises the Prime Minister (Chairman), the President of the Senate, the Speaker of the House of Representatives, the Vice-President of the Executive Council, the Leader of the Opposition, and the Leader of the Opposition in the Senate. An Art Advisory Board, comprising a group of artists, was established in 1912 to assist the Committee by advising on works of art to be commissioned by the Committee.

#### Commonwealth Art Advisory Board

Since its beginning in 1912 the Art Advisory Board has always consisted of artists. At present there are five members. As well as assisting the Historic Memorials Committee the Board also advises the Government on the purchase of works of art for inclusion in the National Collection. In 1967-68 \$75,000 was provided for this purpose. The National Collection now contains over 2,000 works of art.

The Board, on behalf of the Government, also organises and finances exhibitions of Australian art in overseas countries. In addition, it financially assists the showing in State Art Galleries of major exhibitions from abroad or assembled by one or more State Art Galleries. In 1967-68 \$40,000 was provided to meet the costs involved in these exhibitions.

### SCIENTIFIC AND INDUSTRIAL RESEARCH IN AUSTRALIA

A special article on Science and Technology in Australia, prepared by the Commonwealth Scientific and Industrial Research Organization of Australia, was included in Year Book No. 49 (*see* page 781). A short account of the development of research in Australia and of the governmental and university organisations engaged in research was included in Year Book No. 53 (*see* pages 650-2).

#### Research in industry

Research in industry has expanded somewhat in recent years, though not at the same rate as in government agencies or the universities. There is a well-defined trend for larger firms to establish their own laboratories, and appreciable sums are being spent on research in the chemical, metals, sugar, and paper industries. To encourage this trend the Government introduced the *Industrial Research and Development Grants Act* 1967. The legislation, administered by the Australian Industrial Research and Development Grants Board, provides for the payment of grants on a dollar for dollar basis to Australian manufacturing and mining companies for increased research and development expenditure.

Companies employing professional research staff are assisted in the performance of their own research and development, but the Act also makes provision for companies to contract research and development with approved research organisations.

The first grants to industry under this Act were made in 1968 and the Government has made available \$6 million a year for this purpose. Special taxation concessions also apply to expenditure on research and development.

### Commonwealth Scientific and Industrial Research Organization

The Commonwealth Scientific and Industrial Research Organization (C.S.I.R.O.) is Australia's largest civil scientific body. Established as the Council for Scientific and Industrial Research (C.S.I.R.) in 1926, it was re-organised in 1949 under the Science and Industry Research Act and now has a staff of nearly 6,000 including some 1,800 professional scientists. An account of the organisation and work of the former Council, and the earlier Commonwealth Institute of Science and Industry from which the Council was formed, was given in earlier issues of the Year Book. (*See* No. 14, page 1061 and No. 37, page 1183.)

The principal function of C.S.I.R.O. is to carry out scientific research for the primary and secondary industries of the Commonwealth and its Territories. C.S.I.R.O. does not conduct defence research, medical research or atomic energy research. The other powers and functions of C.S.I.R.O. as defined in the Science and Industry Research Act of 1949, include:

- the training of scientific research workers and the awarding of scientific research studentships and fellowships;
- the making of grants in aid of pure scientific research;
- the recognition or establishment of associations of persons engaged in any industry, for the purposes of carrying out industrial scientific research and the co-operation with, and the making of grants to, such organisations;
- the testing and standardisation of scientific apparatus and instruments and the carrying out of scientific investigation connected with standardisation;
- the collection and dissemination of information relating to scientific and technical matters;
- the publication of scientific and technical reports, periodicals and papers.

Before 1939 C.S.I.R. was engaged largely in research into problems of primary industry, in particular, plant and animal diseases and nutrition, soils, pasture improvement, insect pest control, usage of Australian timbers, food processing, and fisheries. Since 1939 an extensive programme of wool research has been developed, and research has been extended into the physical and engineering sciences with particular reference to international standards, radiophysics, various aspects of chemistry, metal physics, meteorological research, mineral processing, building research, dairy products research and engineering research.

#### Organisation

C.S.I.R.O. is a statutory corporation operating under its own Act of Parliament and exercising its powers subject to the regulations and the approval of the Minister for Education and Science.

The governing body of the Organization is the Executive, which consists of nine members appointed by the Governor-General. There are five full-time members, one of whom is chairman, and four part-time members. At least five of the members must possess scientific qualifications. The Executive is responsible to the Minister for the policy and the work of the Organization.

For carrying out its research work, C.S.I.R.O. is divided into four major group laboratories and a number of Divisions and Sections. The four group laboratories are the Animal Research Laboratories comprising four Divisions, the Chemical Research Laboratories comprising five Divisions, the National Standards Laboratory comprising two Divisions, and the Wool Research Laboratories comprising three Divisions. There are also twenty-one independent Divisions in other research fields and an additional five independent Sections. The Head Office is in Melbourne and associated with it are the Central Library (*see* pages 557-8), the Film Unit and the Translation Unit. Regional administrative offices are located at Brisbane, Canberra, Melbourne, and Sydney. The Organization also maintains the Australian Scientific Liaison Office in London and the Office of the Scientific Attaché in Washington.

Since the Organization's activities are Commonwealth-wide and often involve extensive field work, a number of branch laboratories and field stations have been established in various parts of Australia. The more important of these are included in the following lists.

#### Laboratories and Divisions

*Animal Research Laboratories*, consisting of the following four Divisions.

Animal Genetics, Sydney, with a branch laboratory and field station at Rockhampton, Queensland, and field stations at Armidale and Badgery's Creek, New South Wales.

Animal Health, Melbourne, with branch laboratories in Sydney and Brisbane, and field stations at Jimboomba, Queensland, and Werribee, Victoria.

Animal Physiology, Sydney, with a laboratory and field station at Armidale, New South Wales, and a branch laboratory in Brisbane.

Nutritional Biochemistry, Adelaide, with a field station at O'Halloran Hill, South Australia.

*Chemical Research Laboratories*, Melbourne, consisting of the following five divisions.

- Applied Chemistry.
- Applied Mineralogy, with branch laboratories in Perth and Sydney.
- Chemical Engineering.
- Chemical Physics.
- Mineral Chemistry, with a Coal Research Laboratory in Sydney.

*National Standards Laboratory*, Sydney, consisting of the following two Divisions.

- Applied Physics.
- Physics, with an optical observatory at the Solar Observatory, Culgoora, New South Wales.

*Wool Research Laboratories*, consisting of the following three Divisions.

- Protein Chemistry, Melbourne.
- Textile Industry, Geelong, Victoria.
- Textile Physics, Sydney.

The other Divisions are as follows.

- Building Research, Melbourne, with an office in Port Moresby, New Guinea.
- Computing Research, Canberra, with subsidiary installations at Adelaide, Melbourne and Sydney.
- Dairy Research, Melbourne.
- Entomology, Canberra, with branch laboratories in Sydney, Brisbane, Hobart, Perth and at Albury and Armidale, New South Wales.
- Fisheries and Oceanography, Cronulla, New South Wales, with branch laboratories in Brisbane, Melbourne and Perth.
- Food Preservation, Sydney, with branch laboratories at Gosford, New South Wales, (operated jointly with the New South Wales Department of Agriculture), and in Brisbane.
- Forest Products, Melbourne.
- Horticultural Research, Adelaide, with a field station at Merbein, Victoria.
- Irrigation Research, Griffith, New South Wales.
- Land Research, headquarters in Canberra, and field stations and laboratories at Alice Springs, Katherine and Darwin, Northern Territory, and Kununurra, Western Australia.
- Mathematical Statistics, Adelaide, with officers stationed at a number of Divisions and Sections and at the University of Melbourne.
- Mechanical Engineering, Melbourne.
- Meteorological Physics, Melbourne.
- Plant Industry, Canberra, with branch laboratories in Perth, Hobart, and Brisbane, and at Deniliquin and Armidale, New South Wales, field stations and experimental farms at Canberra and Deniliquin, and at Kojonup and Baker's Hill, Western Australia, and a tobacco research institute at Mareeba, Queensland.
- Radiophysics, Sydney, with the Australian National Radio Astronomy Observatory at Parkes, New South Wales, and a radio observatory at the Solar Observatory, Culgoora, New South Wales.
- Soil Mechanics, Melbourne, with a branch laboratory in Adelaide.
- Soils, Adelaide, with branch laboratories in Brisbane, Canberra, Perth, and Hobart, and Townsville, Queensland.
- Tribophysics, Melbourne.
- Tropical Pastures, Brisbane, with branch laboratories at Townsville and Lawes, Queensland, and field stations at Mundubbera, Samford, Townsville and Woodstock, Queensland.
- Wildlife Research, Canberra, with a branch laboratory in Perth.

## Sections

- Editorial and Publications, Melbourne.
- Ore Dressing Investigations, Melbourne.
- Physical Metallurgy, Melbourne.
- Upper Atmosphere, Camden, New South Wales.
- Wheat Research Unit, Sydney.

The Organization's total budget for 1967-68 was about \$46,363,000. Nearly four-fifths of this was provided by the Commonwealth Government, while much of the remainder was provided by trust funds which have been set up by various primary producer groups. The largest of these is the Wool Research Trust Fund, but the wheat, dairy, meat, and tobacco industries also contribute substantial amounts. The funds are derived from a levy on produce matched by a Government contribution.



### Mount Stromlo and Siding Spring Observatories

Mount Stromlo Observatory and Siding Spring Observatory are the two astronomical research stations of the Research School of Physical Sciences, Australian National University. The staff of the observatories are academic staff of the University's Institute of Advanced Studies. The permanent headquarters of the observatories is located at Mount Stromlo, together with the library, laboratories and offices of the scientific staff. The older telescopes are located on Mount Stromlo, the newer ones on Siding Spring Mountain. At Siding Spring there is a lodge to house the astronomers, permanently based at Mount Stromlo, who visit for short periods to make observations there.

The observatories constitute the principal centre of optical astronomical research in the southern hemisphere. Their research facilities are second only to the great observatories of the south-western United States, and because of their geographical latitude observations can be made on parts of the sky permanently inaccessible to northern astronomers. The functions of the observatories are to carry out original investigations (both observational and theoretical) in astronomy and astrophysics, and to provide post-graduate training for the future generation of Australian astronomers.

The direction of the researches conducted depends on the steadily widening interests of the staff and scholars as the subject of astronomy itself rapidly progresses. Areas of permanent interest to which the observatories have made important contributions include the evolution of stars and of stellar systems, the study of the Magellanic clouds and their globular star clusters, the chemical composition of the stars and the study of pulsating stars. The results of the work carried out at the observatories are published in the international scientific periodicals, principally in the *Monthly Notices of the Royal Astronomical Society* and the *Astrophysical Journal*.

Mount Stromlo Observatory is situated at 35° 19' 16" south latitude and 149° east longitude at an altitude of 2,560 feet. It is on the summit of a ridge of low hills in the Australian Capital Territory seven miles west of the city of Canberra. The first regular scientific work was started at this site in 1925, and the Observatory was incorporated in the Australian National University in 1957. The main instruments are 30-inch, 50-inch and 74-inch reflecting telescopes and associated spectrographs, photometers and spectral scanners.

Siding Spring Observatory was established in 1965. It is located at 31° 16' south latitude and 148° 41' east longitude at an altitude of 3,820 feet and occupies the summit of Siding Spring Mountain in the Warrumbungle Ranges, near Coonabarabran, New South Wales. This site has one of the best climates for astronomical research to be found anywhere in Australia—considerably better than that at Mount Stromlo. The instruments at present operating at Siding Spring Observatory include a 40-inch and a 24-inch reflector.

The observatories also operate the National Time Service whose headquarters are located at Mount Stromlo.

### Australian Atomic Energy Commission

#### Establishment and functions of the Commission

In November 1952 a Commission of three members was appointed to control the Commonwealth's activities in relation to uranium and atomic energy, and in April 1953, upon the enactment of the *Atomic Energy Act* 1953, the Commission was established as a statutory authority with powers and functions as defined in the Act. Under amending legislation the number of Commissioners was increased to five in April 1958. The Commission is a corporate and autonomous body controlling its own service. It functions under the direction of the Minister for National Development.

The functions of the Commission fall under two main headings. Firstly, it is responsible for undertaking and encouraging the search for and mining of uranium and is empowered to co-operate with the appropriate authorities of the States in connection with these and related matters. Secondly, it is authorised to develop the practical uses of atomic energy by constructing and operating plant for this purpose, carrying out research, and generally fostering the advancement of atomic energy technology.

#### Uranium prospecting and mining

Production of uranium concentrate in Australia is now confined to the Rum Jungle Plant, Northern Territory. Since 1953, mining and treatment operations here have been conducted for the Commonwealth by a mining company. Mining of presently known reserves of uranium in this area was finished in 1963, but treatment of stock-piled ore has continued. Australia's own domestic requirements of uranium oxide to the end of the present century are expected to be greater than currently known reserves. Because of this the Commonwealth has continued exploration for uranium in the Rum Jungle area and has sought to encourage private producers to resume exploration.

## Research

The Commission's Lucas Heights Research Establishment is Australia's atomic energy research centre. Its research programme is concerned with the development of nuclear power, the production and utilisation of radioisotopes, and other related fields. It is directed towards the long-term development of national resources.

The research programme over the past few years has been a technical and feasibility study of an advanced high temperature gas cooled reactor system in which the core was composed of ceramic materials—oxides of uranium, plutonium, thorium and beryllium. Carbon dioxide was considered as the coolant gas. The study has been largely concerned with fundamental research and development in the fields of reactor materials, nuclear and reactor physics, and nuclear engineering. After a detailed technical assessment of the system in 1966, the Commission concluded that it was not as attractive for base-load power stations as previously expected. The Commission has tapered off this study and largely transferred the effort to a technical and economic assessment of a natural uranium fuelled, heavy water moderated reactor. This type of reactor system is now considered to be most suitable for future installation in Australia for the economic production of nuclear power. During 1967 some twenty-six members of the Commission's technical staff were sent to Britain and Canada on long-term postings, in order to participate directly in development and construction of power reactors of this type.

The use of radioisotopes is increasing rapidly in Australia in scientific research and development, in treatment of diseases, and in agriculture and industry generally. Most of these, especially short-lived radioisotopes which cannot be imported, are being produced in the Commission's high flux research reactor HIFAR at Lucas Heights. The A.A.E.C. is also producing the majority of cobalt 60 teletherapy sources for cancer treatment in Australia, and is exporting high activity sources to New Zealand and to Asia. The Commission is promoting research into radioisotope application and is co-operating with universities, industry and governmental bodies in making available the most up-to-date techniques involving the use of radioisotopes in every field.

Large-scale hydrological investigations using radioactive tracers have been conducted by the Commission. These have included sand tracing in Botany Bay and silt tracing in Newcastle Harbour and the Hunter River in association with maritime and development authorities.

Extensive research and development work on the technical and scientific applications of gamma radiation is also being carried out. The possibilities of radiation for such purposes as industrial sterilisation, food preservation, disinfestation of wheat and flour, and the control of fruit fly and other insect pests are being investigated. Scientists at Lucas Heights are also studying the biological effects of radiation and questions of health and safety.

The Research Establishment has developed facilities for the absolute standardisation of radio isotopes and has participated in international intercomparisons in the health and safety field. Work is directed to various aspects of radiation dosimetry, to radiation biology, and to aspects of the toxicology of beryllium compounds.

Lucas Heights is a centre of specialised equipment and information. In addition to the research reactor HIFAR, used for testing materials and producing radioisotopes, there is much other equipment unique in Australia. All these facilities are available to universities and other institutions under suitable conditions. In these endeavours the Atomic Energy Commission is working in close co-operation with the United Kingdom Atomic Energy Authority, under arrangements which give Australia access to results of British research on peaceful atomic energy uses. Results of research in Australia are in like manner available to Britain. Work in Australia, though constituting a self-contained programme, is co-ordinated with the British programme to avoid overlapping of research objectives and duplication of investigations. Australia also has bilateral arrangements with the United States, Canada and Japan, and has accredited a diplomatic mission to the European Atomic Energy Community (Euratom). Australia is also taking part in the promotion of the peaceful uses of atomic energy through the International Atomic Energy Agency. For the year 1966-67 the Commission placed \$112,512 worth of research contracts mainly within Australian universities on matters related to the research programme at Lucas Heights.

Considerable potential exists in Australia for possible future application of nuclear explosives for large civil engineering and mining projects. The Commission maintains a close interest in the developmental work under the United States Plowshare Program. A United States expert visited Australia in 1962, and an Australian technical mission visited the United States of America in 1963 to make a detailed examination of the use of nuclear explosives for peaceful purposes. The Commission continues to receive data and reports relating to progress in this field and has been represented at recent field tests in the United States.

The Australian Institute of Nuclear Science and Engineering comprises the Australian Atomic Energy Commission and Australian universities. The Institute's operations are financed by membership subscriptions and a Commonwealth Government grant which amounted to \$150,000 in 1966-67. The purpose of the Institute is to stimulate research and training in nuclear science and engineering within the universities and to arrange access for university research workers to the highly specialised equipment at the A.A.E.C. Research Establishment.

The Australian School of Nuclear Technology is jointly sponsored by the Commission and the University of New South Wales. Courses are being offered in nuclear technology, production and use of radioisotopes, radiological safety, health physics, and other related topics.

## Scientific societies

### Royal Societies

The following table contains the latest available statistical information regarding the Royal Societies in each State and in the Australian Capital Territory.

ROYAL SOCIETIES, DECEMBER 1967

	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>Canberra</i>
Year of charter . . . . .	1866	1859	1884	1880	1913	1844	1930
Number of members . . . . .	387	500	349	253	252	606	161
Volumes of transactions issued(a) . . . . .	100	80	(b)78	91	56	101	..
Number of books in library . . . . .	32,780	30,000	69,300	23,500	6,948	36,000	..
Societies on exchange list . . . . .	392	333	300	348	238	315	..

(a) Cumulative total. (b) Volumes of proceedings.

### Australian Academy of Science

The Australian Academy of Science is the national institution representing science in Australia. Constituted by Royal Charter in 1954, the Academy promotes scientific knowledge and research, maintains standards of scientific endeavour and achievement in the natural sciences in Australia, and recognises outstanding contributions to the advancement of science. The Academy represents Australian science and scientists at the national and international level, organises meetings of scientists, holds symposia, and arranges for visits of scientists from other countries to Australia.

In its functions it is comparable with the Royal Society of London and national academies of science of many other countries. Its Fellows (designated F.A.A.) are eminent in some branch of the physical or biological sciences in Australia, occupying professional positions in universities, the Commonwealth Scientific and Industrial Research Organization, other research organisations, and industry. A very few places are reserved for Fellows who have rendered conspicuous service in the cause of science. No more than six new Fellows are elected in any one year. Its present membership is about 120 Fellows.

The Academy co-ordinates Australian contributions to such co-operative ventures as the International Geophysical Year, the International Year of the Quiet Sun, and the International Biological Programme. Representation is provided at the general assemblies of the International Scientific Unions and similar bodies relating to astronomy, geophysics, geology, physics, crystallography, mathematics, biochemistry, physiology, geography, biological sciences, chemistry, Antarctic research space research, and oceanic research.

As the Australian Academy of Science is too young a body to be financially self-sufficient, the Commonwealth Government makes annual grants of general purpose funds without affecting the autonomy of the Academy. These grants, together with substantial private benefactions, enable the Academy to continue its work. Research fellowships provided by industry are administered. The Academy is managed by an elected council comprising a president, treasurer, two secretaries and eight ordinary members who are drawn equally from the physical sciences and biological sciences. Chief administrative officer is the Executive Secretary, who is not a Fellow. Its conference centre in Canberra was opened in 1959.

### Australian and New Zealand Association for the Advancement of Science

This Association was founded in 1887. Its objects are 'to advance the knowledge and to promote a spirit of co-operation between scientific workers and scholars and those in sympathy with science

and scholarship generally, especially in Australia and New Zealand'. The 41st ANZAAS Congress was held in Adelaide on 18 to 22 August 1967, and the 42nd Congress will be held in Port Moresby, 12 to 16 August 1970.

Divisions of ANZAAS have recently been formed in Western Australia and New South Wales. The New South Wales Division held a Symposium in Sydney on 14–15 June 1968 on 'The Information Explosion—Data Storage and Retrieval in the Computer Age', and a Regional Congress at Armidale, 16–19 August 1968 on 'The Planning and Management of Australia's Natural Resources'.

The ANZAAS Central Office is in Sydney.

#### Other scientific societies

The Linnean Society of New South Wales, with headquarters in Sydney, was founded in 1874 for 'the cultivation and study of the science of natural history in all its branches'. Sir William Macleay, who died in 1891, during his lifetime and by his will endowed the Society to the amount of \$134,000, which has been increased by investment to approximately \$260,000. The objects of the Society are achieved by holding meetings, by publishing proceedings, by maintaining a library, and by offering research fellowships. The Society publishes annual volumes of the proceedings, issued in three parts, in which are printed papers read at the general meetings. Ninety-two volumes of such proceedings have been issued and the Society exchanges with about 300 kindred institutions and universities throughout the world. The library has some 19,000 volumes. The Society offers annually to graduates of the University of Sydney, who are members of the Society and resident in New South Wales, a research fellowship (Linnean Macleay Fellowship) in various branches of natural history. The membership at the end of 1967 was 311.

The British Astronomical Society has a branch in Sydney, and in each of the States there is a branch of the Australian Medical Association.

There are more than 200 other learned societies devoted to the study of particular sciences. Some of these, including the Royal Australian Chemical Institute and the Institution of Engineers, Australia, are qualifying bodies, admission to which is by qualification only. Others, such as the Institute of Food Technologists, are open to any interested person. Some societies, such as the Australian Biochemical Society, have annual symposia of a very high standard. A great many of these bodies publish appropriate journals.



## CHAPTER 16

### PUBLIC JUSTICE

Statistics of public justice are influenced by a number of factors which affect comparability from State to State and from year to year, e.g.:

- (a) differences in the jurisdiction of courts;
- (b) changes in the law in particular States and differences in the laws between States;
- (c) differences in the methods of compiling the figures (e.g. in respect of persons convicted for more than one offence);
- (d) the attitude to laws such as those connected with liquor, vagrancy, gaming, and traffic offences;
- (e) the strength and distribution of the police force;
- (f) the proportion of various types of crimes reported and solved.

### The Australian legal system

#### Development of the system

The two major factors in the development of the Australian legal system have been its British origin and the Commonwealth Constitution of 1900. When the various parts of Australia were first settled by British colonists, the common law and statutes of England were brought with them by the settlers. When local law-making bodies were established, the law so brought in was gradually modified and augmented by local legislation, but the Imperial Parliament in London also continued to legislate (to a lesser and lesser extent) in respect of Australia. The Commonwealth Constitution of 1900, which is itself an Imperial Act, limited the legislative power of State Parliaments in some respects and created a federal legislature. Since the *Statute of Westminster Adoption Act* 1942, the Imperial Parliament can legislate for Australia only at Australia's request. The sources of Australian law of today are, therefore, found in Commonwealth and State legislation, in some Imperial legislation and in the common law. Three of the States (Queensland, Western Australia and Tasmania) have Criminal Codes, and separate consolidations of the Statutes of the Commonwealth and of all States except Western Australia (which has adopted a system of reprinting of individual statutes at intervals) have been brought out from time to time.

There are few constitutional or other legislative guarantees of individual rights and liberties in Australia. These rights are nevertheless protected, because a basic feature of the Australian system is the 'rule of law': no act, official or unofficial, however bona fide and apparently reasonable, which infringes the liberty or rights of an individual is justifiable unless it is authorised by law, and for any such unlawful act, by whatever authority commanded, the official or other person is personally liable in an action in the ordinary courts. In the case of subordinate legislation, and even in the case of Commonwealth or State Acts, the validity of the law itself may be challenged in the courts. The remedy for the protection of the personal liberty of the individual is the writ of habeas corpus, which requires the person named therein to be produced in the court.

Australian law adheres to the principle that judicial control must in general be exercised by ordinary courts. There is no integrated system of administrative tribunals, but there is a great variety of such tribunals of various descriptions. The ordinary courts exercise supervision over administrative tribunals either by way of statutory appeal or by the use of prerogative writs of mandamus, prohibition, or *certiorari*, by which the administrative tribunals can be enjoined to perform a duty or to abstain from excess of jurisdiction, or can have their decisions set aside.

Independence of the judiciary is an essential part of the Australian legal system. Security of tenure of superior court judges is guaranteed, mostly by the Constitutions of the Commonwealth and the States, and they can be removed from office only by resolution of both Houses of Parliament of the Commonwealth or the States, as the case may be, for proven misbehaviour or incapacity. Their independence is further secured by relatively high salaries which, in the case of High Court judges, cannot be reduced during their tenure of office, and liberal (mostly non-contributory) pensions for the judges or their widows.

Civil judgments given in the courts of any part of Australia can be enforced in any other part of Australia under the *Service and Execution of Process Act* 1901-1963. Since 1 January 1964 this applies also to fines imposed by courts of summary jurisdiction.

### State and Territory courts

*Civil jurisdiction.* Lower civil courts (i.e. Magistrates' Courts, Courts of Petty Sessions, Local Courts, Small Debts Courts, Courts of Request, and Courts of General Sessions) are usually constituted or presided over by a stipendiary or special magistrate or a commissioner. In some limited instances justices of the peace may exercise the jurisdiction of the court. Local Courts are sometimes constituted by a judge. The powers of the magistrates in the various States and Territories are set out on pages 589–90. In most cases, unless the amount involved is very small, appeal may be made to a higher court against a magistrate's decision. In any case the Supreme Court has a supervisory power, by means of prerogative writs, to examine whether a lower court has properly exercised its jurisdiction. In the higher courts (i.e. District Courts, County Courts and the Supreme Courts) actions are usually tried by a single judge, sitting with or without a jury, from whose judgment appeal lies to the bench of the Supreme Court. In certain cases the appeal can be carried to the High Court of Australia. Appeals to the Privy Council are referred to on page 589.

*Criminal jurisdiction.* Criminal courts are of two kinds, namely, courts of summary jurisdiction and higher courts. Courts of summary jurisdiction, usually called Courts of Petty Sessions, may deal summarily with minor offences; higher courts, known as Courts of Sessions, Quarter Sessions or General Sessions (not to be confused with the lower court of civil jurisdiction of that name) and the Supreme Court, hear indictable offences. A court of summary jurisdiction consists of a stipendiary or police magistrate, or two or more justices of the peace; a higher court consists of a judge or chairman, sitting with a jury. The jury finds as to the facts of the case, and the judge determines the applicable law and, within the limits of the law, the punishment of the convicted person.

In the case of other than minor offences a preliminary hearing is held before a stipendiary magistrate or justice of the peace for the purpose of determining whether a *prima facie* case has been made out. If the magistrate or justice of the peace finds that there is a case to answer, the person charged is committed for trial at a higher court. A magistrate or justice of the peace has power to release on bail. There is an appeal to a higher court from the decision of a court of summary jurisdiction hearing a minor offence, and an appeal from a higher court to the full bench of the Supreme Court, or Court of Criminal Appeal. A further appeal may, with leave, be brought to the High Court of Australia.

### Federal courts

The judicial power of the Commonwealth is vested in the High Court of Australia (the Federal Supreme Court), in the Federal courts created by Parliament (the Federal Court of Bankruptcy and the Commonwealth Industrial Court), and in the State courts invested by Parliament with Federal jurisdiction, both civil and criminal. The nature and extent of the judicial power of the Commonwealth are set out in Chapter III. (§§ 71–80) of the Commonwealth Constitution (*see* pages 15–16 of this Year Book). Particulars concerning the Federal Court of Bankruptcy are given on pages 608–10 of this chapter, and information regarding the Commonwealth Industrial Court, which was established under the *Conciliation and Arbitration Act* 1904–1967, is included in the chapter Labour, Wages and Prices (pages 276–7).

### High Court of Australia

The High Court of Australia consists of a Chief Justice and six other Justices. Its principal seat is in Melbourne, but sittings are held in every State capital as occasion requires. The High Court has both original and appellate jurisdiction. Its original jurisdiction is usually exercised by a single Justice, appellate jurisdiction by at least three Justices.

The Constitution itself confers original jurisdiction on the High Court in all matters (i) arising under any treaty, (ii) affecting consuls or other representatives of other countries, (iii) in which the Commonwealth, or a person suing or being sued on behalf of the Commonwealth, is a party, (iv) between States, or between residents of different States, or between a State and a resident of another State, (v) in which a writ of mandamus or prohibition or an injunction is sought against an officer of the Commonwealth. In addition, Parliament may, under the Constitution, confer additional original jurisdiction on the High Court in certain classes of matters, and has in fact conferred original jurisdiction on the High Court in all matters arising under the Constitution or involving its interpretation and in trials of indictable offences against the laws of the Commonwealth. In matters (i) and (v) and in suits between the Commonwealth and a State or between States the jurisdiction of the High Court is exclusive of that of the State Courts, and in matters (other than trials of indictable offences) involving any question as to the limits *inter se* of the constitutional powers of the Commonwealth and those of the States the jurisdiction of the High Court is exclusive of that of the Supreme Courts of the States.

Under the Constitution the High Court has jurisdiction, with such exceptions and subject to such regulations as the Parliament permits, to hear and determine appeals from all judgments, decrees, orders, and sentences of (i) any Justice or Justices exercising the original jurisdiction of the High

Court, (ii) any other Federal Court or court exercising Federal jurisdiction and (iii) from the Supreme Court or other court of any State from which appeal lay to the Privy Council at the establishment of the Commonwealth. In respect of (iii) the Parliament has prescribed that, generally, appeal can be brought only by special leave of the High Court. However, in the case of judgments affecting the status of any person under the laws relating to aliens, marriage, bankruptcy or insolvency, or in respect of any sum or matter at issue, or involving any claim, demand or question regarding any property or civil right, of the value of \$3,000, appeal may be brought as of right from final judgments, and by leave of the High Court or the Supreme Court from interlocutory judgments.

By Acts of Parliament and by subordinate legislation the High Court has also been given appellate jurisdiction in respect of the courts of the Territories under the control of the Commonwealth. Provision is also made in various enactments for appeal to the High Court on points of law from administrative determinations, such as decisions of the Commissioner of Taxation, Taxation Boards of Review, the Commissioner of Patents, or the Registrar of Trade Marks. Such proceedings, although called appeals, are in reality proceedings in the original jurisdiction of the High Court.

Transactions of the High Court are shown on page 601.

### Appeal to the Privy Council

There has been since Federation an appeal, by special leave of the Privy Council, from the High Court to the Privy Council, except in certain important types of constitutional disputes, involving questions of the powers of the Commonwealth vis-à-vis the States. In the latter type of case a certificate of the High Court, in effect granting leave to appeal, is necessary. There is also an appeal from the State Supreme Courts direct to the Privy Council.

In March 1968 the Federal Government introduced a Bill restricting appeals to the Privy Council. Under the Bill, no appeal can be taken to the Privy Council from the Supreme Court of any Territory or from any Federal court other than the High Court, and special leave of the Privy Council to appeal from the High Court may be asked only in matters that come to the High Court on appeal from the Supreme Court of a State exercising jurisdiction not derived from Commonwealth legislation and which do not raise in the High Court any questions of the application or interpretation of the Commonwealth Constitution or Commonwealth or Territory legislation.

## Lower (magistrates') courts

### Powers of magistrates

*New South Wales.* The powers of the magistrates with regard to offences punishable summarily depend in each case on the statute which creates the offence and gives them jurisdiction. A magistrate may, with the consent of the accused, deal summarily with certain indictable offences under the Commonwealth Crimes Act and offences involving \$500 or less under the State Crimes Act; offences under the Commonwealth Act and certain offences under the State Act may be disposed of summarily without such consent if the amount involved does not exceed \$100. Except in the case of a very few statutes, and excluding cumulative sentences, the power of sentence is limited to twelve months. Imprisonment in default of fine is regulated by a scale limiting the maximum period according to the sum ordered to be paid, but in no case exceeding twelve months. Actions for debt and damage within certain limits also come within magisterial jurisdiction. In cases of liquidated debts, and damages whether liquidated or unliquidated, the amount is limited to \$300 before a court constituted by a stipendiary magistrate. Where the amount claimed exceeds \$100 the Court must transfer the action to the District Court when the defendant gives notice that he objects to the action being heard and determined by a Court of Petty Sessions. Magistrates have power to entertain claims of up to \$1,000 under the Money Lenders and Infants Loans Act, 1941-1961. The amount in actions of debt or damages before one or more justices of the peace ranges up to \$60 in certain cases.

*Victoria.* The civil jurisdiction of magistrates is restricted as follows: (a) ordinary debts, to \$200; (b) any action in tort or contract, with the exception of a few torts such as breach of promise or illegal arrest (on which magistrates have no power to adjudicate), to \$600; and (c) any action in tort arising out of any accident in which a vehicle is involved, to \$1,000. No definite limit is fixed to the powers of the magistrates on the criminal side, and for some offences sentences of up to two years' imprisonment may be imposed. The proportion of long sentences is, however, comparatively small.

*Queensland.* Generally speaking, the maximum term of imprisonment which a magistrate or justice can impose is six months, but in certain cases sentences of twelve months may be imposed. Some examples are Sections 233, 344 and 455 of the Criminal Code (betting houses, aggravated assaults, and unlawfully using animals). There is provision for applying cumulative sentences. In civil matters, a magistrate has jurisdiction in actions involving an amount of not more than \$1,200.



*South Australia.* The power of special magistrates to impose fines and imprisonment is defined by the special Act creating the offence and conferring jurisdiction. In the case of minor indictable offences which are tried summarily, a maximum penalty of \$200 fine or two years' imprisonment is fixed by the Justices Act, 1921-1965. Magistrates also have power to hear certain civil actions in which the amount claimed is less than \$2,500.

*Western Australia.* The powers of magistrates and justices with regard to offences which are tried summarily are governed by the Act creating the offence and giving them jurisdiction. Imprisonment in default of payment of a fine is regulated by a scale limiting the period according to the amount of the fine but not to exceed six months. The civil jurisdiction of Local Courts is restricted in general to \$1,000. By consent of the parties, any action that might be brought in the Supreme Court may be dealt with in a Local Court. Justices may act in the case of illness or absence of the magistrate. Magistrates are coroners, and justices may be appointed as acting coroners. Magistrates have appellate jurisdiction under some statutes and in country districts act as Chairmen of the Session Courts. They may be appointed as Commissioners of the Supreme Court. On the goldfields the magistrate is also the warden.

*Tasmania.* Magistrates are empowered to hear and determine in Courts of Petty Sessions all offences when an enactment expressly or by implication provides that the matter is to be determined summarily, or by or before justices, or that any offence is to be punishable upon summary conviction. Stealing and certain allied crimes are deemed to be summary offences where the value of the property concerned does not exceed \$20. Where the value of the property exceeds \$20 but is not more than \$400 the defendant may elect summary trial or trial by jury. This right of election applies to certain other charges such as escape or rescue; facilitating the escape of a prisoner; rescuing goods legally seized; making a false declaration or statement, etc. In the case of a charge of forgery or uttering, a right of election exists provided the complaint is in respect of a cheque for not more than \$400. In the case of a charge of breaking into a building, other than a dwelling house, a defendant may elect to be tried summarily under certain conditions. No general limit is fixed in respect of sentences, the statute creating the offence almost invariably laying down the penalty. Where this is not the case, the *Contravention of Statutes Act* 1889 provides that a fine of \$100 may be imposed. Sentences of imprisonment which justices may impose vary with the nature of the offence, with a maximum of two years. The aggregate of terms of cumulative sentences may not exceed two years. The civil jurisdiction of magistrates is divided into two categories. A Commissioner of the Court of Requests, provided he is a legal practitioner, may hear actions for the recovery of debts up to \$1,500 or damages up to \$1,000. As Commissioners are invariably police magistrates, this jurisdiction is State-wide. Courts of General Sessions, constituted by at least two justices, exercise similar powers, but the jurisdiction cannot exceed \$100.

*Northern Territory.* Stipendiary and special magistrates constituting courts of summary jurisdiction try offences punishable summarily. The punishment that may be imposed depends on the law creating the offence. Where there is no magistrate available, the offence may be tried by two or more justices of the peace or, if all parties consent, by one justice. Proceedings for committal on indictable offences may be heard by either a magistrate or a justice of the peace. Certain indictable offences under the Territory law may be tried summarily by a magistrate or two justices of the peace, who may impose a fine of up to \$200 or imprisonment for up to two years. A stipendiary magistrate constituting a local court has a civil jurisdiction to hear and determine claims for not more than \$2,000. A local court constituted by two justices of the peace (every special magistrate is also a justice of the peace) has a civil jurisdiction to hear claims up to \$100.

*Australian Capital Territory.* Stipendiary and special magistrates have general jurisdiction to try offences punishable summarily and also where a person is made liable to a penalty or punishment and no other provision is made for trial. The punishment depends on the law which creates the offence. In addition to jurisdiction (possessed by stipendiary and special magistrates throughout Australia) to try summarily with the consent of the defendant offences indictable under the *Crimes Act* 1914-1966 (in which case the magistrate cannot impose a fine exceeding \$200 or imprisonment exceeding one year), under Territory law certain indictable offences may also be tried summarily by a magistrate, who may impose a fine not exceeding \$100 or imprisonment for up to one year. Magistrates also hear proceedings for committal on indictable offences. In civil proceedings, magistrates try actions for amounts up to \$400. Justices of the peace have no judicial functions.

#### First offenders

In all States and Territories statutes are in force for dealing with first offenders. Provisions are incorporated in the various Acts whereby courts may extend leniency to the offender by means such as: (i) dismissal of the charge without proceeding to a conviction; (ii) freeing the offender or suspending sentence with the requirement of a recognisance for good behaviour for a specified period; and (iii) by placing the offender under the supervision of a probation officer for a specified period.

**Children's courts**

Special provisions exist in all States and Territories for dealing with juvenile offenders in special courts. Particulars of the relevant legislation and the constitution and powers of these courts are given below.

*New South Wales.* Children's Courts, first established in 1905, now exercise jurisdiction under the Child Welfare Act, 1939-1967. Each court consists of a special magistrate with jurisdiction within a proclaimed area. Elsewhere the jurisdiction of a Court may be exercised by a special magistrate or two justices of the peace. Where practicable, Children's Courts are not held in ordinary court rooms, and persons not directly interested are excluded from any hearing.

The magistrates exercise all the powers of a Court of Petty Sessions in respect of offences committed by or against children under eighteen years of age. They also exercise jurisdiction in respect of neglected and uncontrollable children. Their functions are reformatory, not punitive; they may commit children to institutions, to the care of persons other than the parents, or to the care of the Minister.

*Victoria.* Under the *Children's Court Act* 1958, the jurisdiction of Children's Courts is restricted, with certain exceptions, to children up to 17 years of age. Two stipendiary special magistrates with jurisdiction throughout the State and, in addition, honorary special magistrates, operate in some metropolitan courts and provincial cities. At Country Courts to which no special magistrates are appointed, the local stipendiary magistrate usually constitutes the bench. The Children's Court may deal with all offences except homicide. However, consent to the jurisdiction of the Children's Court must be indicated by the child (or a parent if the child is under 15 years of age) before an indictable case may proceed.

The primary aim of the Children's Court is reformation and rehabilitation of the offender, and the Court, under Section 27 (3) of the *Children's Court Act* 1958, must 'firstly have regard to the welfare of the child'.

The probation system has been in use by the Children's Court since 1907, and there are now in Victoria a large number of honorary probation officers as well as six stipendiary probation officers. Problem cases are referred by the Court for investigation to a Children's Court Clinic, which is staffed by psychiatrists, psychologists and social workers.

*Queensland.* Children under the age of seventeen years who come before the Court are dealt with under *The Children's Services Act* of 1965. A Children's Court has jurisdiction to try or sentence a child charged with an indictable offence other than such an offence for which he would be liable, were he not a child, to imprisonment with hard labour for life. Children charged with simple offences or breaches of duty also appear before a Children's Court, as do children in respect of whom an application may be made to the Court for their committal to care and control (unruly children etc.) or admission to care and protection (neglected children etc.). The custody and or maintenance of a person under the age of twenty-one years may be sought by the mother or father of that person by application to a Children's Court.

The Children's Court in the metropolitan and near country areas is presided over by a specially appointed Children's Court magistrate. Proceedings are held *in camera*. A non-commissioned police officer is present to offer any observations he considers necessary and to assist the magistrate. An officer of the Department of Children's Services is also present. In country areas the Court is presided over by the local stipendiary magistrate, or in his absence, by two justices.

A child guilty of an offence shall not be imprisoned unless the Court is satisfied that he is so unruly that he should be detained in custody other than under the control of the Director of the Department of Children's Services, in which case it may order that he be imprisoned for a period not exceeding two years; if a child is convicted of an offence of a sexual nature committed on a child, the Court may make orders and deal with the child as if he were not a child and as if such Court were a Magistrate's Court; a child guilty of an offence may be committed to the care and control of the Director for a period not exceeding two years with or without conviction; upon conviction the Court may order that the Director exercise supervision over a child until eighteen years or for a period not exceeding two years (even though he may turn eighteen years in that period) or without conviction for a period not exceeding twelve months; the Court may fine the child in accordance with the Act under which he was charged; it may order the parent or guardian to enter into a recognisance with or without surety to exercise proper care, protection, and guardianship over the child; it may order the child, parent, or guardian to pay compensation, costs, or make restitution; the Court may admonish and discharge the child without convicting him.

*South Australia.* Persons under the age of eighteen years charged with offences are dealt with in Juvenile Courts, from which the public are excluded. The procedure and powers of the Court are laid down in the Juvenile Courts Act, 1965-1966, the Justices Act, 1921-1960, the Social Welfare

Act, 1926-1965, and the Offenders Probation Act, 1913-1963. Any Court of Summary Jurisdiction may be a Juvenile Court provided that it must be constituted by a special magistrate if one is available; and if it is constituted by two justices, they must be from a special panel of justices selected for the purpose. Any case may be referred by any other Juvenile Court to the Adelaide Juvenile Court. A Juvenile Court has power to deal finally with all offences except homicide, but in the case of indictable offences it may commit for trial in the Supreme Court. For offences punishable by fine, it may impose the fine provided, subject to a maximum of \$100. A juvenile may not be imprisoned; but if the Court is constituted by a special magistrate, he may be committed to a reformatory institution. The Court, however constituted, may place the defendant under the control of the Minister of Social Welfare and disqualify him from driving a motor vehicle.

*Western Australia.* Children's Courts deal with offenders under the age of eighteen years and hear cases of all offences against children. Special magistrates are appointed for Children's Courts and the Governor may appoint other persons to be members of a particular Children's Court. One member may sit and adjudicate with the special magistrate, but in the magistrate's absence at least two members must be present.

A Children's Court is deemed to be a court of summary jurisdiction and may exercise exclusive jurisdiction in respect of all offences except wilful murder, murder, manslaughter, or treason alleged to have been committed by children.

Adults charged with certain indictable offences against children may forego the right to trial by jury and agree to be dealt with summarily by Children's Courts. This power to exercise summary jurisdiction is designed to eliminate as far as possible the necessity for children to appear in open courts as witnesses in cases dealing with sex offences. A Children's Court may commit such offenders for sentence by the Supreme Court.

*Tasmania.* Under the provisions of the *Child Welfare Act 1960*, Children's Courts are established to deal with offenders under the age of seventeen years. Special magistrates may be appointed by the Governor to adjudicate in these Courts. A Children's Court may be constituted by one or more special magistrates or a police magistrate, or by a police magistrate and one or more special magistrates. When a police magistrate sits with a special magistrate or magistrates, he is the chairman of the court. In the absence of a special magistrate or a police magistrate any two justices may constitute a Children's Court.

A Children's Court is a court of summary jurisdiction; in the case of children under fourteen years of age it may hear and determine all indictable offences except murder, attempt to murder, manslaughter, and wounding with intent to do grievous bodily harm. When children over this age are charged with an indictable offence, they, or their parents on their behalf, may elect to be dealt with summarily by the Court instead of being tried by a jury, except when the offence is murder, attempt to murder, manslaughter, rape, wounding with intent to do grievous bodily harm, or robbery with violence.

Although all persons under twenty-one years are minors, offenders of seventeen years and over are dealt with in adult courts. When a charge is preferred jointly against a child fifteen or sixteen years of age and a person seventeen years of age or over it is heard in a Court of Petty Sessions. In such an event the 'child' is dealt with as if he were appearing in a Children's Court.

The public are excluded from Children's Courts, and it is an offence to publish a report of any proceedings in Children's Courts or the result of any such proceedings, or any matter that reveals the name, address, or school, or contains any particulars calculated to lead to the identification of a child involved in Children's Court proceedings, except as authorised by the Attorney-General.

*Northern Territory.* The *Child Welfare Ordinance 1958-1967* provides for the establishment of Children's Courts. These courts are constituted by a special magistrate. Where no Children's Court has been established for a particular area or where special circumstances require it, the jurisdiction of a Children's Court may be exercised by a court of summary jurisdiction constituted by a special magistrate.

A Children's Court has jurisdiction in respect of all offences committed by persons under seventeen years of age in respect of which proceedings may be taken in a court of summary jurisdiction. In dealing with such offences, the Court may, in cases other than homicide, impose a fine not exceeding one hundred dollars or, if the child is not under fourteen years of age, a sentence of imprisonment of not more than six months. In addition, the Court's powers include releasing an offender on probation, committing him to the care of a specified person (in which case the offender may be declared a State child), or committing him to an institution for a specified period.

Children's Courts also exercise jurisdiction in respect of destitute, neglected, incorrigible, or uncontrollable children.

*Australian Capital Territory.* The *Child Welfare Ordinance* 1957-1966 provides that the Court of Petty Sessions constitutes the Children's Court when it is hearing proceedings involving persons under the age of eighteen years. Its proceedings are similar to those of an ordinary Court of Petty Sessions, except that persons not directly interested are excluded from the Court.

In addition to the power to deal with summary offences, the Children's Court has power to hear and determine summarily a charge for an indictable offence other than an offence punishable by death. In either case, the Court's powers include releasing an offender on probation, committing him to the care of a specified person, making him a government ward, or committing him to an institution for up to three years. The Children's Court also exercises jurisdiction in respect of neglected or uncontrollable children.

#### Proceedings at lower (magistrates') courts

Particulars of the differences in the jurisdiction of lower courts in the various States are given under Powers of Magistrates (pages 589-90). The proceedings of these courts are summarised in this paragraph. The statistics in the following tables are influenced by the factors affecting comparability listed at the beginning of this chapter (page 587).

*Criminal proceedings—total cases.* The total numbers of cases dealt with at magistrates' courts in each State and Territory for the years 1962 to 1966 are shown in the following table.

#### CASES AT MAGISTRATES' COURTS(a): OFFENCES CHARGED, STATES AND TERRITORIES, 1962 TO 1966(b)

State or Territory	1962	1963	1964	1965	1966
New South Wales . . .	322,848	323,501	341,351	341,171	338,808
Victoria . . .	270,857	290,332	303,096	323,644	307,465
Queensland(c) . . .	79,772	87,737	97,878	113,568	111,743
South Australia(c) . . .	61,276	67,707	64,799	71,842	83,390
Western Australia . . .	57,768	60,086	60,510	67,244	66,863
Tasmania . . .	30,415	34,728	31,702	36,535	37,624
Northern Territory(d) . . .	4,350	5,886	6,581	7,519	7,961
Australian Capital Territory . . .	4,795	6,435	7,797	7,845	9,025
<b>Australia . . .</b>	<b>832,081</b>	<b>876,412</b>	<b>913,714</b>	<b>969,368</b>	<b>962,879</b>

(a) Includes Children's Courts, except for Northern Territory. (b) Excludes minor traffic offences settled without court appearance. (c) Year ended 30 June. (d) Excludes courts at Tennant Creek and Katherine.

Differences in the figures in the preceding table between States, and within a State over a period of time, are influenced by the large number of traffic offences and the arrangements which have been introduced at various times for dealing with them. Provision exists in the States and the Australian Capital Territory for settlement of parking and minor traffic offences by payment of fines without court appearance.

#### MINOR TRAFFIC OFFENCES SETTLED WITHOUT COURT APPEARANCES STATES AND A.C.T., 1962 TO 1966

State or Territory	1962	1963	1964	1965	1966
New South Wales . . .	443,689	389,395	381,058	400,459	464,122
Victoria . . .	132,144	170,590	181,479	(a)229,478	(a)313,529
Queensland(b) . . .	75,322	79,237	101,276	115,446	209,417
South Australia(b) . . .	191,592	183,684	198,943	121,535	240,359
Western Australia . . .	42,582	43,970	49,488	51,167	64,842
Tasmania . . .	33,217	34,394	38,555	40,917	50,914
Australian Capital Territory . . .	..	..	(c)1,419	5,145	3,949
<b>Total . . .</b>	<b>918,546</b>	<b>901,270</b>	<b>952,218</b>	<b>964,147</b>	<b>1,347,132</b>

(a) Includes fines paid direct to the Police Department: 1965, 18,380; 1966, 52,063. Legislation to enable this came into force on 9 August 1965. (b) Year ended 30 June. (c) From 14 September 1964.

*Criminal proceedings—cases in which convictions were made.* Of the cases dealt with in magistrates' courts, the following tables show the number in which convictions were made.

**CASES AT MAGISTRATES' COURTS(a) IN WHICH CONVICTIONS WERE MADE, BY  
CLASS OF OFFENCE: STATES AND TERRITORIES, 1966(b)**

<i>Class of offence</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Old (c)(d)</i>	<i>S.A. (c)</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T. (e)</i>	<i>A.C.T.</i>	<i>Aust.</i>
Against the person . . .	3,575	3,562	821	519	868	378	217	100	10,040
Against property . . .	30,593	21,972	6,074	4,542	8,482	2,686	360	649	75,358
Forgery and offences against the currency . . .	743	270	5	24	7	221	70	12	1,352
Against good order . . .	91,734	32,761	31,864	10,240	12,897	1,518	4,874	615	186,503
Other . . .	173,135	221,066	59,450	56,679	41,235	27,611	1,881	6,417	587,474
<b>Total . . .</b>	<b>299,780</b>	<b>279,631</b>	<b>98,214</b>	<b>72,004</b>	<b>63,489</b>	<b>32,414</b>	<b>7,402</b>	<b>7,793</b>	<b>860,727</b>

(a) Includes Children's Courts except for Northern Territory. (b) Excludes minor traffic offences settled without court appearances. (c) Year ended 30 June. (d) A person convicted on several counts at the one hearing is included only once. (e) Excludes courts at Tennant Creek and Katherine.

**CASES AT MAGISTRATES' COURTS(a) IN WHICH CONVICTIONS WERE MADE  
STATES AND TERRITORIES, 1962 TO 1966(b)**

<i>State or Territory</i>	<i>1962</i>	<i>1963</i>	<i>1964</i>	<i>1965</i>	<i>1966</i>
New South Wales . . .	292,484	287,053	301,922	304,053	299,780
Victoria . . .	246,017	266,058	277,877	296,542	279,631
Queensland(c)(d) . . .	71,702	78,864	88,442	101,955	98,214
South Australia(c) . . .	53,531	57,524	55,806	62,612	72,004
Western Australia . . .	54,564	56,778	57,498	64,014	63,489
Tasmania . . .	26,211	29,945	26,686	31,256	32,414
Northern Territory(e) . . .	3,968	5,503	6,166	7,026	7,402
Australian Capital Territory . . .	4,089	6,026	5,815	6,688	7,793
<b>Australia . . .</b>	<b>752,566</b>	<b>787,751</b>	<b>820,212</b>	<b>874,146</b>	<b>860,727</b>

(a) Includes Children's Courts except for Northern Territory. (b) Excludes minor traffic offences settled without court appearances. (c) Year ended 30 June. (d) A person convicted on several counts at the one hearing is included only once. (e) Excludes courts at Tennant Creek and Katherine.

*Criminal proceedings—cases in which convictions were made for drunkenness.* The numbers of cases in which convictions were recorded during each of the years 1962 to 1966 are given in the following table.

**DRUNKENNESS: CASES(a) IN WHICH CONVICTIONS WERE MADE, STATES AND  
TERRITORIES, 1962 TO 1966**

<i>State or Territory</i>	<i>1962</i>	<i>1963</i>	<i>1964</i>	<i>1965</i>	<i>1966</i>
New South Wales . . .	68,546	65,630	61,537	63,143	56,159
Victoria . . .	28,529	27,576	24,048	23,790	24,279
Queensland(b) . . .	26,293	28,580	30,924	29,224	28,791
South Australia(b) . . .	6,178	7,485	6,952	7,110	7,334
Western Australia . . .	7,523	7,294	7,910	8,288	9,033
Tasmania . . .	575	562	420	491	461
Northern Territory(c) . . .	1,388	1,730	3,021	3,938	3,231
Australian Capital Territory . . .	252	237	331	401	377
<b>Australia . . .</b>	<b>139,284</b>	<b>139,094</b>	<b>135,143</b>	<b>136,385</b>	<b>129,665</b>

(a) Includes Children's Courts except for Northern Territory. (b) Year ended 30 June. (c) Excludes courts at Tennant Creek and Katherine.

*Civil proceedings.* Civil proceedings in the lower courts refer to those in the Small Debts Courts in New South Wales, Courts of Petty Sessions in Victoria, Magistrates' Courts in Queensland, Local Courts in South Australia and Western Australia, Courts of Requests in Tasmania, Local Courts in the Northern Territory, and the Court of Petty Sessions in the Australian Capital Territory. Statistics of civil proceedings in the lower courts are given on page 601.

### Higher (judges') courts

Higher courts are presided over by a judge, sometimes with a jury (*see* page 588). The general jurisdiction of the higher courts in the States and Territories, which for this purpose include District, County and Supreme Courts, includes appeals from the lower courts, cases of serious crime committed from lower courts, and civil cases involving common law, commercial causes, equity, etc. Under the *Matrimonial Causes Act* 1959–1966 of the Commonwealth, the Supreme Courts of the various States and Territories have exclusive jurisdiction in matrimonial causes, and under the *Bankruptcy Act* 1966, the Supreme Courts of New South Wales, Queensland, Western Australia, Tasmania, and the Northern Territory, and the Courts of Insolvency in Victoria and South Australia, can deal with bankruptcy cases.

Proceedings at higher courts include therefore criminal, civil, divorce, and bankruptcy proceedings. Separate details of each are given on pages 599–610.

An account of the methods adopted in each jurisdiction in connection with habitual offenders is given in Year Book No. 49, pages 668–9.

### Capital punishment

There were eight executions in Australia during the period 1955 to 1967. Three took place in South Australia (in 1956, 1958 and 1964) and four in Western Australia (one in 1960 and 1961, two in 1964) and one in Victoria in 1967. In each case the offence was murder.

Under 'The Criminal Code Amendment Act of 1922' capital punishment was abolished in Queensland, and in New South Wales the Crimes Act was amended in 1955, abolishing capital punishment for all offences except treason and piracy with violence. In the Australian Capital Territory the *Child Welfare Ordinance* 1957–1962 provides that no death sentence is to be pronounced or recorded against a person under the age of 18 years, and sub-section (2) of section 389 of the *Tasmanian Criminal Code Act* 1924 as amended contains a similar provision.

In the early days of the history of Australia the penalty of death was attached to a large number of offences, many of which would now be dealt with in a court of summary jurisdiction. The present tendency is to restrict death sentences to persons convicted of murder. Although rape is a capital offence in some States, the penalty of death has not been imposed in recent years on persons convicted of it. The average annual number of executions in Australia from 1861 to 1880 was 9; from 1881 to 1900, 6; from 1901 to 1910, 4; from 1911 to 1920, 2; from 1921 to 1930, 2; from 1931 to 1940, 1; from 1941 to 1950, 0.5; and from 1951 to 1960, 0.7.

## Serious crime

### Selected crime reported or becoming known to police

The tables on pages 597–8 show some details of certain categories of offences reported or becoming known to police. This series, which commenced in 1964, is derived from police records and is based, as far as possible, on definitions and procedural arrangements uniformly determined for all States. The following explanations are necessary in order to interpret the figures in this series.

*Number of offences reported or becoming known.* All incidents reported or becoming known to the police which are found to constitute offences within the scope of the crimes covered are included. Offences are shown as 'reported or becoming known' in the year during which it has been established that the incident constitutes a crime, not necessarily in the period when the incident occurred. However, the incident is included when the police are satisfied that a crime has been committed, even though it may be established in subsequent proceedings that no crime or a crime of a different nature was committed. As far as possible, the offences are recorded in respect of the State in which the incident occurred, regardless of which police force undertakes investigations or prosecutions, or where an arrest is made. In the case of homicide, assault, robbery, and rape, one offence is counted in respect of each victim, regardless of the number of offenders involved. In the case of breaking and entering, and fraud, etc., one offence is counted for each act or series of directly related acts occurring at the same time and place and under the same circumstances. Each motor vehicle stolen is counted as a separate offence.

*Number of offences cleared.* An offence of the type included in this series is counted as 'cleared' when an information (charge, arrest or summons to appear) has been laid against at least one person involved. However, an offence may also be counted as 'cleared' without an information being laid. This may occur when the offender has received an official caution or has died, has committed suicide, has been committed to a mental institution, or is in another jurisdiction from which extradition is not desired or available, or is serving a sentence; or if there are other obstacles to prosecution, such

as diplomatic immunity or that the complainant refuses to prosecute. A clearance is always shown against the classification under which the offence was 'reported', regardless of the nature of the charge laid or changes in the description of an offence due to later information. The entries are made in respect of the year when the offence was 'cleared', whether or not the offence was 'reported' in that or an earlier year.

*Persons involved in crimes cleared.* This is the sum of the number of persons dealt with in each of the offences shown as 'cleared'. If more than one person is involved in the one offence, each person is counted. If the same person is involved in more than one offence cleared, he is counted separately for each offence. Persons involved are shown against the categories of offences to which an incident was originally allocated, regardless of the actual offences they are charged with. This basis of counting 'persons involved in offences cleared' was adopted to reveal trends in crime participation by persons in various age-groups. The figures in this series are not directly comparable with statistics of persons charged or convicted in court, or of cases brought before the courts; nor do these figures reveal the number of offenders in the community.

*Offences included in the statistics*

*Homicide.* Separate details are provided for murder, attempted murder (i.e. acts done with intent to murder) and manslaughter (unlawful killing other than murder), excluding manslaughter arising from motor traffic accidents.

*Serious assault.* These are assaults normally dealt with on indictment. Includes woundings, offences causing bodily harm, assaults with a weapon, etc., and attempts of this nature. Excludes sexual assault and robbery. *Uniform interpretation of this definition between States is especially difficult to effect.*

*Robbery.* Stealing anything, if at or immediately before or after the time of stealing the offender uses or threatens to use violence to any person or property in order to obtain the thing stolen, or to prevent or overcome resistance to its being stolen. Includes attempts of this nature.

*Rape.* Includes attempted rape and assault with intent to rape. Excludes unlawful carnal knowledge (i.e. where consent is given, but the girl is below the legal age of consent, etc.) and indecent assault.

*Breaking and entering.* Breaking and entering a building (or entering a building and breaking out) and committing or intending to commit a crime. Includes burglaries. Separate details are shown according to the type of building involved, namely, *dwellings* (including unoccupied dwellings, tents, caravans, etc., used as dwellings, and the residential parts of hotels, schools, etc.); *shops* (including kiosks, service stations, restaurants, bars, non-residential clubs, etc.); and *offices, factories and warehouses* (including parts of buildings, but excluding dwellings and shops used for such purposes). Includes attempts. From 1967 the figures exclude breakings involving property valued at \$100 or less.

*Motor vehicle thefts, illegal use, etc.* Includes all offences of illegal, unlawful or unauthorised use, use without consent, unlawfully assuming control, etc., no matter under which legislation these offences are prescribed. Excludes cases of 'interference', but includes attempts at illegal use. The number of stolen motor vehicles which are recovered is also shown.

*Fraud, forgery, false pretences.* Includes embezzlement, 'omit to account', misappropriation, fraudulent appropriation, conversion, larceny as bailee, falsification of accounts, company fraud, forgery, uttering, false pretences, passing of valueless cheques and offences by trustees. Includes attempts, but excludes imposition. As a general rule, offences are included only if there is an element of deception or trickery. Separate details are shown for *valueless cheque* offences (i.e. passing of valueless cheques, whether there is no account, insufficient funds or a false signature of the purported drawer of the cheque. However, this sub-group excludes cases where a genuine cheque is altered or the endorsement of the payee is forged. These cases are regarded as forgery and or uttering and included in 'other').

**Number of offences reported or becoming known to police**

The following table shows, for each State and Territory, the number of offences in each of the seven categories covered by this series which were reported or became known to police during the years 1964 to 1967.

SELECTED CRIME REPORTED OR BECOMING KNOWN TO POLICE  
NUMBER OF OFFENCES, STATES AND TERRITORIES, 1964 TO 1967

Category of crime	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
<b>Homicide—</b>									
1964 . . . . .	109	72	56	14	10	4	6	1	272
1965 . . . . .	111	81	34	14	13	7	6	5	271
1966 . . . . .	113	106	62	13	14	3	8	2	321
1967 . . . . .	139	57	47	25	7	7	17	1	300
<b>Serious assault(a)—</b>									
1964 . . . . .	545	1,208	61	34	33	27	9	7	1,924
1965 . . . . .	484	1,243	49	53	13	19	13	21	1,895
1966 . . . . .	522	1,529	82	53	14	3	11	13	2,227
1967 . . . . .	547	1,338	119	71	20	11	39	13	2,158
<b>Robbery—</b>									
1964 . . . . .	211	252	53	37	22	17	..	..	592
1965 . . . . .	283	302	72	32	17	18	1	5	730
1966 . . . . .	346	457	92	50	20	17	4	6	992
1967 . . . . .	386	395	79	51	21	18	5	5	960
<b>Rape—</b>									
1964 . . . . .	91	94	33	21	6	11	2	4	262
1965 . . . . .	67	93	46	23	13	8	2	5	257
1966 . . . . .	72	107	38	16	7	2	8	1	251
1967 . . . . .	72	138	32	43	5	17	2	2	311
<b>Breaking and entering (dwel- lings, shops, offices, etc.)—</b>									
1964 . . . . .	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	(b)39,695
1965 . . . . .									(b)46,626
1966 . . . . .									(b)56,841
1967(c) . . . . .	7,806	7,656	1,417	1,165	552	340	40	96	19,072
<b>Motor vehicle theft, etc.—</b>									
1964 . . . . .	11,512	7,269	1,711	1,372	1,153	353	45	124	23,539
1965 . . . . .	12,214	6,967	1,792	1,472	1,141	424	83	192	24,285
1966 . . . . .	12,678	8,969	1,703	1,304	1,572	410	89	212	26,937
1967 . . . . .	12,558	8,348	1,544	1,701	1,707	603	119	211	26,791
<b>Fraud, forgery, etc.—</b>									
1964 . . . . .	5,688	3,828	2,634	2,091	1,020	293	85	69	15,708
1965 . . . . .	6,311	4,132	3,331	1,617	1,075	371	104	258	17,199
1966 . . . . .	5,558	3,779	2,778	1,740	1,052	182	144	276	15,509
1967 . . . . .	5,438	3,367	2,872	2,185	1,256	292	143	270	15,823

(a) See definition on page 596. (b) All reported breakings, etc. (c) Excludes offences involving property valued at \$100 or less.

Crimes cleared and persons involved

The tables which follow show, for the various categories of offences, the number of offences reported, the number cleared, and the number of persons involved according to age and sex. Subdivisions of the categories homicide, breaking and entering, and fraud, etc., are provided. See pages 595-6 for definitions used and the bases on which these statistics are prepared.

HOMICIDE: CRIMES REPORTED OR BECOMING KNOWN, CRIMES CLEARED  
AND PERSONS INVOLVED, AUSTRALIA, 1965 TO 1967

	Murder			Attempted murder			Manslaughter			All homicide		
	1965	1966	1967	1965	1966	1967	1965	1966	1967	1965	1966	1967
Number reported or becoming known . .	141	163	137	101	129	127	29	29	36	271	321	300
Number cleared . . .	132	149	127	99	121	116	29	29	36	260	299	279
Persons involved in crimes cleared—												
Aged(a)—												
16 years and under	14	6	4	5	10	3	1	2	2	20	18	9
17 and 18 years . .	5	9	7	6	7	4	1	3	2	12	19	13
19 and 20 years . .	2	12	7	4	10	7	1	3	2	7	25	16
21 years and over .	125	134	121	88	101	104	26	27	31	239	262	256
Total persons in- volved . . . . .	146	161	139	103	128	118	29	35	37	(b)278	(b)324	(b)294

(a) Age last birthday at time of clearance. (b) Includes 44 females in 1965, 41 in 1966, and 46 in 1967.



**SERIOUS ASSAULT, ROBBERY, RAPE: CRIMES REPORTED OR BECOMING KNOWN,  
CRIMES CLEARED, AND PERSONS INVOLVED, AUSTRALIA, 1965 TO 1967**

	<i>Serious assault</i>			<i>Robbery</i>			<i>Rape</i>		
	1965	1966	1967	1965	1966	1967	1965	1966	1967
Number reported or becoming known .	1,895	2,227	2,158	730	992	960	257	251	311
Number cleared .	1,609	1,838	1,748	356	424	425	210	205	228
Persons involved in crimes cleared—									
Aged(a)—									
16 years and under . . . .	147	150	111	55	110	108	43	38	22
17 and 18 years . . . .	280	271	238	134	136	161	72	89	111
19 and 20 years . . . .	251	345	271	93	118	121	60	79	90
21 years and over . . . .	1,195	1,362	1,365	315	335	306	143	124	205
Total persons involved . . .	(b)1,873	(b)2,128	(b)1,985	(c)597	(c)699	(c)696	318	330	428

(a) Age last birthday at time of clearance. (b) Includes 70 females in 1965, 114 in 1966, and 85 in 1967. (c) Includes 14 females in 1965, 35 in 1966, and 26 in 1967.

**BREAKING AND ENTERING: CRIMES REPORTED OR BECOMING KNOWN, CRIMES  
CLEARED, AND PERSONS INVOLVED, AUSTRALIA, 1965 TO 1967**

	<i>Dwellings</i>			<i>Shops</i>			<i>Offices and warehouses</i>			<i>Total</i>		
	1965 (a)	1966 (a)	1967 (b)	1965 (a)	1966 (a)	1967 (b)	1965 (a)	1966 (a)	1967 (b)	1965 (a)	1966 (a)	1967 (b)
Number reported or becoming known	18,073	22,186	8,205	15,166	18,743	6,030	13,387	15,912	4,837	46,626	56,841	19,072
Number cleared	5,525	5,954	1,738	4,526	4,788	1,367	3,376	3,925	983	13,427	14,667	4,088
Persons involved in crimes cleared—												
Aged(c)—												
16 years and under . . . .	4,303	4,023	602	2,953	3,144	506	2,811	3,065	276	10,067	10,232	1,384
17 and 18 years . . . .	1,107	1,325	416	1,340	1,573	387	758	850	189	3,205	3,748	992
19 and 20 years . . . .	636	808	417	929	997	438	588	570	210	2,153	2,375	1,065
21 years and over . . . .	2,147	2,251	1,086	2,296	2,430	874	1,600	1,888	828	6,043	6,569	2,788
Total persons involved	8,193	8,407	2,521	7,518	8,144	2,205	5,757	6,373	1,503	(d)21,468	(d)22,924	(d)6,229

(a) All reported offences. (b) Excludes offences involving property valued at \$100 or less. (c) Age last birthday at time of clearance. (d) Includes 505 females in 1965, 447 in 1966, and 195 in 1967.

**MOTOR VEHICLE THEFT, ETC., FRAUD, ETC.: CRIMES REPORTED OR BECOMING  
KNOWN, CRIMES CLEARED, AND PERSONS INVOLVED, AUSTRALIA, 1965 TO 1967**

	<i>Motor vehicles theft, etc.</i>			<i>Fraud, forgery, false pretences</i>								
				<i>Valueless cheques</i>			<i>Other</i>			<i>All frauds, etc.</i>		
	1965	1966	1967	1965	1966	1967	1965	1966	1967	1965	1966	1967
Number reported or becoming known .	24,285	26,937	26,791	7,272	7,277	7,127	9,927	8,232	8,696	17,199	15,509	15,823
Number cleared .	5,567	5,640	6,039	5,345	5,739	5,063	9,133	7,483	7,681	14,478	13,222	12,744
Persons involved in crimes cleared—												
Males aged (a)—												
16 years and under . . . .	3,411	3,535	3,774	113	75	68	250	344	218	363	419	286
17 and 18 years . . . .	2,844	2,559	2,413	179	185	146	183	251	258	362	436	404
19 and 20 years . . . .	1,163	1,181	1,168	294	262	387	383	404	260	677	666	647
21 years and over . . . .	1,754	1,696	1,799	4,280	4,588	4,009	6,674	5,069	4,776	10,954	9,657	8,785
Total males . . . .	9,172	8,971	9,154	4,866	5,110	4,610	7,490	6,068	5,512	12,356	11,178	10,122
Females aged(a)—												
16 years and under . . . .	98	80	68	13	16	1	178	144	127	191	160	128
17 and 18 years . . . .	34	38	21	23	39	60	253	205	143	276	244	203
19 and 20 years . . . .	19	19	20	49	97	45	220	252	343	269	349	388
21 years and over . . . .	9	26	18	586	544	619	1,224	873	1,901	1,810	1,417	2,520
Total females . . . .	160	163	127	671	696	725	1,875	1,474	2,514	2,546	2,170	3,239
Total persons involved . . .	9,332	9,134	9,281	5,537	5,806	5,335	9,365	7,542	8,026	14,902	13,348	13,361

(a) Age last birthday at time of clearance.

The number of stolen motor vehicles recovered was: 1965, 22,353; 1966, 24,490; 1967, 24,701.

**Convictions for serious crime at lower (magistrates') courts**

The figures given in the tables on page 594 refer to all convictions, and include offences of a technical nature, drunkenness, and minor breaches of good order, which come under the heading of crime in a very different sense from the more serious offences. The following table has therefore been prepared to show convictions at magistrates' courts for the years 1962 to 1966 for what may be regarded as the more serious offences, i.e. offences against the person, offences against property, forgery, and offences against the currency.

**CONVICTIONS FOR SERIOUS CRIME(a) AT MAGISTRATES' COURTS(b): STATES AND TERRITORIES, 1962 TO 1966**

<i>State or Territory</i>	<i>1962</i>	<i>1963</i>	<i>1964</i>	<i>1965</i>	<i>1966</i>
New South Wales . . . . .	32,320	32,656	31,826	34,585	34,911
Victoria . . . . .	19,016	21,540	23,131	23,785	25,804
Queensland(c)(d) . . . . .	4,833	5,768	5,707	6,160	6,900
South Australia(c) . . . . .	3,693	3,727	4,145	4,813	5,085
Western Australia . . . . .	7,259	8,450	8,017	7,991	9,357
Tasmania . . . . .	1,704	1,570	2,122	3,670	3,285
Northern Territory(e) . . . . .	419	591	469	627	647
Australian Capital Territory . . . . .	286	492	480	627	761
<b>Australia . . . . .</b>	<b>69,530</b>	<b>74,794</b>	<b>75,897</b>	<b>82,258</b>	<b>86,750</b>

(a) Offences against the person, offences against property, forgery, and offences against the currency. (b) Includes Children's Courts except for Northern Territory. (c) Year ended 30 June. (d) A person convicted on several counts at the one hearing is included only once. (e) Excludes courts at Tennant Creek and Katherine.

**Committals to higher (judges') courts**

**COMMITTALS TO HIGHER COURTS(a), BY CLASS OF OFFENCE: STATES AND TERRITORIES, 1966**

<i>Class of offence</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Old (b)(c)</i>	<i>S.A. (b)</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T. (d)</i>	<i>A.C.T.</i>	<i>Aust.</i>
Against the person . . . . .	1,380	1,108	375	299	98	87	43	55	3,445
Against property . . . . .	6,830	2,919	1,221	394	351	376	57	82	12,230
Forgery and offences against the currency . . . . .	370	414	8	32	63	19	4	..	910
Against good order . . . . .	146	146	2	9	3	3	1	..	310
Other . . . . .	32	721	8	3	8	1	22	..	795
<b>Total . . . . .</b>	<b>8,758</b>	<b>5,308</b>	<b>1,614</b>	<b>737</b>	<b>523</b>	<b>486</b>	<b>127</b>	<b>137</b>	<b>17,690</b>

(a) Includes committals from Children's Court except for Northern Territory. (b) Year ended 30 June. (c) A person committed on several counts at the one hearing is included only once. (d) Excludes courts at Tennant Creek and Katherine.

**COMMITTALS TO HIGHER COURTS(a): STATES AND TERRITORIES, 1962 TO 1966**

<i>State or Territory</i>	<i>1962</i>	<i>1963</i>	<i>1964</i>	<i>1965</i>	<i>1966</i>
New South Wales . . . . .	7,414	8,538	7,575	7,908	8,758
Victoria . . . . .	5,468	5,306	5,343	4,745	5,308
Queensland(b)(c) . . . . .	1,295	1,354	1,270	1,477	1,614
South Australia(b) . . . . .	712	600	602	753	737
Western Australia . . . . .	460	544	474	515	523
Tasmania . . . . .	643	705	610	414	486
Northern Territory(d) . . . . .	92	107	65	169	127
Australian Capital Territory . . . . .	110	92	177	224	137
<b>Australia . . . . .</b>	<b>16,194</b>	<b>17,246</b>	<b>16,116</b>	<b>16,205</b>	<b>17,690</b>

(a) Includes committals from the Children's Court except for Northern Territory. (b) Year ended 30 June. (c) A person committed on several counts at the one hearing is included only once. (d) Excludes courts at Tennant Creek and Katherine.

## Persons convicted at higher (judges') courts

## PERSONS CONVICTED(a) AT HIGHER COURTS, BY NATURE OF OFFENCE: STATES AND TERRITORIES, 1966

Offence	N.S.W.	Vic.	Qld (b)	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Against the person—									
Concealment of birth . . . . .	..	..	..	1	..	..	..	1	2
Murder . . . . .	15	9	7	2	1	..	1	..	35
Attempted murder . . . . .	7	1	2	..	1	..	..	..	11
Manslaughter(c) . . . . .	21	9	14	5	18	1	1	..	69
Culpable driving . . . . .	42	..	21	6	..	2	1	..	72
Rape . . . . .	13	33	14	6	12	6	4	..	88
Incest . . . . .	4	10	11	2	4	2	..	..	33
Other offences against females	318	246	101	183	16	34	2	6	906
Abduction . . . . .	..	9	1	1	2	..	..	..	13
Unnatural offences . . . . .	84	54	14	22	1	6	3	5	189
Abortion and attempt to procure	2	5	..	..	..	..	..	..	7
Bigamy . . . . .	22	4	2	2	5	..	..	1	36
Malicious wounding . . . . .	44	..	..	..	..	..	..	..	44
Aggravated assault . . . . .	72	44	35	17	11	8	..	5	192
Common assault . . . . .	48	27	2	3	..	..	5	2	87
Attempted suicide . . . . .	..	1	..	..	..	..	..	..	1
Other offences against the person	13	62	6	..	..	..	1	1	83
<i>Total, against the person</i> . . . . .	<i>705</i>	<i>514</i>	<i>230</i>	<i>250</i>	<i>71</i>	<i>59</i>	<i>18</i>	<i>21</i>	<i>1,868</i>
Against property—									
Burglary, breaking and entering . . . . .	1,377	359	832	312	177	93	28	27	3,205
Robbery and stealing from the person	115	75	21	9	11	32	..	..	263
Livestock stealing . . . . .	..	18	3	11	1	..	4	..	37
Embezzlement and fraudulent misap- propriation . . . . .	94	44	5	16	4	2	..	3	168
Other larceny . . . . .	654	64	31	28	16	..	4	6	803
Unlawfully using vehicles . . . . .	3	103	118	..	..	..	..	..	224
Receiving . . . . .	88	38	37	5	..	4	..	1	178
Fraud and false pretences . . . . .	94	55	10	24	8	6	..	5	202
Arson . . . . .	3	11	20	1	..	5	3	..	43
Malicious damage . . . . .	18	17	6	4	..	..	..	..	45
Other offences against property . . . . .	2	6	4	2	4	..	..	4	22
<i>Total, against property</i> . . . . .	<i>2,448</i>	<i>790</i>	<i>1,087</i>	<i>412</i>	<i>226</i>	<i>142</i>	<i>39</i>	<i>46</i>	<i>5,190</i>
Forgery and offences against the currency	24	63	9	27	3	1	1	..	128
Against good order . . . . .	7	39	1	..	2	2	..	..	51
Other . . . . .	17	319	3	49	..	..	..	..	388
<b>Grand total</b> . . . . .	<b>3,201</b>	<b>1,725</b>	<b>1,330</b>	<b>738</b>	<b>302</b>	<b>204</b>	<b>58</b>	<b>67</b>	<b>7,625</b>

(a) A person convicted on several counts at the one hearing is included only once. (b) Year ended 30 June. (c) Includes causing death by dangerous driving.

## PERSONS CONVICTED(a) AT HIGHER COURTS: STATES AND TERRITORIES, 1962 TO 1966

State or Territory	1962	1963	1964	1965	1966
New South Wales . . . . .	2,513	2,907	2,689	2,900	3,201
Victoria . . . . .	2,329	1,946	1,793	1,618	1,725
Queensland(b) . . . . .	1,175	1,187	1,134	1,201	1,330
South Australia . . . . .	718	745	629	713	738
Western Australia . . . . .	238	313	259	315	302
Tasmania . . . . .	270	293	172	170	204
Northern Territory . . . . .	49	56	41	76	58
Australian Capital Territory . . . . .	57	51	66	85	67
<b>Australia</b> . . . . .	<b>7,349</b>	<b>7,498</b>	<b>6,783</b>	<b>7,078</b>	<b>7,625</b>

(a) See note (a) above. (b) Year ended 30 June.

### Civil cases

The statistics in the two tables in this section are influenced by factors which affect comparability between States and between courts. The total number of plaints entered and amounts awarded plaintiffs in the lower courts during 1966 are shown in the following table.

#### CIVIL CASES AT LOWER COURTS: STATES AND TERRITORIES, 1966

		<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i> (a)	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
Plaints entered	number	177,239	207,727	54,774	99,601	54,289	39,539	2,799	6,418	642,386
Amounts awarded to plaintiffs	\$'000	6,658	15,539	3,386	4,499	2,446	1,196	133	242	34,099

(a) Year ended 30 June.

The following table shows the civil judgments (excluding those for divorce and bankruptcy) in the higher courts during 1966. The particulars given below include the number and amount of judgments entered by default or confession or agreement.

#### CIVIL CASES AT HIGHER COURTS: STATES AND TERRITORIES, 1966

		<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i> (a)	<i>S.A.</i>	<i>W.A.</i> (b)	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
Judgments	number	53,110	8,664	686	394	652	n.a.	n.a.	551	n.a.
Amount awarded	\$'000	n.a.	7,231	3,480	2,602	2,273	n.a.	n.a.	1,205	n.a.

(a) Year ended 30 June. (b) Judgments signed and entered.

### Transactions of the High Court

#### TRANSACTIONS OF THE HIGH COURT OF AUSTRALIA, 1966 AND 1967

<i>Original jurisdiction(a)</i>	1966	1967	<i>Appellate jurisdiction</i>	1966	1967
Number of writs issued . . . . .	79	74	Number of appeals set down for hearing . . . . .	93	114
Number of causes entered for trial . . . . .	25	46	Number allowed . . . . .	31	27
Judgments for plaintiffs . . . . .	4	6	Number dismissed . . . . .	68	67
Judgments for defendants . . . . .	3	7	Otherwise disposed of . . . . .	20	25
Otherwise disposed of . . . . .	14	19			
Amounts of judgments . . . . .	\$ 9,115	74,175			

(a) Some matters dealt with by the High Court neither originate as writs nor are entered as causes.

During 1966 and 1967, respectively, the High Court dealt also with the following: appeals from assessments under the Taxation Assessment Acts, 24, 55; special cases stated for the opinion of the Full Court, 7, 4; applications for prohibition, etc., 30, 15. The fees collected amounted to \$7,975 in 1966 and \$7,327 in 1967.

## Divorce and other matrimonial causes

### Separation and maintenance orders of courts of summary jurisdiction

In all States and Territories there are laws enabling a wife whose husband leaves her or the children of the marriage without adequate means of support to obtain a maintenance order against the husband from a court of summary jurisdiction. In some States and in the Northern Territory, courts of summary jurisdiction also have power to make separation orders. A separation order is intended primarily for the protection of the person of the wife.

### Divorce and other matrimonial proceedings in higher courts

A marriage may be terminated by a Supreme Court of a State or Territory, under powers vested in these courts by Commonwealth legislation, in one of three ways. Firstly, there may be a dissolution of the marriage, commonly known as divorce; secondly, the courts may annul a marriage; and thirdly, there can be a judicial separation of the parties. Until the Commonwealth *Matrimonial Causes Act* 1959 came into operation each State was primarily responsible for legislation relating to matrimonial causes. The law varied from State to State, for example, as to the period of desertion needed to obtain a decree for the dissolution of marriage. In 1959, however, the Commonwealth Matrimonial Causes Act was passed, and it came into force on 1 February 1961. The Act establishes uniform grounds throughout the whole of the Commonwealth for the termination of marriage. While the Act displaces corresponding State law, it vests jurisdiction in existing State and Territorial Courts.

### Matrimonial Causes Act 1959-1966

Under this Act a decree for the dissolution of marriage may be granted on one or more of fourteen grounds, which include adultery, desertion, separation for five years in certain circumstances, cruelty, drunkenness, and failure to comply with a restitution decree.

Proceedings for nullity of marriage may be instituted in respect of a marriage which is void or voidable. A marriage which is void has no existence at all, and so it is not legally necessary to obtain a decree of nullity of marriage, but since the issue may depend on difficult questions of fact, such as proof that the consent of one of the parties to the marriage was not a real consent, it is advisable and customary to seek a court judgment which decides the question of the validity of the marriage.

Proceedings for annulling a voidable marriage may be instituted on various grounds, as, for example, where at the time of the marriage either party was a mental defective. A voidable marriage is void from the date of the decree absolute, but until then the parties have the status of married people and transactions concluded on the basis of the existence of that status cannot be undone or re-opened. Since the parties to a marriage which is void or which has been voided do not have the status of married people, they may remarry.

The death of either husband or wife terminates any proceedings under the Act. A decree for dissolution or annulment of a voidable marriage is first a decree *nisi*. The decree automatically becomes absolute at the expiration of three months, unless it is in the meantime rescinded, appeal proceedings are instituted, or there are children of the marriage under the age of 16, in which case the Court must be satisfied that appropriate arrangements have been made for their welfare before the decree will become absolute. The parties cannot remarry until a decree *nisi* has become absolute.

A decree of judicial separation is available on most of the grounds available for divorce. It leaves unimpaired the status of marriage, but suspends rights and duties with respect to cohabitation. A husband is not responsible for the acts of his wife, except that he is liable for necessities supplied to her if he has failed to pay maintenance ordered by a court. Persons who have judicially separated cannot remarry, but a divorce may be obtained on the same facts as those on which the decree of judicial separation was based.

The Act provides for financial grants to approved marriage guidance organisations and the courts are enjoined to consider at all times the possibility of reconciliation and they may take certain steps to endeavour to effect a reconciliation.

### Number of petitions filed

The following table shows the number of petitions for dissolution of marriage, nullity of marriage and judicial separation filed in each State and Territory during 1967.

**PETITIONS FILED FOR DISSOLUTION OF MARRIAGE, NULLITY OF MARRIAGE  
AND JUDICIAL SEPARATION: STATES AND TERRITORIES, 1967**

<i>Petition for—</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
<b>Dissolution of marriage—</b>									
Husband petitioner . .	1,964	1,167	591	429	408	151	30	58	4,798
Wife petitioner . . .	3,463	1,533	833	749	480	168	25	104	7,355
<i>Total</i> . . . . .	<i>5,427</i>	<i>2,700</i>	<i>1,424</i>	<i>1,178</i>	<i>888</i>	<i>319</i>	<i>55</i>	<i>162</i>	<i>12,153</i>
<b>Nullity of marriage—</b>									
Husband petitioner . .	9	3	2	4	1	..	..	2	21
Wife petitioner . . .	19	13	3	7	1	..	..	1	44
<i>Total</i> . . . . .	<i>28</i>	<i>16</i>	<i>5</i>	<i>11</i>	<i>2</i>	<i>..</i>	<i>..</i>	<i>3</i>	<i>65</i>
<b>Dissolution or nullity—</b>									
Husband petitioner . .	3	6	..	..	..	..	..	..	9
Wife petitioner . . .	1	7	1	2	..	..	..	..	11
<i>Total</i> . . . . .	<i>4</i>	<i>13</i>	<i>1</i>	<i>2</i>	<i>..</i>	<i>..</i>	<i>..</i>	<i>..</i>	<i>20</i>
<b>Judicial separation—</b>									
Husband petitioner . .	13	2	7	15	..	1	..	1	39
Wife petitioner . . .	..	..	..	..	..	..	..	..	..
<i>Total</i> . . . . .	<i>13</i>	<i>2</i>	<i>7</i>	<i>15</i>	<i>..</i>	<i>1</i>	<i>..</i>	<i>1</i>	<i>39</i>
<b>Dissolution or judicial separation—</b>									
Husband petitioner . .	..	1	..	1	..	..	..	..	2
Wife petitioner . . .	..	..	..	..	..	..	..	..	..
<i>Total</i> . . . . .	<i>..</i>	<i>1</i>	<i>..</i>	<i>1</i>	<i>..</i>	<i>..</i>	<i>..</i>	<i>..</i>	<i>2</i>
<b>Total petitions—</b>									
Husband petitioner . No.	1,976	1,176	593	433	409	151	30	60	4,828
per cent . . . . .	36	43	41	36	46	47	55	36	39
Wife petitioner . No.	3,496	1,556	844	774	481	169	25	106	7,451
per cent . . . . .	64	57	59	64	54	53	45	64	61
<i>Grand total</i> . . . .	<i>5,472</i>	<i>2,732</i>	<i>1,437</i>	<i>1,207</i>	<i>890</i>	<i>320</i>	<i>55</i>	<i>166</i>	<i>12,279</i>

**Number of decrees granted**

The following table shows the number of dissolutions of marriage, nullities of marriage and judicial separations granted in each State and Territory during 1967 classified according to petitioner.

**DISSOLUTIONS OF MARRIAGE, NULLITIES OF MARRIAGE AND JUDICIAL  
SEPARATIONS GRANTED: STATES AND TERRITORIES, 1967**

<i>Decree for—</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
<b>Dissolution of marriage(a)—</b>									
Husband petitioner . .	1,720	873	446	360	345	96	11	41	3,892
Wife petitioner . . .	2,834	1,162	628	569	381	152	9	56	5,791
Petition by both . . .	1	4	..	..	..	..	..	..	5
<i>Total</i> . . . . .	<i>4,555</i>	<i>2,039</i>	<i>1,074</i>	<i>929</i>	<i>726</i>	<i>248</i>	<i>20</i>	<i>97</i>	<i>9,688</i>
<b>Nullity of marriage(b)—</b>									
Husband petitioner . .	3	6	1	5	..	..	..	1	16
Wife petitioner . . .	14	9	5	4	1	..	..	1	34
<i>Total</i> . . . . .	<i>17</i>	<i>15</i>	<i>6</i>	<i>9</i>	<i>1</i>	<i>..</i>	<i>..</i>	<i>2</i>	<i>50</i>
<b>Judicial separation—</b>									
Husband petitioner . .	..	..	3	3	..	..	..	..	8
Wife petitioner . . .	2	..	..	..	..	..	..	..	..
<i>Total</i> . . . . .	<i>2</i>	<i>..</i>	<i>3</i>	<i>3</i>	<i>..</i>	<i>..</i>	<i>..</i>	<i>..</i>	<i>8</i>
<b>Total decrees—</b>									
Husband petitioner . No.	1,723	879	447	365	345	96	11	42	3,908
per cent . . . . .	38	43	41	39	47	39	55	42	40
Wife petitioner . No.	2,850	1,171	636	576	382	152	9	57	5,833
per cent . . . . .	62	57	59	61	53	61	45	58	60
Petition by both . No.	1	4	..	..	..	..	..	..	5
<i>Grand total</i> . . . .	<i>4,574</i>	<i>2,054</i>	<i>1,083</i>	<i>941</i>	<i>727</i>	<i>248</i>	<i>20</i>	<i>99</i>	<i>9,746</i>

(a) Decrees absolute.

(b) Final decrees.

The following table shows the number of dissolutions of marriage, nullities of marriage and judicial separations granted in each State and Territory for each year from 1963 to 1967.

**DISSOLUTIONS OF MARRIAGE, NULLITIES OF MARRIAGE AND JUDICIAL  
SEPARATIONS GRANTED: STATES AND TERRITORIES, 1963 TO 1967**

<i>State or Territory</i>	<i>1963</i>	<i>1964</i>	<i>1965</i>	<i>1966</i>	<i>1967</i>
<b>DISSOLUTIONS OF MARRIAGE(a)</b>					
New South Wales . . . . .	3,293	3,024	3,440	4,515	4,555
Victoria . . . . .	1,616	2,130	2,089	2,131	2,039
Queensland . . . . .	910	981	1,052	1,031	1,074
South Australia . . . . .	765	887	852	1,069	929
Western Australia . . . . .	553	542	604	637	726
Tasmania . . . . .	260	229	279	317	248
Northern Territory . . . . .	38	31	41	58	20
Australian Capital Territory . . . . .	41	93	134	101	97
<i>Australia . . . . .</i>	<i>7,476</i>	<i>7,917</i>	<i>8,491</i>	<i>9,859</i>	<i>9,688</i>
<b>NULLITIES OF MARRIAGE(b)</b>					
New South Wales . . . . .	13	14	14	19	17
Victoria . . . . .	7	19	13	11	15
Queensland . . . . .	6	5	3	7	6
South Australia . . . . .	5	3	3	9	9
Western Australia . . . . .	1	2	2	3	1
Tasmania . . . . .	..	1	..	1	..
Northern Territory . . . . .	..	..	..	..	..
Australian Capital Territory . . . . .	..	..	..	..	2
<i>Australia . . . . .</i>	<i>32</i>	<i>44</i>	<i>35</i>	<i>50</i>	<i>50</i>
<b>JUDICIAL SEPARATIONS</b>					
New South Wales . . . . .	..	3	1	4	2
Victoria . . . . .	3	2	1	2	..
Queensland . . . . .	3	..	4	1	3
South Australia . . . . .	..	..	..	2	3
Western Australia . . . . .	..	1	..	..	..
Tasmania . . . . .	1	..	1	1	..
Northern Territory . . . . .	..	..	..	..	..
Australian Capital Territory . . . . .	..	..	1	2	..
<i>Australia . . . . .</i>	<i>7</i>	<i>6</i>	<i>8</i>	<i>12</i>	<i>8</i>
<b>TOTAL DECREES GRANTED</b>					
<i>Australia . . . . .</i>	<i>7,515</i>	<i>7,967</i>	<i>8,534</i>	<i>9,921</i>	<i>9,746</i>

(a) Decrees absolute. (b) Final decrees.

The ten-year averages of the numbers of decrees (i.e. dissolutions, nullities and judicial separations) granted annually in Australia for the 80 years from 1881 to 1960 are as follows:

1881-90	1891-1900	1901-10	1911-20	1921-30	1931-40	1941-50	1951-60
70	357	399	741	1,692	2,508	6,187	6,973

**Grounds on which decrees were granted**

The grounds on which dissolutions of marriage, nullities of marriage and judicial separations were granted in each State and Territory during 1967 are shown in the following table.

**DISSOLUTIONS OF MARRIAGE, NULLITIES OF MARRIAGE AND JUDICIAL  
SEPARATIONS GRANTED: GROUNDS, STATES AND TERRITORIES, 1967**

<i>Ground</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
<b>DISSOLUTIONS OF MARRIAGE</b>									
Single grounds—									
Desertion . . . . .	2,138	995	522	341	247	112	9	34	4,398
Adultery . . . . .	923	575	184	271	240	41	5	31	2,270
Separation . . . . .	769	416	254	166	187	62	2	12	1,868
Cruelty . . . . .	334	18	54	116	11	5	..	12	550
Drunkenness . . . . .	75	13	16	12	5	5	..	2	128
Failure to pay maintenance	1	..	..	..	2	..	..	..	3
Non-compliance with									
restitution decree . . . . .	4	..	1	..	..	..	..	..	5
Refusal to consummate . . . . .	15	1	6	5	3	..	..	..	30
Insanity . . . . .	5	1	..	1	..	..	..	..	7
Frequent convictions . . . . .	4	2	..	1	5	..	..	..	12
Imprisonment . . . . .	3	3	1	..	..	..	..	..	7
Other single grounds . . . . .	7	1	1	..	1	..	..	..	10
Dual grounds—									
Desertion and adultery . . . . .	57	3	9	2	2	2	..	1	76
Desertion and separation . . . . .	32	1	10	5	10	8	2	..	68
Desertion and cruelty . . . . .	39	3	2	1	..	3	1	1	50
Desertion and drunkenness . . . . .	17	1	2	1	..	3	..	..	24
Desertion and failure to pay									
maintenance . . . . .	2	..	..	..	1	1	..	..	4
Desertion and other . . . . .	4	..	..	..	..	1	..	..	5
Adultery and separation . . . . .	3	..	..	1	5	..	..	..	9
Adultery and cruelty . . . . .	7	1	1	1	1	..	..	1	12
Adultery and drunkenness . . . . .	2	..	..	..	1	..	..	..	3
Separation and other . . . . .	3	..	..	..	2	..	..	..	5
Cruelty and drunkenness . . . . .	95	5	10	5	3	4	1	3	126
Other dual grounds . . . . .	1	..	1	..	..	..	..	..	2
Three grounds or more . . . . .	15	..	..	..	..	1	..	..	16
<i>Total</i> . . . . .	<i>4,555</i>	<i>2,039</i>	<i>1,074</i>	<i>929</i>	<i>726</i>	<i>248</i>	<i>20</i>	<i>97</i>	<i>9,688</i>
<b>NULLITY OF MARRIAGE</b>									
Bigamy . . . . .	4	4	2	4	..	..	..	1	15
Invalid marriage . . . . .	1	2	..	2	..	..	..	..	5
Consent under duress or by									
fraud . . . . .	1	..	..	..	..	..	..	..	1
Incapacity to consummate . . . . .	11	8	4	2	1	..	..	1	27
Pregnancy . . . . .	..	1	..	1	..	..	..	..	2
<i>Total</i> . . . . .	<i>17</i>	<i>15</i>	<i>6</i>	<i>9</i>	<i>1</i>	<i>..</i>	<i>..</i>	<i>2</i>	<i>50</i>
<b>JUDICIAL SEPARATIONS</b>									
Desertion . . . . .	..	..	1	..	..	..	..	..	1
Adultery . . . . .	1	..	2	2	..	..	..	..	5
Cruelty . . . . .	1	..	..	1	..	..	..	..	2
<i>Total</i> . . . . .	<i>2</i>	<i>..</i>	<i>3</i>	<i>3</i>	<i>..</i>	<i>..</i>	<i>..</i>	<i>..</i>	<i>8</i>
<b>TOTAL DECREES GRANTED</b>									
<b>Grand total</b> . . . . .	<b>4,574</b>	<b>2,054</b>	<b>1,083</b>	<b>941</b>	<b>727</b>	<b>248</b>	<b>20</b>	<b>99</b>	<b>9,746</b>



## Ages of husband and wife at time of marriage

The following table shows the *ages at time of marriage* of husbands and wives who were parties to marriages dissolved in 1967.

**DISSOLUTIONS, BY AGES OF PARTIES AT TIME OF MARRIAGE  
AUSTRALIA, 1967**

Age of wife (years)												
Age of husband (years)	Under 20	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60 and over	Not stated	Total hus- bands
Under 20	613	155	14	..	1	..	..	..	..	..	..	783
20-24	2,020	2,324	258	36	13	2	..	..	..	..	..	4,653
25-29	519	1,212	518	117	26	6	1	1	..	..	1	2,401
30-34	96	329	238	167	57	16	6	2	..	..	..	910
35-39	27	116	101	93	88	23	12	5	..	..	..	462
40-44	9	33	37	37	52	44	5	5	1	..	..	223
45-49	2	13	7	11	26	30	18	8	1	..	..	116
50-54	..	3	2	6	13	8	23	12	2	2	..	71
55-59	..	1	4	..	5	3	4	5	10	2	..	34
60 and over	..	..	1	1	..	2	5	5	7	12	..	33
Not stated	..	..	..	..	..	1	..	..	..	..	1	2
Total wives	3,286	4,186	1,180	468	281	135	74	39	21	16	2	9,688

## Ages of husband and wife at time of dissolution of marriage

The following table shows the *ages at the time the decree absolute was made* of husbands and wives who were parties to marriages dissolved in 1967.

**DISSOLUTIONS, BY AGES OF PARTIES AT TIME OF DISSOLUTION OF MARRIAGE  
AUSTRALIA, 1967**

Age of wife (years)													
Age of husband (years)	Under 20	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60 and over	Not stated	Total hus- bands	
Under 20	..	..	..	..	..	..	1	..	..	..	..	255	
20-24	7	215	32	..	..	9	4	..	..	..	..	1,293	
25-29	4	498	719	59	99	17	3	..	1	..	..	1,562	
30-34	..	95	683	664	601	581	113	25	8	1	..	1,547	
35-39	..	11	207	601	581	635	135	24	5	2	..	1,633	
40-44	..	7	46	188	611	520	465	97	14	6	..	1,320	
45-49	..	2	18	34	164	321	318	62	14	1	..	931	
50-54	..	1	3	16	43	152	121	203	146	35	..	581	
55-59	..	..	1	3	17	55	61	101	125	224	..	544	
60 and over	..	..	..	2	10	21	..	1	..	..	1	2	
Not stated	..	..	..	..	..	..	..	..	..	..	..	..	
Total wives	11	829	1,709	1,567	1,534	1,517	1,132	752	354	281	2	9,688	

**Duration of marriages dissolved and number of children**

The following table shows the number of dissolutions of marriage granted in 1967, classified according to the legal duration of the marriage (i.e. the period from the date of marriage to the date when the decree *nisi* was made absolute) and number of children.

**DISSOLUTIONS, BY DURATION OF MARRIAGES DISSOLVED AND NUMBER OF CHILDREN: AUSTRALIA, 1967**

Duration of marriage (years)	Dissolutions of marriages with—											Total dissolutions of marriage	Total children (a)
	No children	1 child	2 children	3 children	4 children	5 children	6 children	7 children	8 children	9 children	11 children		
Under 1 year . . .	14	2	..	2	..	..	..	..	..	..	..	18	..
1 year and under 2 . .	36	10	3	..	..	..	..	..	..	..	..	49	16
2 years and under 3 . .	97	38	6	1	..	..	..	..	..	..	..	142	53
3 " " " 4 . . .	295	151	31	5	..	..	..	..	..	..	..	482	228
4 " " " 5 . . .	267	177	50	11	2	..	1	..	..	..	..	508	324
5 " " " 6 . . .	193	187	116	13	4	..	..	..	..	..	..	513	474
6 " " " 7 . . .	179	196	115	27	4	..	..	..	..	..	..	521	523
7 " " " 8 . . .	159	149	110	39	10	3	1	..	..	..	..	471	547
8 " " " 9 . . .	145	136	103	44	15	1	..	..	..	..	..	444	539
9 " " " 10 . . .	108	118	127	55	20	2	2	..	..	..	..	432	639
10 " " " 11 . . .	110	98	111	63	21	6	1	..	..	..	..	410	629
11 " " " 12 . . .	94	89	123	56	34	7	1	1	..	..	..	405	687
12 " " " 13 . . .	74	78	102	58	32	7	5	1	..	..	..	357	656
13 " " " 14 . . .	78	65	101	63	37	6	4	..	..	..	..	354	658
14 " " " 15 . . .	62	69	111	53	31	7	6	1	..	..	..	340	652
15 " " " 16 . . .	62	67	100	58	32	8	4	..	2	..	..	333	649
16 " " " 17 . . .	72	68	73	51	33	10	4	..	..	..	..	311	573
17 " " " 18 . . .	67	70	97	70	40	6	4	1	..	2	..	358	721
18 " " " 19 . . .	58	57	109	64	36	3	10	..	1	..	1	339	705
19 " " " 20 . . .	43	71	105	71	30	18	4	2	..	..	..	344	742
20 " " " 21 . . .	25	214	233	312	201	76	37	8	5	1	1	1,088	2,049
21 " " " 25 . . .	30	352	226	160	63	26	8	..	..	1	..	836	888
25 " " " 30 . . .	35	249	83	32	8	3	2	1	..	..	..	380	212
30 " " " 35 . . .	40	129	23	5	1	..	..	..	..	..	..	158	36
35 " " " 40 . . .	45	50	1	2	..	..	..	..	..	..	..	53	5
40 " " " 45 . . .	..	..	..	..	..	..	..	..	..	..	..	..	..
45 " " " over . . .	42	..	..	..	..	..	..	..	..	..	..	42	..
Total dissolutions of marriage . . .	3,249	2,462	2,204	1,077	486	131	57	12	5	4	1	9,688	..
Total children(a) . . .	..	2,462	4,408	3,231	1,944	655	342	84	40	36	11	..	13,213

(a) The term 'children' used in the Commonwealth legislation refers to living 'children of the marriage' under 21 years at the time of petition.

**Ages of children of dissolved marriages**

The following table shows the ages of children of marriages dissolved in 1967. The children referred to are those under twenty-one years of age at the time of petition.

**CHILDREN OF DISSOLVED MARRIAGES(a), BY AGE AT TIME OF PETITION AUSTRALIA, 1967**

Petitioner	Ages of children at time of petition																		Total number of children
	Under 12 mths	1 yr	2 yrs	3 yrs	4 yrs	5 yrs	6 yrs	7 yrs	8 yrs	9 yrs	10 yrs	11 yrs	12 yrs	13 yrs	14 yrs	15 yrs	16-20 yrs	Not stated	
Husband . . .	32	88	168	256	261	333	272	317	304	278	275	271	268	256	214	267	995	..	4,855
Wife . . .	49	147	315	443	479	513	516	503	523	490	484	457	416	455	437	414	1,704	1	8,346
Petitions of both . . .	..	1	..	1	2	1	1	2	..	1	2	..	..	..	1	..	..	..	12
Total . . .	81	236	483	700	742	847	789	822	827	769	761	728	684	711	652	681	2,699	1	13,213

(a) See footnote (a) to preceding table.

### Number of divorced persons at each census, 1911 to 1966

The following table shows the number and proportion of divorced persons in Australia as recorded from returns supplied at each census from 1911 to 1966. A classification of divorced persons by ages for the censuses from 1891 to 1947 appeared in earlier issues of the Year Book (see No. 39, page 269). Prior to 1911 no record was made of divorced persons in South Australia, so comparisons cannot be made beyond that date.

**DIVORCED PERSONS AT CENSUS DATES: AUSTRALIA, 1911 TO 1966**

Sex	Number							Number per 10,000 of males or females 15 years of age and over							
	1911	1921	1933	1947	1954	1961	1966	1911	1921	1933	1947	1954	1961	1966	
Males	2,368	4,233	10,298	25,052	32,389	38,640	42,885	15	23	42	89	100	105	105	
Females	2,140	4,304	10,888	27,516	36,650	43,339	51,143	15	24	46	96	115	119	125	

### Bankruptcy

Particulars of bankruptcy in each State to the end of 1927 were incorporated in issues of the Year Book before No. 23. On 1 August 1928 the first Bankruptcy Act of the Commonwealth came into operation. This Act as amended was repealed by the *Bankruptcy Act 1966* which came into operation on 4 March 1968.

Under the *Bankruptcy Act 1966* the Commonwealth is divided into nine Bankruptcy Districts, of which three are in Queensland, and the remainder coincide with the boundaries of the States and of the Northern Territory of Australia. The State of New South Wales and the Australian Capital Territory together constitute one district.

The Federal Court of Bankruptcy is invested with jurisdiction throughout Australia, but exercises it only in the Bankruptcy Districts of the State of New South Wales and the Australian Capital Territory, and the State of Victoria. Certain State Courts have been invested with federal jurisdiction in bankruptcy and, outside New South Wales and Victoria, exercise that jurisdiction in the appropriate Bankruptcy District. The Supreme Court of the Northern Territory has also been invested with federal jurisdiction in bankruptcy, but certain restrictions are placed on its powers unless the debtor or bankrupt resides or carries on business in the Territory.

Any debtor unable to pay his debts may present to a Registrar in Bankruptcy a petition against himself accompanied by a statement of his affairs. Upon their acceptance by the Registrar the debtor becomes a bankrupt. A creditor may apply for a compulsory sequestration if the debtor has committed an act of bankruptcy. The act of bankruptcy usually relied on is that the debtor has failed to comply with the requirements of a bankruptcy notice issued in respect of a debt due under a judgment or order, or to satisfy the Court that he has a counter-claim, set-off, or cross demand equal to or exceeding the debt and which he could not have set up in the proceedings in which the judgment or order was obtained. The prescribed form of bankruptcy notice requires the debtor, within a specified time, to pay the amount of the debt due under the judgment or order, secure payment of the debt, or compound the debt. If an act of bankruptcy is committed, a creditor may thereupon present a petition against a debtor, provided that the debt or debts amount to no less than \$500, the act of bankruptcy relied on has occurred within six months preceding the presentation of the petition, and the statutory requirements relating to presence or residence in Australia are applicable to the debtor.

When a debtor becomes bankrupt, either by acceptance of his own petition, or by the making of a sequestration order, the property of the bankrupt vests forthwith in The Official Receiver in Bankruptcy and after-acquired property of the bankrupt vests, as soon as it is acquired by the bankrupt, in the Official Receiver in Bankruptcy or, if a person other than an official receiver is trustee of the property of the bankrupt, in that trustee. The property of the bankrupt is divisible among his creditors in accordance with the provisions of the Act. No creditor may, in respect of a debt provable in bankruptcy, enforce any remedy against the person or property of the bankrupt, or, except with the leave of the Court, commence any legal proceeding or take any fresh step in such a proceeding.

Part X of the Act enables a debtor and his creditors to enter into arrangements without having a sequestration order made against him. These arrangements may take the form of a composition, a deed of assignment, or a deed of arrangement. A debtor who desires that his affairs be dealt with under this Part may authorise a solicitor or a registered trustee to call a meeting of his creditors.

The Court has power to decide questions of law affecting a bankrupt estate. Questions of fact may be tried before a jury.

The Act provides for an Inspector-General in Bankruptcy. It also provides for a Registrar in Bankruptcy to be appointed for each Bankruptcy District, and for so many Deputy Registrars in Bankruptcy as are necessary. Each Registrar and Deputy Registrar has such powers and functions as are conferred or imposed on a Registrar by the Act, and may exercise such of the powers and functions of an administrative nature exercisable by the Court as the Court directs or authorises him to exercise. He may examine a bankrupt, the spouse of a bankrupt, and a person indebted to a bankrupt or having in his possession any of the estate or effects of a bankrupt.

There is an official receiver for each District and the official receivers together constitute a body corporate known as 'The Official Receiver in Bankruptcy'. An official receiver is a permanent officer of the Commonwealth Public Service. His duties are to investigate the conduct, property and transactions of a bankrupt, and the cause of his bankruptcy, and to realise and administer the property of the bankrupt. In respect of these activities an official receiver is under the control of the Court.

A person registered by the Court as qualified to act as a trustee may be appointed by resolution of the creditors to be the trustee of the estate of a bankrupt. Until a trustee of the estate of a bankrupt is appointed by the creditors or the Court, or if a trustee is not so appointed, or there is, for any other reason, at any time no trustee so appointed, the official receiver for the District in which the sequestration order was made or the debtor's petition was presented is the trustee of the estate.

In cases where a vacancy occurs in the office of trustee under a deed of arrangement, a deed of assignment or a composition under Part X of the Act, a meeting of creditors or the Court may appoint a registered trustee to the vacant office. The Court may also appoint an official receiver or a registered trustee who is willing so to act as trustee until the vacant office is filled by a meeting of creditors.

### Bankruptcy proceedings

The following table shows the number of bankruptcies of the various types in each State, together with the assets and liabilities of the debtors, during 1966-67.

**BANKRUPTCY PROCEEDINGS: STATES AND TERRITORIES, 1966-67**

State or Territory		Sequestration orders and orders for administra- tion of deceased debtors' estates	Compositions and schemes under Part XI	Deeds under Part XI	Deeds of arrangement, Part XII	Total
N.S.W.(a)	Number	613	10	1	46	670
	Liabilities \$	4,632,686	202,219	9,952	912,799	5,757,656
	Assets \$	1,859,406	65,031	8,150	703,839	2,636,426
Vic.	Number	496	14	4	45	559
	Liabilities \$	7,105,633	1,019,418	70,231	961,229	9,156,511
	Assets \$	2,713,092	481,130	51,419	639,410	3,885,051
Qld	Number	242	5	..	15	262
	Liabilities \$	3,006,229	63,539	..	406,843	3,476,611
	Assets \$	1,253,291	42,494	..	187,014	1,482,799
S. Aust.	Number	664	23	7	..	694
	Liabilities \$	3,255,413	242,067	275,993	..	3,773,473
	Assets \$	1,436,239	187,352	136,102	..	1,759,693
W. Aust.	Number	195	74	6	2	277
	Liabilities \$	757,532	641,751	179,124	28,891	1,607,298
	Assets \$	180,809	507,285	112,630	12,060	812,784
Tas.	Number	69	1	..	..	70
	Liabilities \$	296,900	7,212	..	..	304,112
	Assets \$	165,091	9,843	..	..	174,934
N.T.	Number	5	..	..	..	5
	Liabilities \$	53,177	..	..	..	53,177
	Assets \$	77,510	..	..	..	77,510
Australia	Number	2,284	127	18	108	2,537
	Liabilities \$	19,107,570	2,176,206	535,300	2,309,762	24,128,838
	Assets \$	7,685,438	1,293,135	308,301	1,542,323	10,829,197

(a) Includes the Australian Capital Territory.

The two tables which follow show Australian figures in respect of each of the various types of bankruptcy, and State figures in respect of all types of bankruptcy, for the years 1962-63 to 1966-67.

### BANKRUPTCY PROCEEDINGS: AUSTRALIA, 1962-63 TO 1966-67

Year			<i>Sequestration orders and orders for administra- tion of deceased debtors' estates</i>	<i>Compositions and schemes under Part XI</i>	<i>Deeds under Part XI</i>	<i>Deeds of arrangement, Part XII</i>	Total
1962-63	Number	.	2,371	183	23	158	2,735
	Liabilities	\$'000	14,010	3,776	432	3,165	21,383
	Assets	\$'000	5,925	3,541	514	2,813	12,793
1963-64	Number	.	2,392	142	23	121	2,678
	Liabilities	\$'000	15,608	1,753	688	2,593	20,642
	Assets	\$'000	6,393	1,231	490	2,179	10,292
1964-65	Number	.	2,453	128	13	110	2,704
	Liabilities	\$'000	15,740	1,993	312	1,804	19,850
	Assets	\$'000	6,127	1,129	129	1,365	8,749
1965-66	Number	.	2,384	133	23	113	2,653
	Liabilities	\$'000	15,106	4,082	634	3,176	22,998
	Assets	\$'000	6,488	3,585	725	2,623	13,421
1966-67	Number	.	2,284	127	18	108	2,537
	Liabilities	\$'000	19,108	2,176	535	2,310	24,129
	Assets	\$'000	7,685	1,293	308	1,542	10,829

### BANKRUPTCY PROCEEDINGS: STATES AND TERRITORIES, 1962-63 TO 1966-67

Year			<i>N.S.W. (a)</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>Aust.</i>
1962-63	Number	.	872	625	258	617	241	119	3	2,735
	Liabilities	\$'000	7,405	5,579	2,240	2,920	2,371	844	24	21,383
	Assets	\$'000	3,945	3,363	1,425	1,586	2,141	333	1	12,793
1963-64	Number	.	772	631	271	629	241	128	6	2,678
	Liabilities	\$'000	7,774	5,993	1,800	3,291	1,142	545	97	20,642
	Assets	\$'000	3,192	2,647	1,609	2,009	509	264	61	10,292
1964-65	Number	.	798	613	255	633	308	96	1	2,704
	Liabilities	\$'000	5,937	6,343	2,041	3,507	1,610	405	6	19,850
	Assets	\$'000	2,829	2,088	1,165	1,879	598	190	..	8,749
1965-66	Number	.	818	594	262	592	277	106	4	2,653
	Liabilities	\$'000	6,633	7,223	2,115	3,144	3,231	624	28	22,998
	Assets	\$'000	3,713	4,125	1,175	1,709	2,470	222	8	13,421
1966-67	Number	.	670	559	262	694	277	70	5	2,537
	Liabilities	\$'000	5,758	9,157	3,477	3,773	1,607	304	53	24,129
	Assets	\$'000	2,636	3,885	1,483	1,760	813	175	78	10,829

(a) Includes the Australian Capital Territory.

### Police

The primary duties of the police are to prevent crime, to detect and detain offenders, to protect life and property, to enforce the law, and to maintain peace and good order. In addition, they perform many duties in the service of the State, e.g. they act as clerks of petty sessions in small centres, as crown land bailiffs, foresters, mining wardens, and inspectors under the fisheries and various other Acts. In metropolitan and large country areas they also regulate the street traffic. With the exception of the Commonwealth Police Force and the police in the Northern Territory and the Australian Capital Territory, the police forces of Australia are under the control of the State Governments, but their members perform certain functions for the Commonwealth Government, such as acting as aliens registration officers and policing various Commonwealth Acts and Regulations.

Women police perform special duties at places where young women and girls are subject to moral danger, control traffic at school crossings and lecture school children on road safety. They also assist male police as required in the performance of normal police duties.

The strength of the police force and the duties and ranks of the personnel involved in each State and Territory for 1967 are shown in the following table. Comparability between States is affected by differences in the classification of ranks and duties, and known differences between States are mentioned in footnotes.

Also included in the table are statistics of ancillary and civilian staff employed by police departments. Differences between States in the use of such staff are considerable. These differences arise, on the one hand, from differences in the extent to which police make use of such staff for police functions and, on the other hand, in the extent to which such staff are required to undertake additional functions (such as parking control) which are allocated to the police in varying degree between States. There is also some overlap between duties of ancillary and civilian staff as defined in footnotes (h) and (i) of the following table.

### POLICE FORCES AND ASSISTANT STAFFS: STATES AND TERRITORIES, 30 JUNE 1967

<i>Duty and rank(a)</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>
<b>POLICE FORCES</b>								
Criminal investigations, plain clothes police, scientific duties—								
Executive officers . . .	4	2	1	1	1	1	1	1
Inspectors . . .	18	14	11	3	5	4	7	1
Sergeants . . .	342	52	140	32	50	15	7	10
Constables(b) . . .	773	581	(k)309	193	119	73	18	16
Total, criminal investigations, etc. . .	1,137	649	460	229	174	93	25	27
Traffic duties—								
Executive officers . . .	3	2	1	1	1	1	1	1
Inspectors . . .	7	9	5	3	2	2	1	1
Sergeants . . .	140	16	33	13	13	6	1	7
Constables(b) . . .	804	374	(k)248	182	105	59	8	38
Total, traffic duties . . .	954	401	286	199	120	68	9	46
Other special and general duties—								
Executive officers . . .	23	22	5	1	1	1	1	1
Inspectors . . .	113	87	(e)57	31	30	30	2	5
Sergeants . . .	1,007	181	673	145	173	46	20	28
Constables(b) . . .	3,239	3,019	(k)1,410	1,010	792	377	88	103
Total, other special, etc. (f)4,382	3,309	2,140	1,191	(d)995	454	(f)110	(f)136	
Not allocated—								
Executive officers whose duties extend beyond one branch . . .	4	(g)3	(c)4	2	(g)3	5	(g)2	2
Police women . . .	70	61	20	42	20	12	5	4
Trainees and cadets . . .	218	154	146	396	63	13	..	..
Total, not allocated . . .	292	218	170	440	86	30	7	6
Total police force—								
Executive officers . . .	34	(g)29	(c)4	9	(g)3	8	(g)2	2
Inspectors . . .	138	110	73	37	37	36	2	7
Sergeants . . .	1,489	249	846	190	236	67	28	45
Constables(b) . . .	4,816	3,974	(k)1,967	1,385	1,016	509	114	157
Police women . . .	70	61	20	42	20	12	5	4
Trainees and cadets . . .	218	154	146	396	63	13	..	..
Total police force . . .	6,765	4,577	3,056	2,059	1,375	645	151	215

### ANCILLARY AND CIVILIAN STAFFS

Employed by Police Department—								
Ancillary staff(h)								
Full-time . . .	167	122	25	151	..	56	35	..
Part-time . . .	..	1	..	3	49	..	..	..
Civilian staff(i)								
Full-time . . .	(j) 581	583	268	77	156	73	14	28
Part-time . . .	..	65	21	7	28	..	..	1

For footnotes see next page.

**POLICE FORCES AND ASSISTANT STAFFS: STATES AND TERRITORIES, 30 JUNE 1967—**  
*continued*

<i>Duty and rank(a)</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>
<b>TOTAL STAFFS</b>								
<b>Grand total—</b>								
Full-time . . . . .	7,513	5,282	3,349	2,287	1,531	774	200	243
Part-time . . . . .	..	66	21	10	77	..	..	1

(a) Where more than one duty is involved, officers have been allocated to the category of duties in which the greater part of their time is spent. The allocation of executive officers and inspectors to categories of duties is necessarily somewhat arbitrary and varies from State to State. (b) Includes probationary constables. (c) Includes 1 commissioner's inspector and 1 chief inspector. (d) Includes officers engaged on motor vehicle examination and testing and licensing drivers. (e) Includes 39 sub-inspectors. (f) Does not include transport and maintenance; each section undertakes its own transport, and maintenance is done on contract and/or by the Government Transport Pool. (g) Includes 1 chief inspector. (h) Parking police, native trackers, wardresses, etc.; special constables in New South Wales and Tasmania; police reservists in Victoria. (i) Clerks, typists, artisans, cleaners. (j) Does not include cleaning which is done by the Cleaning Services Branch of the Government Stores Department. (k) Excludes probationary constables; included with trainees and cadets.

**POLICE FORCES: STATES AND TERRITORIES, 1963 TO 1967**

<i>30 June—</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
1963 . . . . .	5,798	4,291	2,798	1,752	1,193	629	137	115	16,713
1964 . . . . .	5,950	4,389	2,818	1,830	1,266	598	149	135	17,135
1965 . . . . .	6,121	4,466	2,810	1,926	1,306	633	155	165	17,582
1966 . . . . .	6,486	4,529	2,975	1,994	1,349	619	157	186	18,295
1967 . . . . .	6,765	4,577	3,056	2,059	1,375	645	151	215	18,843

**Commonwealth Police Force**

The Commonwealth Police Force commenced operations on 21 April 1960, and is the principal agency for the enforcement of the laws passed by the Commonwealth Parliament. It is also responsible for the protection of Commonwealth property and interests at various buildings and establishments under the control of the Commonwealth. This force co-ordinates the work of other Commonwealth investigation and law enforcement agencies and acts on behalf of the United Nations Organization for the suppressing of traffic in women and the suppression of obscene literature.

Under the control of the force is the Australian Police College at Manly, New South Wales, which provides training for officers of various police forces and other agencies in Australia and New Zealand. The force has its Head Office in Canberra and District Offices in each capital city. The strength of the force at 30 June 1967 was 673 policemen and 3 policewomen. At that date there were, in addition, 69 civilian employees.

**Prisons**

**Prisons and prison accommodation**

**PRISONS AND PRISON ACCOMMODATION: STATES AND NORTHERN TERRITORY, 1966**

	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>Aust.</i>
Prisons . . . . .	18	12	7	14	22	1	2	76
Accommodation . . . . .	3,100	2,252	1,158	1,065	1,240	404	111	9,330

There is no gaol in the Australian Capital Territory, but there is a lock-up attached to the police station at Canberra and another lock-up at Jervis Bay where offenders are held while awaiting trial or serving short sentences not exceeding one week imposed by a magistrate's court. Long-term prisoners from the Australian Capital Territory normally serve their sentences in New South Wales prisons.

## Convicted prisoners

## CONVICTED PRISONERS: STATES AND TERRITORIES, 1962 TO 1966

30 June—	N.S.W. (a)	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	Australia	
								Number	Per 10,000 of popu- lation
1962 . . .	3,051	1,844	846	701	708	207	58	7,415	6.9
1963 . . .	3,043	1,942	890	749	774	231	66	7,695	7.0
1964 . . .	3,090	1,981	801	726	825	232	74	7,729	6.9
1965 . . .	2,957	1,879	949	796	803	210	129	7,723	6.8
1966 . . .	3,140	1,872	995	818	863	259	107	8,054	6.9

(a) Includes Australian Capital Territory.

## Patents, trade marks and designs

## Patents

Patents for inventions are granted under the *Patents Act* 1952–1966, which applies to the Commonwealth of Australia and the Territories of Norfolk Island, Papua and New Guinea. The Act is administered by a Commissioner of Patents. The principal fees payable up to and including the grant of a patent amount to \$39. Renewal fees are payable as follows: \$10 before the expiration of the fourth year, and an amount progressively increasing by \$2 before the expiration of each succeeding year up to the final fee of \$32, payable before the expiration of the fifteenth year. An extension of time for six months for payment of a renewal fee may be obtained.

## PATENTS: AUSTRALIA, 1963 TO 1967

	1963	1964	1965	1966	1967
Applications . . . . .	13,051	14,134	15,150	16,007	15,733
Applications accompanied by provisional specifications . . . . .	3,557	3,603	3,783	3,853	3,708
Letters patent sealed . . . . .	5,361	5,456	7,277	6,140	6,356

## Trade marks and designs

Under the *Trade Marks Act* 1955–1966 the Commissioner of Patents is also Registrar of Trade Marks. Provision is made for the registration of users of trade marks and for their assignment with or without the goodwill of the business concerned. A new classification of goods was adopted in 1958, and trade marks registered under repealed Acts are reclassified on renewal. Under the *Designs Act* 1906–1967 the Commissioner of Patents is also Registrar of Designs.

## TRADE MARKS AND DESIGNS: AUSTRALIA, 1963 TO 1967

	1963	1964	1965	1966	1967
Trade marks—					
Received . . . . .	6,411	6,280	6,583	6,714	7,537
Registered . . . . .	4,224	3,606	3,256	3,272	5,333
Designs—					
Received . . . . .	1,425	1,572	1,567	1,523	1,627
Registered . . . . .	1,251	1,287	1,260	642	1,833



### Copyright

Copyright is regulated by the Commonwealth *Copyright Act* 1912-1966 wherein, subject to modifications relating to procedure and remedies, the British Copyright Act of 1911 has been adopted and scheduled to the Australian law. The Act is administered by the Commissioner of Patents.

Reciprocal protection of unpublished works was extended in 1918 to citizens of Australia and of the United States of America, under which copyright may be secured in the latter country by registration at the Library of Congress, Washington. The Commonwealth Government promulgated a further Order-in-Council which came into operation on 1 February 1923 and extended the provisions of the Copyright Act to the foreign countries of the Copyright Union, subject to the observance of the conditions contained therein.

#### COPYRIGHT: AUSTRALIA, 1963 TO 1967

	1963	1964	1965	1966	1967
Applications lodged . . . . .	1,265	1,360	1,438	1,291	1,387
Applications registered . . . . .	1,146	1,275	1,277	1,113	1,231

### Cost of administration of law and order

#### Expenditure by the States

The tables following show the net expenditure (i.e. gross expenditure less receipts from fees, fines, recoups for services rendered, etc.) from Consolidated Revenue in connection with the administration of justice, police and prisons. The figures exclude Loan Fund expenditure and expenditure on debt charges, pay-roll tax and superannuation payments. Because of differing legislative and administrative arrangements in the various States, the activities covered by the figures shown are not exactly the same in each State. Small differences also result from differing accounting practices. However, the figures shown for individual States are comparable from year to year.

#### STATE NET EXPENDITURE ON LAW AND ORDER, 1966-67

State	Net expenditure			Per head of population		
	Justice	Police	Prisons (a)	Justice	Police	Prisons
	\$'000	\$'000	\$'000	\$	\$	\$
New South Wales . . . . .	5,457	27,385	4,396	1.28	6.41	1.03
Victoria . . . . .	(b) -243	20,383	2,753	(b) -0.07	6.27	0.85
Queensland . . . . .	(b) -396	13,140	1,581	(b) -0.23	7.78	0.94
South Australia . . . . .	(b) -1,450	8,036	1,402	(b) -1.31	7.28	1.27
Western Australia . . . . .	302	5,518	1,042	0.35	6.40	1.21
Tasmania . . . . .	610	2,735	650	1.63	7.31	1.74
Total . . . . .	4,279	77,197	11,824	0.37	6.59	1.01

(a) Excludes expenditure on reformatories, which amounted to: N.S.W., \$2,268,926; Vic., n.a.; Qld, \$149,089; S.A., \$432,875; W.A., \$663,954; Tas., \$157,953. (b) Receipts for fines, legal fees and registrations exceed expenditure.

#### STATE NET EXPENDITURE ON LAW AND ORDER AUSTRALIA, 1962-63 TO 1966-67 (\$'000)

Year	Justice	Police	Prisons (a)
1962-63 . . . . .	5,845	55,450	8,248
1963-64 . . . . .	5,508	60,051	8,462
1964-65 . . . . .	5,549	64,338	10,633
1965-66 . . . . .	5,637	68,132	10,261
1966-67 . . . . .	4,279	77,197	11,824

(a) Excludes expenditure on reformatories, which amounted to: 1962-63, \$2,415,112; 1963-64, \$2,944,662; 1964-65, \$1,970,083; 1965-66, \$3,239,536; 1966-67, \$3,672,797. Expenditure on reformatories in Victoria is not included in these amounts.

**Commonwealth expenditure**

Since the functions of the Commonwealth Government in the administration of law and order differ considerably from those of the States, precise comparison between Commonwealth and State expenditure in this field is not possible. The following tables show expenditure by the Commonwealth Government on the services it performs in relation to law and order.

**COMMONWEALTH EXPENDITURE ON LAW AND ORDER, 1966-67**  
(\$'000)

	<i>Gross expenditure</i>	<i>Receipts</i>	<i>Net expenditure</i>
<b>Justice—</b>			
Administration . . . . .	1,419	549	871
Bankruptcy . . . . .	825	506	319
Crown Solicitor's Office . . . . .	1,512	..	1,512
High Court . . . . .	281	..	281
Judges' salaries and pensions . . . . .	232	..	232
Rent . . . . .	404	..	404
Court reporting . . . . .	559	231	328
Territory courts . . . . .	554	339	215
Repairs and maintenance . . . . .	93	..	93
<i>Total, justice</i> . . . . .	<i>5,879</i>	<i>1,624</i>	<i>4,254</i>
<b>Police—</b>			
Commonwealth Police Force . . . . .	3,273	..	3,273
Australian Police College . . . . .	85	..	85
Australian Security and Intelligence Organization . . . . .	2,565	..	2,565
Northern Territory Police . . . . .	921	..	921
Australian Capital Territory Police . . . . .	1,174	..	1,174
<i>Total, police</i> . . . . .	<i>8,018</i>	<i>..</i>	<i>8,018</i>
<b>Prisons—</b>			
Northern Territory prisons . . . . .	226	..	226
<i>Total, prisons</i> . . . . .	<i>226</i>	<i>..</i>	<i>226</i>
<b>Total, law and order</b> . . . . .	<b>14,123</b>	<b>1,624</b>	<b>12,499</b>

**COMMONWEALTH EXPENDITURE ON LAW AND ORDER**  
**1962-63 TO 1966-67**  
(\$'000)

<i>Year</i>	<i>Gross expenditure</i>	<i>Receipts</i>	<i>Net expenditure</i>
1962-63 . . . . .	7,150	946	6,203
1963-64 . . . . .	8,280	1,220	7,061
1964-65 . . . . .	9,342	1,236	8,106
1965-66 . . . . .	10,363	1,529	8,834
1966-67 . . . . .	14,123	1,624	12,499



## CHAPTER 17

# NATIONAL ACCOUNTS

## NATIONAL INCOME AND EXPENDITURE

National accounting aims at providing a systematic summary of the transactions taking place in the economy, especially of those that relate to the production and use of goods and services, and to transfers of income or capital between sectors of the economy.

Estimates of national income and expenditure have been compiled by the Bureau since 1944-45 and have been published annually as papers entitled *National Income and Expenditure* accompanying the Commonwealth Budgets. Detailed annual estimates of national income and expenditure on a revised basis were published in *Australian National Accounts, National Income and Expenditure, 1953-54 to 1966-67*. Preliminary estimates for 1966-67 were published in a Budget Paper. Quarterly estimates are published in *Quarterly Estimates of National Income and Expenditure*.

The figures shown on pages 621-8 are as published in *Australian National Accounts, National Income and Expenditure, 1953-54 to 1966-67*.

### Description of the National Accounts

A brief description of the conceptual basis of national accounts is given in this section, but for a more detailed treatment of the concepts and structure of the Australian National Accounts reference should be made to *Australian National Accounts, National Income and Expenditure, 1953-54 to 1966-67* or to Year Book No. 50, pages 1253-68.

#### Definition and relationship of the concepts of product, income and expenditure

The main concepts of product, income and expenditure in the Australian National Accounts are defined and expressed in equivalents as follows.

*Gross national expenditure* is the total expenditure within a given period on final goods and services (i.e. excluding goods and services produced or imported and used up in the process of further production) bought for use in the Australian economy. It is equivalent to gross national product, plus imports of goods and services, less exports of goods and services.

*National turnover of goods and services* is the total flow of final goods and services within a given period in the Australian economy as a whole (i.e. excluding goods and services produced or imported and used up in the process of further production) derived from production in Australia and imports. This value is equivalent to gross national product plus imports of goods and services or, alternatively, to gross national expenditure plus exports of goods and services.

*Gross national product* is the total market value of goods and services produced in Australia within a given period after deduction of the cost of goods and services, other than capital equipment, used in the process of production. Thus gross national product, as here defined, is 'at market prices'. It is equivalent to gross national expenditure, plus exports of goods and services, less imports of goods and services.

*Gross national product at factor cost* is that part of the cost of producing the gross national product which consists of gross payments to factors of production (labour, land, capital, and enterprise). It represents the value added by these factors in the process of production and is equivalent to gross national product, less indirect taxes, plus subsidies. *Gross farm product at factor cost* is that part of gross national product at factor cost arising from production in rural industries (excluding forestry). *Gross non-farm product at factor cost* arises from production in all other industries.

*Net national product* is the part of the value added within a given period by factors of production (labour, land, capital, and enterprise) which accrues as income to their suppliers after allowing for the depreciation of capital equipment. It is equivalent to gross national product at factor cost less allowance for depreciation.

*National income* is the net income accruing within a given period to Australian residents from their services in supplying factors of production (labour, land, capital, and enterprise), in Australia or overseas. It is equivalent to net national product, plus income receivable from overseas, less income payable overseas.

*Personal income* is the total income, whether in cash or kind, received by persons normally resident in Australia. It includes both income received in return for productive activity (such as wages, salaries and supplements, incomes of unincorporated enterprises, etc.) and transfer incomes (such as cash, social service benefits, interest, etc.). Personal income also includes any property income received by non-taxable organisations such as private schools, churches, charitable organisations, etc. However, it excludes any income which might be said to accrue to persons in the form of undistributed company income and retained investment income of life insurance, etc., funds.

#### Framework of accounts and sectors

In the accounts shown in Tables 1 to 7 four internal sectors are distinguished—persons, public authorities, financial enterprises, and trading enterprises. In addition, there is an overseas sector which shows a summary of the transactions into which overseas governments, persons and businesses enter with Australian residents. All the sectors (except the overseas sector) engage in productive activity, but in the tables a national production account for the whole economy is shown instead of separate accounts for each sector. Similarly, the tables show only a national capital account for the economy, but a current (or income appropriation) account is shown for each sector. The system of accounts as thus envisaged is a completely articulated system in that a credit in any account must be matched with a corresponding debit in some other account—or in the same account if a complete consolidation of the transactions appropriate to that account has not been carried through.

The framework of sectors and accounts underlying the form of social accounts shown in this Year Book is set out in the following diagram. As stated in the previous paragraph, each sector could be envisaged as having separate production, appropriation and capital accounts, but in the tables compiled for Australia the production and capital accounts have been combined. In the diagram the solid rectangles depict the actual form of the tables, and the remaining rectangles show the full amount of detail which would be needed to provide a complete articulation of the accounts. The appropriate number of each table on pages 621–5 is shown on the left of the diagram.

#### ARTICULATION OF AUSTRALIAN NATIONAL ACCOUNTS

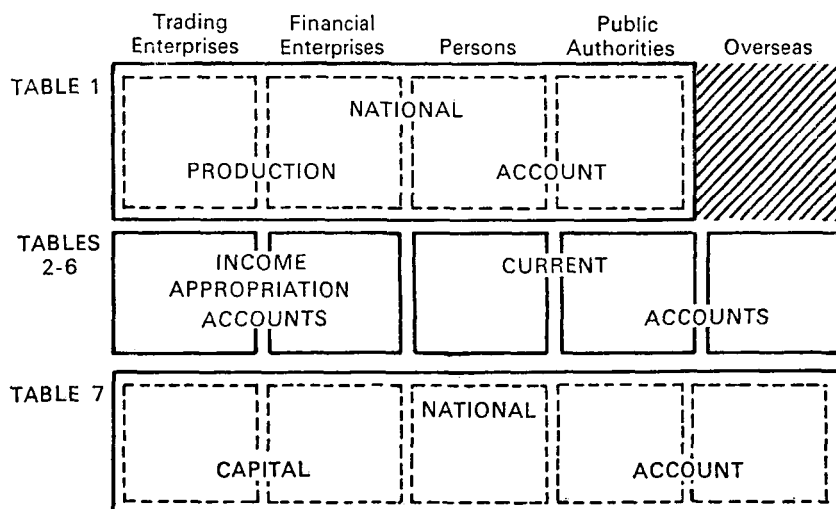


PLATE 45

### Description of the accounts

The *national production account* is a consolidation of the production accounts of each sector. The production account is shown as receiving revenue from the sale of goods and services to final buyers; all intermediate goods and services are cancelled out, since they represent a cost to one producer to offset the revenue of the other. On the payments side are shown the payments of indirect taxes, and, since the account is presented from the point of view of the producing unit, the wages and salaries paid to employees. The balance is the gross operating surplus which is carried to the trading enterprises income appropriation account.

The *trading enterprises income appropriation account* is shown as receiving the gross operating surpluses from the national production account, and dividends, non-dwelling rent and interest from other sectors. The allocation of this total to depreciation allowances and to various transfer payments (taxes, dividends, interests, etc.) is shown on the appropriation side. All net income of unincorporated enterprises is treated as being transferred to persons. Any income of trading companies not distributed but retained for use in the business is shown as undistributed income and transferred to the national capital account either directly or by way of the overseas current account (when it accrues to non-residents).

The *financial enterprises income appropriation account* is in the main similar to the preceding account. There is, however, no operating surplus, as property income (which is treated as transfer income, not as income of factors of production) is the sole receipt.

The *personal current account* records all receipts on current account whether of factor incomes (wages and salaries) or transfer incomes (interest, etc., dividends, net business incomes, cash benefits from public authorities, and remittances from overseas). On the payments side are shown current payments for goods and services and transfer payments (taxes, interest, etc., remittances to overseas). The balance is transferred to the national capital account under the heading of personal saving.

The *public authorities current account* reflects a distinction between current and capital expenditure, which is necessarily arbitrary in some measure and has been made on the basis of excluding from the current account expenditure on public works and increase in stocks. Expenditure on public works is taken to include new buildings, construction, plant and machinery, and any replacement of assets charged to loan funds or capital works votes. It includes capital expenditure of public enterprises, including replacements of assets charged to depreciation reserves but not those charged directly to working expenses. It includes all expenditure on roads for which a satisfactory distinction between new works and maintenance cannot be made, but excludes all defence expenditure, which is included in the current account.

The income of public enterprises shown in this account is derived by deducting from their operating surplus any depreciation shown by these enterprises in their published accounts, except in the case of enterprises (e.g. railways and Postmaster-General's Department) whose accounts are included in the Commonwealth or State budgets and are for the present analysed on the basis of these cash accounts in which depreciation is not deducted. The depreciation allowances set aside by the enterprises whose accounts are not included in Commonwealth or State budgets are shown in the capital account. As in the case of persons, all overseas gifts are included in the current account. These include gifts for international relief, technical assistance, etc., grants, and other expenditure in connection with the administration of Papua and New Guinea.

The *overseas current account* records all transactions of a current nature between Australian and overseas residents. It should be emphasised that this account is shown here from the point of view of overseas residents, i.e. receipts from Australia are shown as credits, and payments to Australia as debits. Australians temporarily overseas are regarded as residents, and visitors to Australia as non-residents.

Capital transactions of the four domestic sectors and the net deficit on current account with overseas are shown in the *national capital account*. On the receipts side are shown the savings of the various sectors—saving by enterprises, personal saving, the retained investment income of insurance funds, and the public authority surplus on current account. Net apparent capital inflow from overseas and withdrawal from monetary reserves are also reflected in the item 'overseas balance on current account'. On the payments side are shown the purchases by all sectors of new buildings and capital equipment and the increase in the value of stocks. The private component of capital expenditure includes new dwellings and major alterations to dwellings and expenditure of a capital nature by private non-profit institutions (churches, schools, clubs, etc.) but excludes motor vehicles for personal use and other durable consumer goods, which are included in personal consumption expenditure.

### Estimates at constant prices

For certain types of economic analysis it is useful to examine estimates of the principal flows of goods and services in the economy revalued in such a way as to remove the direct effects of changes in their prices which have occurred over the period under review. Such estimates, conventionally described as 'at constant prices', are presented in Table 8 for gross national product, gross national expenditure, and the principal components of the latter.

Constant price estimates amount to an attempt to express every component item of expenditure as the product of a price and a quantity, instead of only as a value, and to substitute for the actual current prices the prices that ruled in the chosen base year. Such estimates can be made only on the basis of approximations and assumptions, and this should be borne in mind in the interpretation and use of the results.

Gross national product is equivalent to gross national expenditure, plus exports of goods and services, less imports of goods and services. This relationship has been used in deriving the estimates of gross national product at constant prices shown in Table 8.

For a considerable part of personal consumption expenditure, exports, and imports, it is possible to identify specific units of quantity and price and to revalue the quantities at base year prices. Where it is not possible to express the values in successive years as the product of prices and homogeneous units of quantity, the treatment generally adopted is to divide values by appropriate price indexes.

For gross fixed capital expenditure, some components are revalued by means of appropriate price or volume indexes; but where homogeneous or standard units of quantity do not exist, the values are divided by indexes of prices of labour and materials. This latter method of revaluation is also applied to current expenditure by financial enterprises and public authorities. The resulting estimates have considerable limitations for many uses, for example in studies of productivity.

The information available on which to base an estimate of changes in stocks at constant prices is very limited, and hence any estimate made is subject to an appreciable margin of error. The method used involves an adjustment for stock revaluation, arising out of the replacement during the year of opening stocks with equivalent new stocks at different prices, or because of the practice of revaluing stocks at the end of the period.

Part I of *Australian National Accounts, National Income and Expenditure, 1953-54 to 1966-67* contains a fuller discussion of the conceptual problems involved in making these estimates, and Appendix B of that publication contains a brief account of the sources and methods used in preparing the estimates.

### Reliability and future revisions

Estimates of national income and expenditure are necessarily prepared from a very wide range of information, some of which is available quickly, some of it with a delay of several years after the period to which it relates. Some of it is closely related to the desired national income concepts, while some of it is not completely satisfactory in various aspects, including coverage, concepts and timing. Estimates, in particular for the most recent years, are therefore subject to revision.

This applies especially to estimates based on income tax statistics—income of companies, non-farm unincorporated enterprises, depreciation, and part of gross private fixed investment—which are subject to substantial revisions for the last two years, as tabulations of income tax statistics do not become available until about twenty-two months after the end of each financial year.

It is not possible to put precise limits on the degree of revision likely in any particular series, nor to state degrees of reliability in a statistical sense. These depend in large part on the range and quality of the basic statistical data. For illustrations of common causes of revisions reference should be made to *Australian National Accounts, National Income and Expenditure, 1953-54 to 1966-67*.

## National accounts and tables

Items in tables 1 to 7 are consecutively numbered from 1 to 28, with or without the addition of a letter, and this system is used to identify the corresponding credit and debit entries in the accounts and as a key to the notes on pages 629–32. In some cases the items correspond exactly, while in other cases an entry in one table is the sum of two or more entries in other tables; here the total is given a number, and the components have a number and a letter. In the remaining type of case all entries are given the same number and a distinguishing letter, because in this group one item is not the sum of one or more entries. The relationship between these items can still be traced through because the sum of all credit entries must equal the sum of all debit entries.

TABLE 1  
NATIONAL PRODUCTION ACCOUNT  
(\$ million)

	1962-63	1963-64	1964-65	1965-66	1966-67
1 Wages, salaries, and supplements . . . . .	8,064	8,792	9,812	10,582	11,509
Gross operating surplus of trading enterprises—					
2a Companies . . . . .	2,237	2,540	2,887	2,987	3,249
2b Unincorporated enterprises . . . . .	2,996	3,477	3,563	3,463	3,888
2c Dwellings owned by persons . . . . .	729	817	890	959	1,044
2d Public enterprises . . . . .	489	564	621	657	700
Gross national product at factor cost . . . . .	14,515	16,190	17,773	18,648	20,390
3 Indirect taxes less subsidies . . . . .	1,719	1,831	2,065	2,238	2,392
Gross national product . . . . .	16,234	18,021	19,838	20,886	22,782
4 Imports of goods and services . . . . .	2,616	2,864	3,478	3,627	3,690
National turnover of goods and services . . . . .	18,850	20,885	23,316	24,513	26,472
Net current expenditure on goods and services—					
5 Personal consumption . . . . .	10,281	11,077	11,943	12,621	13,504
6 Financial enterprises . . . . .	207	233	255	283	317
7 Public authorities . . . . .	1,626	1,778	2,041	2,373	2,684
Gross fixed capital expenditure—					
8 Private . . . . .	2,531	2,884	3,371	3,685	3,692
9 Public enterprises . . . . .	778	847	993	1,099	1,204
10 Public authorities . . . . .	638	719	806	880	926
11 Increase in value of stocks . . . . .	319	147	681	201	451
12 Statistical discrepancy . . . . .	—21	39	178	234	219
Gross national expenditure . . . . .	16,359	17,724	20,268	21,376	22,997
13 Exports of goods and services . . . . .	2,491	3,161	3,048	3,137	3,475
National turnover of goods and services . . . . .	18,850	20,885	23,316	24,513	26,472
Gross national product at factor cost—					
Farm . . . . .	1,796	2,153	2,070	1,844	2,160
Non-farm . . . . .	12,719	14,037	15,703	16,804	18,230
Total . . . . .	14,515	16,190	17,773	18,648	20,390



TABLE 2  
TRADING ENTERPRISES INCOME APPROPRIATION ACCOUNT  
(\$ million)

		1962-63	1963-64	1964-65	1965-66	1966-67
2	Gross operating surplus . . . . .	6,451	7,398	7,961	8,066	8,881
15b, 17b	Interest, etc., and dividends received . . . . .	111	124	132	139	154
18b	Undistributed income accruing from overseas . . . . .	9	14	19	18	17
	<i>Total receipts</i> . . . . .	6,571	7,536	8,112	8,223	9,052
14a	Depreciation allowances . . . . .	1,255	1,418	1,559	1,710	1,871
15a	Interest, etc., paid . . . . .	655	724	840	953	1,052
	Company income—					
16a	Income tax payable . . . . .	584	683	749	750	
17a	Dividends payable . . . . .	492	512	522	524	
18a	Undistributed income . . . . .	491	595	752	730	
	<i>Total company income</i> . . . . .	1,567	1,790	2,023	2,004	2,152
19	Unincorporated enterprises income . . . . .	2,319	2,729	2,743	2,567	2,922
20	Personal income from dwelling rent . . . . .	410	462	494	521	558
21a	Public enterprises income . . . . .	365	413	453	468	497
	<i>Total outlay</i> . . . . .	6,571	7,536	8,112	8,223	9,052

TABLE 3  
FINANCIAL ENTERPRISES INCOME APPROPRIATION ACCOUNT  
(\$ million)

		1962-63	1963-64	1964-65	1965-66	1966-67
15d	Interest, etc., received . . . . .	891	1,002	1,134	1,249	1,371
17d, 18d	Dividends received and undistributed income accruing from overseas . . . . .	22	27	31	34	36
	<i>Total receipts</i> . . . . .	913	1,029	1,165	1,283	1,407
14b	Depreciation allowances . . . . .	13	15	19	25	29
6	Net current expenditure on goods and services . . . . .	207	233	255	283	317
15c	Interest paid . . . . .	290	319	381	433	476
	Company income—					
16b	Income tax payable . . . . .	43	50	52	54	
17c	Dividends payable . . . . .	40	42	41	45	
18c	Undistributed income . . . . .	10	21	26	24	
	<i>Total company income</i> . . . . .	93	113	119	123	139
21b	Public enterprises income . . . . .	95	107	127	124	130
22	Retained investment income of life insurance funds, etc. . . . .	215	242	264	295	316
	<i>Total outlay</i> . . . . .	913	1,029	1,165	1,283	1,407

TABLE 4  
PERSONAL CURRENT ACCOUNT  
(\$ million)

	1962-63	1963-64	1964-65	1965-66	1966-67
1 Wages, salaries and supplements . . . . .	8,064	8,792	9,812	10,582	11,509
15f Interest, etc., received . . . . .	409	434	500	566	616
17e Dividends . . . . .	352	383	377	366	388
19a Unincorporated enterprises—Farm . . . . .	1,106	1,390	1,283	1,019	1,282
19b Other . . . . .	1,213	1,339	1,460	1,548	1,640
20 Income from dwelling rent . . . . .	410	462	494	521	558
23b Remittances from overseas . . . . .	70	104	115	121	133
25 Cash benefits from public authorities . . . . .	951	1,045	1,098	1,178	1,271
<i>Total receipts . . . . .</i>	<i>12,575</i>	<i>13,949</i>	<i>15,139</i>	<i>15,901</i>	<i>17,397</i>
5 Personal consumption expenditure . . . . .	10,281	11,077	11,943	12,621	13,504
15e Interest paid . . . . .	138	167	181	188	197
16c Income tax payable . . . . .	1,088	1,272	1,497	1,650	1,869
16d Estate and gift duties . . . . .	122	137	140	137	154
23a Remittances overseas . . . . .	54	62	66	74	78
24 Saving . . . . .	892	1,234	1,312	1,231	1,595
<i>Total outlay . . . . .</i>	<i>12,575</i>	<i>13,949</i>	<i>15,139</i>	<i>15,901</i>	<i>17,397</i>

TABLE 5  
PUBLIC AUTHORITIES CURRENT ACCOUNT  
(\$ million)

	1962-63	1963-64	1964-65	1965-66	1966-67
3a Indirect taxes . . . . .	1,798	1,941	2,161	2,377	2,551
16e Income tax, estate and gift duties received . . . . .	1,740	2,009	2,431	2,681	2,879
15h Interest, etc., received . . . . .	71	80	103	112	115
21 Public enterprises income . . . . .	460	520	580	592	627
<i>Total receipts . . . . .</i>	<i>4,069</i>	<i>4,550</i>	<i>5,275</i>	<i>5,762</i>	<i>6,172</i>
7 Net current expenditure on goods and services . . . . .	1,626	1,778	2,041	2,373	2,684
3d Subsidies . . . . .	79	110	96	139	159
15g Interest, etc., paid . . . . .	437	471	505	541	579
23c Overseas grants . . . . .	73	87	107	128	152
25 Cash benefits to persons . . . . .	951	1,045	1,098	1,178	1,271
26 Grants towards private capital expenditure . . . . .	10	10	30	56	54
27 Surplus on current account . . . . .	893	1,049	1,398	1,347	1,273
<i>Total outlay . . . . .</i>	<i>4,069</i>	<i>4,550</i>	<i>5,275</i>	<i>5,762</i>	<i>6,172</i>

TABLE 6  
OVERSEAS CURRENT ACCOUNT  
(\$ million)

		1962-63	1963-64	1964-65	1965-66	1966-67
4a	Imports f.o.b. . . . .	2,065	2,237	2,739	2,822	2,843
4b	Transportation . . . . .	370	417	488	520	535
4c	Travel . . . . .	90	102	114	122	133
4d	Government transactions . . . . .	37	42	51	66	82
4e	Other goods and services . . . . .	54	66	86	97	97
4	Total imports of goods and services . . . . .	2,616	2,864	3,478	3,627	3,690
15j, 17g	Interest, etc., paid and dividends payable and profits remitted overseas . . . . .	253	263	292	310	353
18f	Undistributed income accruing to overseas residents . . . . .	106	133	120	115	110
23a	Personal remittances overseas . . . . .	54	62	66	74	78
23c	Public authority grants . . . . .	73	87	107	128	152
	Total credits to non-residents . . . . .	3,102	3,409	4,063	4,254	4,383
13a	Exports f.o.b. . . . .	2,121	2,730	2,574	2,626	2,937
13b	Transportation . . . . .	220	254	279	295	313
13c	Travel . . . . .	35	43	54	58	64
13d	Government transactions . . . . .	47	62	59	77	83
13e	Other goods and services . . . . .	68	72	82	81	78
13	Total exports of goods and services . . . . .	2,491	3,161	3,048	3,137	3,475
15i, 17f	Interest, etc., received and dividends receivable from overseas . . . . .	67	80	100	96	110
18e	Undistributed income accruing from overseas . . . . .	9	14	19	18	17
23b	Personal remittances from overseas . . . . .	70	104	115	121	133
28	Overseas balance on current account . . . . .	465	50	781	882	648
	Total debits to non-residents . . . . .	3,102	3,409	4,063	4,254	4,383

TABLE 7  
NATIONAL CAPITAL ACCOUNT  
(\$ million)

		1962-63	1963-64	1964-65	1965-66	1966-67
14	Depreciation allowances . . . . .	1,268	1,433	1,578	1,735	1,900
16f, 17h	Increase in dividend and income tax provisions	107	135	8	-86	28
18g	Undistributed company income accruing to residents . . . . .	395	483	658	639	678
22	Retained investment income of life insurance funds, etc. . . . .	215	242	264	295	316
24	Personal saving . . . . .	892	1,234	1,312	1,231	1,595
26	Public authority grants towards private capital expenditure . . . . .	10	10	30	56	54
27	Public authorities surplus on current account	893	1,049	1,398	1,347	1,273
	Overseas balance on current account—					
28a	Withdrawal from overseas monetary reserves(a) . . . . .	-151	-447	296	-61	120
28b	Net apparent capital inflow . . . . .	616	497	485	943	528
	<i>Total capital funds accruing</i> . . . . .	<i>4,245</i>	<i>4,636</i>	<i>6,029</i>	<i>6,099</i>	<i>6,492</i>
	Gross fixed capital expenditure—					
8a	Private—Dwellings . . . . .	643	754	890	887	957
8b	Other new building . . . . .	521	572	626	748	715
8c	All other . . . . .	1,367	1,558	1,855	2,050	2,020
9	Public enterprises . . . . .	778	847	993	1,099	1,204
10	Public authorities . . . . .	638	719	806	880	926
	<i>Total gross fixed capital expenditure</i> . . . . .	<i>3,947</i>	<i>4,450</i>	<i>5,170</i>	<i>5,664</i>	<i>5,822</i>
11a	Increase in value of stocks—Farm . . . . .	88	-26	107	-81	181
11b	Other . . . . .	231	173	574	282	270
	<i>Total use of funds</i> . . . . .	<i>4,266</i>	<i>4,597</i>	<i>5,851</i>	<i>5,865</i>	<i>6,273</i>
12	Statistical discrepancy . . . . .	-21	39	178	234	219
	<i>Total capital funds accruing</i> . . . . .	<i>4,245</i>	<i>4,636</i>	<i>6,029</i>	<i>6,099</i>	<i>6,492</i>

(a) Minus sign (—) indicates an addition to reserves.

TABLE 8  
VALUE OF MAIN AGGREGATES AT CURRENT AND AVERAGE 1959-60 PRICES  
(\$ million)

	1962-63	1963-64	1964-65	1965-66	1966-67
AT CURRENT PRICES					
Personal consumption expenditure . . . . .	10,281	11,077	11,943	12,621	13,504
Current expenditure by financial enterprises and public authorities . . . . .	1,833	2,011	2,296	2,656	3,001
Gross fixed capital expenditure—					
Public . . . . .	1,416	1,566	1,799	1,979	2,130
Private—Dwellings . . . . .	643	754	890	887	957
Other . . . . .	1,888	2,130	2,481	2,798	2,735
Increase in value of stocks . . . . .	319	147	681	201	451
Statistical discrepancy . . . . .	-21	39	178	234	219
Total gross national expenditure . . . . .	16,359	17,724	20,268	21,376	22,997
Gross national expenditure after stock valuation adjustment . . . . .	16,273	17,603	20,098	21,174	22,724
Plus Exports of goods and services . . . . .	2,491	3,161	3,048	3,137	3,475
Less Imports of goods and services . . . . .	2,616	2,864	3,478	3,627	3,690
Gross national product after stock valuation adjustment . . . . .	16,148	17,900	19,668	20,684	22,509
AT AVERAGE 1959-60 PRICES(a)					
Personal consumption expenditure . . . . .	9,773	10,346	10,818	11,083	11,536
Current expenditure by financial enterprises and public authorities . . . . .	1,697	1,761	1,918	2,157	2,295
Gross fixed capital expenditure—					
Public . . . . .	1,294	1,387	1,545	1,645	1,689
Private—Dwellings . . . . .	619	712	817	789	828
Other . . . . .	1,834	2,050	2,320	2,546	2,429
Statistical discrepancy . . . . .	-20	36	160	204	184
Gross national expenditure after stock valuation adjustment . . . . .	15,424	16,312	18,049	18,416	19,127
Plus Exports of goods and services . . . . .	2,531	2,929	2,928	2,967	3,334
Less Imports of goods and services . . . . .	2,733	2,971	3,509	3,644	3,685
Gross national product after stock valuation adjustment . . . . .	15,222	16,270	17,468	17,739	18,776

(a) See page 620.

TABLE 9  
RELATIONSHIP OF MAIN AGGREGATES  
(\$ million)

	1962-63	1963-64	1964-65	1965-66	1966-67
Net current expenditure on goods and services . . . . .	12,114	13,088	14,239	15,277	16,505
Gross fixed capital expenditure . . . . .	3,947	4,450	5,170	5,664	5,822
Increase in value of stocks . . . . .	319	147	681	201	451
Statistical discrepancy . . . . .	-21	39	178	234	219
<b>Gross national expenditure . . . . .</b>	<b>16,359</b>	<b>17,724</b>	<b>20,268</b>	<b>21,376</b>	<b>22,997</b>
<i>Plus</i> Exports of goods and services . . . . .	2,491	3,161	3,048	3,137	3,475
<b>National turnover of goods and services . . . . .</b>	<b>18,850</b>	<b>20,885</b>	<b>23,316</b>	<b>24,513</b>	<b>26,472</b>
<i>Less</i> Imports of goods and services . . . . .	2,616	2,864	3,478	3,627	3,690
<b>Gross national product . . . . .</b>	<b>16,234</b>	<b>18,021</b>	<b>19,838</b>	<b>20,886</b>	<b>22,782</b>
<i>Less</i> Indirect taxes <i>less</i> subsidies . . . . .	1,719	1,831	2,065	2,238	2,392
<b>Gross national product at factor cost . . . . .</b>	<b>14,515</b>	<b>16,190</b>	<b>17,773</b>	<b>18,648</b>	<b>20,390</b>
<i>Less</i> Depreciation allowances of trading enterprises . . . . .	1,255	1,418	1,559	1,710	1,871
<b>Net national product . . . . .</b>	<b>13,260</b>	<b>14,772</b>	<b>16,214</b>	<b>16,938</b>	<b>18,519</b>
<i>Less</i> Net income payable overseas . . . . .	283	302	293	311	336
<b>National income . . . . .</b>	<b>12,977</b>	<b>14,470</b>	<b>15,921</b>	<b>16,627</b>	<b>18,183</b>
<i>Plus</i> Net income payable overseas . . . . .	283	302	293	311	336
<b>Net national product . . . . .</b>	<b>13,260</b>	<b>14,772</b>	<b>16,214</b>	<b>16,938</b>	<b>18,519</b>
<i>Less</i> Net operating surplus of companies and public enterprises . . . . .	2,084	2,367	2,689	2,735	2,944
<i>Less</i> Interest, etc. paid by unincorporated enterprises and dwellings owned by persons . . . . .	383	422	476	533	586
<i>Plus</i> Interest received by persons . . . . .	409	434	500	566	616
Dividends received by persons . . . . .	352	383	377	366	388
Cash benefits to persons . . . . .	951	1,045	1,098	1,178	1,271
Remittances from overseas . . . . .	70	104	115	121	133
<b>Personal income . . . . .</b>	<b>12,575</b>	<b>13,949</b>	<b>15,139</b>	<b>15,901</b>	<b>17,397</b>
<i>Less</i> Income tax payable and estate and gift duties . . . . .	1,210	1,409	1,637	1,787	2,023
<b>Personal disposable income . . . . .</b>	<b>11,365</b>	<b>12,540</b>	<b>13,502</b>	<b>14,114</b>	<b>15,374</b>

TABLE 10  
MAIN AGGREGATES AT CURRENT PRICES, 1948-49 TO 1966-67  
(\$ million)

Year	1	2	3	4	5	6 (1 to 6)	7
	<i>Personal Consump- tion</i>	<i>Net current expenditure on goods and services by public authorities and financial enterprises</i>	<i>Private gross fixed capital expenditure</i>	<i>Public gross fixed capital expenditure</i>	<i>Increase in value of stocks</i>	<i>Statistical discrepancy</i>	<i>Gross national expenditure</i>
1948-49 . . .	2,994	393	498	283	148	-12	4,304
1949-50 . . .	3,446	468	644	399	315	34	5,306
1950-51 . . .	4,186	634	920	576	531	-40	6,807
1951-52 . . .	4,987	868	1,127	793	775	87	8,637
1952-53 . . .	5,294	997	1,136	775	-181	-211	7,810
1953-54 . . .	5,811	954	1,309	798	42	-79	8,835
1954-55 . . .	6,319	1,027	1,470	848	278	84	10,026
1955-56 . . .	6,786	1,151	1,624	903	345	-22	10,787
1956-57 . . .	7,252	1,204	1,689	934	49	-118	11,010
1957-58 . . .	7,611	1,245	1,838	977	2	3	11,676
1958-59 . . .	8,011	1,361	1,895	1,075	332	-90	12,584
1959-60 . . .	8,781	1,489	2,160	1,169	236	136	13,971
1960-61 . . .	9,302	1,594	2,381	1,203	521	72	15,073
1961-62 . . .	9,591	1,726	2,295	1,343	-205	-59	14,691
1962-63 . . .	10,281	1,833	2,531	1,416	319	-21	16,359
1963-64 . . .	11,077	2,011	2,884	1,566	147	39	17,724
1964-65 . . .	11,943	2,296	3,371	1,799	681	178	20,268
1965-66 . . .	12,621	2,656	3,685	1,979	201	234	21,376
1966-67 . . .	13,504	3,001	3,692	2,130	451	219	22,997

Year	8	9	10 (7+8-9)	11	12	13	14
	<i>Exports of goods and services</i>	<i>Imports of goods and services</i>	<i>Gross national product</i>	<i>National income</i>	<i>Personal income</i>	<i>Wages, salaries and supple- ments</i>	<i>Net income payable overseas</i>
1948-49 . . .	1,146	979	4,471	3,735	3,742	2,169	81
1949-50 . . .	1,307	1,260	5,353	4,407	4,421	2,467	102
1950-51 . . .	2,092	1,726	7,173	6,056	6,050	3,103	120
1951-52 . . .	1,486	2,437	7,686	6,402	6,319	3,921	126
1952-53 . . .	1,855	1,312	8,353	7,032	6,996	4,238	119
1953-54 . . .	1,793	1,601	9,027	7,473	7,270	4,512	159
1954-55 . . .	1,707	1,983	9,750	8,014	7,794	4,937	164
1955-56 . . .	1,740	1,953	10,574	8,638	8,470	5,409	189
1956-57 . . .	2,190	1,736	11,464	9,317	9,051	5,722	189
1957-58 . . .	1,847	1,925	11,598	9,188	8,997	5,930	187
1958-59 . . .	1,868	1,960	12,492	9,897	9,692	6,211	254
1959-60 . . .	2,150	2,285	13,836	10,980	10,632	6,887	284
1960-61 . . .	2,175	2,604	14,644	11,629	11,401	7,420	265
1961-62 . . .	2,469	2,204	14,956	11,971	11,766	7,639	217
1962-63 . . .	2,491	2,616	16,234	12,977	12,575	8,064	283
1963-64 . . .	3,161	2,864	18,021	14,470	13,949	8,792	302
1964-65 . . .	3,048	3,478	19,838	15,921	15,139	9,812	293
1965-66 . . .	3,137	3,627	20,886	16,627	15,901	10,582	311
1966-67 . . .	3,475	3,690	22,782	18,183	17,397	11,509	336

## Description of items in the National Accounts

### Tables 1 to 7

**Item 1. Wages, salaries and supplements.** Payments in the nature of wages and salaries as defined for pay-roll tax, including allowances for income in kind (board and quarters, etc.), together with supplements to wages, and pay and allowances of members of the forces. In addition to wages and salaries paid by employers subject to pay-roll tax, this item includes wages and salaries paid by employers not subject to pay-roll tax, based on estimates of employment and average earnings. Supplements consist of employers' contributions to pension and superannuation funds, direct payments of pensions and retiring allowances, and amounts paid as workers' compensation for injuries. Pay and allowances of members of the forces consist of active pay, field allowances, subsistence allowances, dependants' allowances, and the value to the members of the forces of food, clothing, normal medical attention, etc. supplied in kind.

**Item 2. Gross operating surplus of trading enterprises.** The operating surplus, before deduction of depreciation provisions, dividends, interest, rent and royalties, and direct taxes payable of all trading enterprises operating in Australia. Trading enterprises include all companies, public enterprises, partnerships, and self-employed persons engaged in the production of goods and services for sale, but exclude financial enterprises. Public trading enterprises are government undertakings which attempt to recover all, or a substantial part, of their costs through charges made to the public for the sale of goods and services. All owners of dwellings are included whether they let the dwellings or occupy them themselves. Trading enterprises' gross operating surplus is shown separately for companies (item 2a), unincorporated enterprises (item 2b), dwellings owned by persons (item 2c), and public enterprises (item 2d).

**Item 3. Indirect taxes less subsidies.** Indirect taxes comprise taxes on purchases, sales or other transactions, or on the ownership of property, etc. paid by enterprises, public authorities and persons. They include licence fees in respect of rights conferred, such as liquor licences, etc. Subsidies are transfer payments made with the object of providing incentives to, or of assisting, certain industries or activities. Such payments may take the form of bounties on goods produced, subsidies to producers to ensure a guaranteed price, payments to transport undertakings to permit a reduction of freights on certain classes of goods, assistance to producers, etc.

**Item 4. Imports of goods and services.** The value of goods imported from overseas and amounts payable overseas for services. In Table 6 this item is sub-divided into the following components.

**Item 4a. Imports f.o.b.** Recorded trade figures adjusted for the purpose of balance of payments estimates. The principal adjustments are the addition of unrecorded imports, including ships and aircraft for use on overseas routes, the subtraction of films imported on a rental basis, imports of gold, goods for repair and goods intended for re-export, and the deduction of a 'valuation adjustment' representing the excess of the recorded value of imports (based on value for duty) over the estimated selling price to the importer as shown on invoices accompanying customs entries.

**Item 4b. Transportation.** Freight payable to foreign carriers on goods imported into Australia and transported between Australian ports, fares payable in Australia, the overseas expenditure of Australian ships, remittances to foreign airlines, and premiums (less claims) on marine insurance payable overseas on imports into Australia, less the net earnings on marine insurance business undertaken by Australian firms in respect of both exports and imports.

**Item 4c. Travel.** Net remittances in the form of travellers' cheques, etc., by Australians visiting overseas for pleasure and for business.

**Item 4d. Government transactions.** Expenditure overseas for defence, including the pay and allowances of personnel serving overseas, expenditure overseas on diplomatic, consular and trade representation, contributions to international organisations, government pensions paid abroad, overseas expenditure on immigration, and miscellaneous payments for services.

**Item 4e. Other goods and services.** Cinema and television film rentals payable overseas, expenses of Australian firms transacting business overseas, commissions, brokerage, etc., and the value of repairs on goods previously exported for repair and return, etc.

**Item 5. Net current expenditure on goods and services—personal consumption.** Net expenditure on goods and services for purposes of consumption by persons and private non-profit making bodies serving persons. This item excludes the purchase of dwellings and capital expenditure by non-profit making bodies (included in item 8), and maintenance of dwellings (treated as expenses of private enterprises), but includes personal expenditure on motor vehicles and other durable goods and the imputed rent of owner-occupied dwellings. Purchase of motor vehicles is the estimated expenditure by persons on new motor vehicles, second-hand motor vehicles purchased from business enterprises



and public authorities, and net dealers' margins on purchases and sales of motor vehicles within the personal sector. Motor vehicles include cars, station wagons, motor cycles, and motor scooters bought on personal account. The value of income in kind (e.g. food produced and consumed on farms, board and lodging provided free to employees) is included in both personal income and personal consumption expenditure, but goods chargeable to business (expense) accounts are excluded.

*Item 6. Net current expenditure on goods and services—financial enterprises.* The current expenditure of banks, instalment credit companies, short-term money market companies, and building societies after deduction of bank charges to customers. Charges by instalment credit companies are treated as interest receipts and therefore are not offset against expenditure. This item includes wages, salaries and supplements, indirect taxes, and other payments for goods and services. Public financial enterprises are government businesses (mainly banks, including the Reserve Bank) which operate in a manner analogous to other financial enterprises, in that their current expenditure is largely financed by the net receipt of interest. The interest received by government housing authorities is treated as a receipt by public financial enterprises, but their other receipts, including net profit on sale of houses, and all their expenditure, are included in those of public trading enterprises.

*Item 7. Net current expenditure on goods and services—public authorities.* Expenditure by public authorities (not public enterprises) which does not result in the creation of fixed tangible assets or in the acquisition of land, buildings or second-hand goods (other than imported). It comprises expenditure on wages, salaries, and supplements, and on goods and services other than fixed assets and stocks; fees, etc. charged by public authorities for goods sold and services rendered are offset against purchases. Net expenditure overseas by public authorities and purchases from public enterprises are included. All expenditure on defence is classified as current.

*Item 8. Gross fixed capital expenditure—private.* Expenditure on fixed assets whether for additions or replacements. This item includes expenditure on dwellings (item 8a), other building and construction (item 8b), and vehicles, plant, machinery, etc. (item 8c). It includes also expenditure on second-hand assets (other than houses purchased from public authorities) as well as new assets, less sales of existing assets. Expenditure on ordinary repair and maintenance of fixed assets is excluded as being chargeable to current account. Major additions are, however, regarded as capital expenditure. New dwellings purchased by persons from public housing authorities are included in private capital expenditure.

*Item 9. Gross fixed capital expenditure—public enterprises.* Expenditure on fixed assets whether for additions or replacements, including wages and salaries paid by public enterprises in connection with capital works.

*Item 10. Gross fixed capital expenditure—public authorities.* Expenditure on fixed assets whether for additions or replacements other than for defence purposes. Because it has not been possible to make a satisfactory dissection, all expenditure on roads, including maintenance, is classified as fixed capital expenditure. Expenditure on housing, included in this item, includes the estimated expenditure on construction of dwellings for rental purposes and hostels for migrants and others, but excludes houses built for sale, which are included in private capital expenditure. Advances by War Service Homes Division and other authorities for financing home purchase schemes are also excluded.

*Item 11. Increase in value of stocks.* The change in book value of non-farm stocks held by trading enterprises and public authorities (item 11b) and the change in the value of farm stocks (item 11a).

*Item 12. Statistical discrepancy.* The difference between the sum of the direct estimates of gross national product and imports of goods and services on the one hand and the sum of the estimates of components of gross national expenditure and exports of goods and services on the other hand. Conceptually these two totals are the same. Inclusion of the discrepancy on the expenditure side of the national production account implies nothing as to the relative accuracy of the estimates of gross national product and expenditure. Similarly its inclusion in the capital account does not imply that estimates in this table are less accurate than those in other tables, or that capital expenditure estimates are less accurate than estimates on the receipts side of this account.

*Item 13. Exports of goods and services.* The value of goods exported overseas and receipts from overseas for other goods and services. In Table 6 this item is sub-divided into the following components.

*Item 13a. Exports f.o.b.* The recorded trade figures adjusted for balance of payments purposes. The adjustments are similar to those made to the recorded import figures but no change is made to the basis of valuation. The adjustment for unrecorded exports includes exports of uranium ores.

*Item 13b. Transportation.* The expenditure of overseas carriers in Australian ports, the overseas earnings of ships owned or chartered by Australian operators, the remittances from overseas to Australian domestic and international airline operators.

*Item 13c. Travel.* Net receipts of travellers' cheques, etc. from persons visiting Australia for pleasure and for business.

*Item 13d. Government transactions.* Receipts for services rendered by the Australian Government to other governments and other payments in Australia by foreign governments on defence and other projects, on diplomatic, consular and trade representation, and for pensions paid in Australia.

*Item 13e. Other goods and services.* The value of Australian production of gold less net industrial usage, business expenses of overseas firms in Australia, and commissions, brokerage, etc.

*Item 14. Depreciation allowances.* The financial provisions made for depreciation which are deducted to obtain net income. The estimates represent, in the main, amounts allowed under income tax legislation, but include also the estimated depreciation on tenanted and owner-occupied dwellings and provisions made by public enterprises. This item is divided into depreciation allowances of trading enterprises (item 14a) and of financial enterprises (item 14b).

*Item 15. Interest, etc.* Comprises interest, non-dwelling rent and royalties. This item appears in most accounts as receipts and payments of interest, etc., but in the case of some entries the amounts are combined with dividends and overseas profits. The item is shown net of intra-sector receipts and payments. Payment of interest, etc. by public enterprises is included in item 15g. Payment of interest, etc. by trading enterprises (item 15a) includes interest charged on borrowings for the purchase of a house by persons, which is treated as an appropriation from the gross operating surplus of dwellings owned by persons. Non-dwelling rent includes only actual payments. It is estimated net of the expenses of the owner of the premises on rates, maintenance, etc., which are treated as working expenses of the enterprises renting the building. Royalties include mining and forestry royalties paid to public authorities and royalties and fees for use of trade marks, patents, etc. paid overseas.

*Item 16. Income tax, estate and gift duties.* Income tax payable by trading and financial companies (items 16a and 16b) and persons (item 16c) are amounts payable at rates of taxation applicable in each year. Income tax payable by companies in respect of the most recent year's income is estimated on the basis of rates of tax applicable in respect of the preceding year's income. The difference between the amounts of income tax payable and the cash receipts by public authorities (part of item 16e) is included in item 16f. Income tax payable by persons (item 16c) includes the total income tax payable by individuals on all forms of income whether wages, business income or property income. Estate and gift duties (item 16d) are the amounts actually paid by persons in that year.

*Item 17. Dividends.* All receipts and payments of dividends, including dividends payable overseas and the remitted profits of Australian branches of overseas enterprises. Dividends payable (items 17a and 17c) are the dividends declared by trading and financial companies in respect of the year (including an estimate of dividends to be declared in respect of the most recent year). Receipts of dividends (other than dividends receivable from overseas subsidiaries) are cash receipts, and the difference between the amounts payable and received is included in item 17h. The items are shown net of intra-sector receipts and payments.

*Item 18. Undistributed income.* The undistributed income of companies comprising trading enterprises (item 18a) and financial enterprises (item 18c) is the balance of total company income, including profits receivable from overseas (items 18b and 18d) after deduction of income tax and dividends payable, and is equal to the sum of undistributed income accruing to overseas residents (item 18f) and undistributed company income accruing to residents (item 18g). Profits receivable from overseas are the unremitted part of profits earned by overseas branches of Australian companies and undistributed profits of overseas subsidiaries of Australian companies.

*Item 19. Unincorporated enterprises income.* The gross operating surplus of unincorporated enterprises less interest, etc. paid and depreciation allowances. It comprises the income of farm unincorporated enterprises (item 19a) and the income of all other unincorporated enterprises (item 19b).

*Item 20. Personal income from dwelling rent.* The gross operating surplus of dwellings owned by persons less interest, etc. paid and depreciation allowances.

*Item 21. Public enterprises income.* Includes income of public trading enterprises (item 21a) and income of public financial enterprises (item 21b). For trading enterprises it is equal to gross operating surplus after the deduction of depreciation allowances; for financial enterprises it is the net income after depreciation allowances, interest paid, and net current expenditure on goods and services by government banks are deducted from total receipts of interest and non-dwelling rent. Depreciation allowances deducted in arriving at the income of public trading enterprises are those shown in their published accounts, except in the case of enterprises whose accounts are included in the Commonwealth or State budgets and are analysed on the basis of their cash accounts in which depreciation is not deducted. In particular, no amount is included for the Post Office or most railways, since cash accounts for these enterprises have been used.

*Item 22. Retained investment income of life insurance funds, etc.* Total dividends, interest, etc. received by life insurance and superannuation funds, less rent and interest paid, depreciation allowances, income tax and dividends payable.

*Item 23. Overseas grants, contributions and remittances.* All transfers to or from overseas on public authority or private account which are not payments for goods and services or payments of dividends, interest, etc.

*Item 23a. Personal remittances overseas.* Gifts of money by resident persons and private institutions payments for sustenance, and transfers of emigrants' funds and legacies from Australia to overseas, together with the value of goods exported as personal effects and gifts.

*Item 23b. Personal remittances from overseas.* Gifts of money received from non-resident persons and private institutions, receipts for sustenance, and transfers of immigrants' funds and legacies from overseas to Australia, together with the value of goods imported as personal effects and gifts.

*Item 23c. Public authority overseas grants.* Grants to, and payments made on behalf of the Territory of Papua and New Guinea, and expenditure overseas in respect of technical assistance and relief under the Colombo Plan and United Nations projects. Contributions to United Nations and other organisations due by virtue of membership of these organisations are also included in this item.

*Item 24. Personal saving.* The excess of personal income over the sum of personal consumption expenditure, interest paid, income tax payable, estate and gift duties paid, and remittances overseas. Personal saving is estimated as the balancing item in the personal current account. It includes saving through life insurance and superannuation funds (defined as premiums, etc. paid less claims, etc. received and administrative expenses of life insurance offices) and the increase in assets of marketing authorities. Personal saving may also take the form of increases in holdings of cash and net purchases of securities, the net increase in bank deposits less advances, the reduction in the outstanding advances of instalment credit companies to persons and unincorporated enterprises, and the increase in the equity of persons in dwellings and in capital equipment, buildings and stocks of unincorporated enterprises.

*Item 25. Cash benefits.* Current transfers to persons from public authorities in return for which no services are rendered or goods supplied. Principal components are scholarships; hospital, medical, pharmaceutical, maternity, sickness, and unemployment benefits; child endowment; widows', age, invalid, and repatriation pensions; and attendance money for waterside workers.

*Item 26. Grants towards private capital expenditure.* Grants to meet part of the costs of private capital expenditure, e.g. Commonwealth Home Savings grants, grants towards construction of science laboratories in private schools and of houses for aged persons, etc.

*Item 27. Public authorities surplus on current account.* The excess of current revenue, including income of public enterprises, over current outlay. Current outlay includes current expenditure on goods and services, as defined in item 7, and transfer payments (interest, cash benefits, subsidies, grants towards private capital expenditure, and overseas grants). The surplus is transferred to the capital account where it is shown as part of total funds available for financing capital outlay.

*Item 28. Overseas balance on current account.* The excess of payments to the rest of the world on current account over receipts from the rest of the world on current account. In the national capital account it is shown divided into drawings on Australia's overseas monetary reserves (item 28a) and net apparent capital inflow (item 28b).

## CHAPTER 18

### PRIVATE FINANCE

Further information on the subjects dealt with in this chapter is contained in the annual bulletins *Banking and Currency* and *Insurance and Other Private Finance*. Current information is contained in the *Quarterly Summary of Australian Statistics*, the *Monthly Review of Business Statistics*, the *Digest of Current Economic Statistics* (monthly), and the monthly mimeographed statements *Banking Statistics* (bulletin and preliminary statement), *Savings Bank Statistics* (bulletin and preliminary statement), *Monthly Bulletin of Life Insurance Statistics*, and *Finance Companies: Australia*. The annual mimeographed bulletins *Australian Fire, Marine and General Insurance Statistics* and *Life Insurance* contain the latest information on these subjects. Other relevant mimeographed statements are: *Finance Companies: July 1964 to September 1967*; *Instalment Credit for Retail Sales*; *Unit Trusts, Land Trusts and Mutual Funds*; *New Capital Raisings by Companies in Australia*; and *Capital and Maintenance Expenditure by Private Business in Australia*—quarterly; *Government Pension and Superannuation Schemes, 1966–67*; *Survey of Private Pension and Retiring Allowance Schemes, 1962–63*; *Survey of Selected Private Pension Funds, 1966–67*; and *Registered Building Societies, 1965–66*. Preliminary monthly statements *Instalment Credit for Retail Sales* and preliminary quarterly estimates of *New Capital Raisings by Companies in Australia* are also issued.

### CURRENCY

Until 13 February 1966 Australian currency was based on the British unit, which is the pound (£) divided into 20 shillings (s) each of 12 pence (d). A decimal currency system was introduced in Australia on 14 February 1966 based on a major unit—the dollar—equal to ten shillings in the old currency. The minor unit—the cent—is one-hundredth part of the major unit and is equal to 1.2 pence in the old currency. Decimal notes and coins became legal tender from 14 February 1966. The par value of the Australian dollar, under the terms of the International Monetary Fund, was established at 0.99531 grams of fine gold.

The official changeover arrangements provided for a dual currency and for a transition period of eighteen months to two years following the changeover. From the changeover day all cheques and other bills of exchange and all promissory notes have to be executed in dollars and cents. During the transition period, however, contracts and other monetary transactions might be arranged in terms of either £ s. d. or \$ c.

Since the end of the transition period (1 August 1967 fixed by proclamation) contracts and other documents have to be made out in terms of \$ c. All references to £ s. d. in existing contracts, agreements, etc. with continuing effect are converted automatically into their exact equivalents in decimal currency. Payments of amounts owing in £ s. d. are made in \$ c on a nearest-cent basis according to the conversion table shown in the Currency Act (*see Year Book No. 52, page xvi*). Threepences, pennies and halfpennies are legal tender only in multiples of sixpence. All £ s. d. notes and coins from sixpence upwards continue to be legal tender on the same basis as decimal notes and coins.

Historical notes of the arrangements for the introduction of decimal currency and the relationship between £ s. d. and \$ c are published in Year Book No. 52, pages 671–4.

### Australian coinage

Prior to Federation in 1901 the coins circulating throughout Australia were many and varied. For a full account of the history of pre-Federation coinage *see Year Book, No. 51, 1965, pages 812–14*. After Federation the only coins which were legal tender within Australia until 1909 were English coins.

The Constitution in 1901 gave the Commonwealth Parliament power to make laws with respect to coinage and in 1909 the Coinage Act was passed prescribing the standard weight and fineness of coins. The first coins exclusively for circulation in Australia—silver (925 fine) florins, shillings, sixpences and threepences—were minted in 1910 by the Royal Mint, London, followed by bronze

coins in 1911. The Melbourne Branch of the Royal Mint produced in 1916 the first Commonwealth coins (pence) minted in Australia. The Sydney Branch of the Royal Mint commenced production of halfpennies in 1919 and in 1922 the Perth Branch minted its first pennies.

The Commonwealth Treasury administered the Coinage Act which was repealed and replaced by the *Currency Act* 1965. All coins produced under authority of these two Acts have been ordered by the Treasury.

#### Australian mints

Brief historical notes relating to Australian mints and details of pre-decimal Australian coins obtained from each mint to 30 June 1965 are given in Year Book No. 52, page 675.

The construction of the Royal Australian Mint in Canberra provided the Commonwealth Government for the first time with facilities for minting its own coinage. Production at the Royal Australian Mint was initially restricted to the new coins for issue on the changeover to decimal currency on 14 February 1966. It was estimated that a minimum of 1,700 million pre-decimal coins needed to be replaced by the new coinage. The critical coins were the bronze one cent and two cents to replace the threepence, penny and halfpenny which had no counterparts in the decimal range. The initial capacity of the Royal Australian Mint was directed to the production of bronze coin with some capacity being directed to the fifty cent silver coin. Bronze decimal coins were also produced at the Melbourne and Perth branches of the Royal Mint, and the Royal Mint, London, contracted to produce 30 million each of the cupro-nickel five, ten and twenty cent denominations for issue in February 1966. All Australia's coin requirements are now met by the Royal Australian Mint, with the Melbourne and Perth branches of the Royal Mint providing some bronze coins on contract to the Commonwealth Treasury.

#### Coins in circulation

Brief historical notes relating to the Australian pre-decimal coinage are given in Year Book No. 37, pages 557 and 558. For weight, metal composition, etc. of Australian pre-decimal coins in circulation see Year Book No. 39, page 697.

The net issues of Australian pre-decimal silver and bronze coins from 1910 to 30 June 1967 were: crown (5s.), \$551,000; florin (2s.), \$31,967,000; shilling (1s.), \$19,247,000; sixpence (6d.), \$13,404,000; threepence (3d.), \$9,418,000; total silver coin, \$74,456,000; penny (1d.), \$4,544,000; half-penny (½d.), \$1,157,000; total bronze coin, \$5,701,000. Except in the total, no allowance has been made for \$131,000 worth of damaged silver coin, for which denominations are not available, withdrawn since 1910. Australian decimal coin issued from 14 February 1966 to 30 June 1967 was: 50 cents, \$16,476,000; 20 cents, \$16,380,000; 10 cents, \$4,052,000; 5 cents, \$4,403,000; 2 cents, \$6,277,000; 1 cent, \$3,805,000; total \$51,393,000.

In the following table details are given of the value of decimal coins issued, the cost of bullion, the cost of minting, and sundry expenses connected with the issue, and the surplus during the years 1965-66 and 1966-67. A similar table on pre-decimal coinage was shown on page 676 of Year Book No. 53 and in earlier issues.

AUSTRALIAN DECIMAL COIN: COSTS OF COIN ISSUED  
(\$'000)

Year	Cost of bullion	Cost of minting	Freight and sundry charges	Total cost	Face value of coin issued (a)	Surplus (b)
Silver—						
1965-66 . . .	9,077	406	106	9,589	11,607	2,018
1966-67 . . .	3,808	170	34	4,012	4,869	857
Cupro-nickel—						
1965-66 . . .	510	631	168	1,309	10,429	9,120
1966-67 . . .	772	835	145	1,752	14,406	12,654
Bronze—						
1965-66 . . .	1,493	2,686	260	4,439	7,368	2,929
1966-67 . . .	543	930	110	1,583	2,714	1,131
Total—						
1965-66 . . .	11,080	3,723	534	15,337	29,404	14,067
1966-67 . . .	5,123	1,935	289	7,347	21,989	14,642

(a) Includes selected and proof pieces.

(b) Used to assist in purchase of pre-decimal coin withdrawn from circulation.

### Gold receipts and issues

Since early in the 1939-45 War all gold has been acquired by the Reserve Bank, and the export and use of gold has been subject to regulation by the Commonwealth Government. All trading banks in Australia, Deputy Master of the branch of the Royal Mint in Perth, and three private refining companies are authorised under the Banking (Gold) Regulations to deal in gold on behalf of the Reserve Bank. The Melbourne Mint ceased to deal in gold in 1964. The Royal Australian Mint at Canberra is not authorised to receive and issue gold.

Details of the production of gold, subsidy payable, etc. are given in the chapter Mineral Industry.

### Price of gold

The following table shows the average prices of gold, the average values of the sovereign's gold content in London, and the sovereign's Reserve Bank buying price in Australia for the years 1962-63 to 1966-67. The average price of gold in Australia is fixed by the Reserve Bank and at present reflects the parity value of Australian currency established in conformity with the *International Monetary Agreements Act 1947*.

PRICE OF GOLD: LONDON AND AUSTRALIA, 1962-63 TO 1966-67

Year	London		Australia			
			Sovereign		Equivalent to a premium on mint par value of—	
			Average price per fine oz	Reserve Bank buying price		
	Average price per fine oz	Average value of sovereign's gold content	Average price per fine oz	Reserve Bank buying price		
	£stg s d	£stg s d	\$	\$	per cent	
1962-63	12 10 6	2 19 0	31.25	7.25	267.8	
1963-64	12 10 9	2 19 1	31.25	7.25	267.8	
1964-65	12 11 8	2 19 3	31.25	7.25	267.8	
1965-66	12 11 8	2 19 3	31.25	7.25	267.8	
1966-67	12 11 11½	2 19 3	31.25	7.25	267.8	

In December 1951 arrangements were made whereby producers could sell a proportion of newly-mined gold for industrial purposes on overseas premium markets. Under these arrangements gold is acquired by the Reserve Bank in the usual manner and sold, at the Bank's buying price, to an association representing gold producers participating in the scheme. The association pays the Bank's handling charges and the costs of preparation of the gold and makes arrangements for export and sale. Profits earned by the association after meeting administrative expenses are distributed to members in proportion to the quantity of gold delivered to the Reserve Bank. Until August 1952, when permission was given for the export of fine gold, gold exported under this arrangement was not to exceed a fineness of 22 carats (11/12ths).

The average prices per fine ounce in Australian currency obtained for gold exported under this scheme for each month during 1966-67 for which there were sales, were: July \$31.480; August \$31.549; September \$31.524; October \$31.510; November \$31.468; December \$31.474; January—no gold sales reported; February \$31.497; March \$31.448; April \$31.418; May \$31.412; and June \$31.418.

### The Australian note issue

In 1901 notes in circulation in Australia consisted of bank notes payable in gold coin and issued by the trading banks, and Queensland Treasury notes. Bank notes circulated in all States except Queensland, but were not legal tender except for a brief period in 1893 in New South Wales. There were, however, some restrictions on their issue or other provisions for the protection of the public. Queensland Treasury notes were issued by the Queensland Government and were legal tender in that State. Notes of both categories continued in circulation until 1910, when the *Australian Notes Act 1910* and *Bank Notes Tax Act 1910* were passed by the Commonwealth Parliament. The *Australian Notes Act 1910* prohibited the circulation of State notes as money and the *Bank Notes Tax Act 1910* imposed a tax of ten per cent per annum on 'all bank notes issued or re-issued by any bank in the Commonwealth after the commencement of this Act, and not redeemed'. These Acts put an end to the issue of notes by the trading banks and the Queensland Treasury. The *Reserve Bank Act 1959* expressly prohibits persons, including States, from issuing bills or notes payable to bearer on demand and intended for circulation.

The *Reserve Bank Act* 1965 authorised the Bank to issue Australian notes in denominations of \$1, \$2, \$5, \$10, \$20, or \$50, or in any other denomination that the Treasurer, by instrument of writing published in the Gazette, determines. The Act provided that each note of the previous currency should have the value in dollar currency set out in the following table:

10s.	.	.	.	.	\$1
£1	.	.	.	.	\$2
£5	.	.	.	.	\$10
£10	.	.	.	.	\$20
£20	.	.	.	.	\$40
£50	.	.	.	.	\$100
£100	.	.	.	.	\$200
£1,000	.	.	.	.	\$2,000

The Act came into force on 14 February 1966, and notes of \$1, \$2, \$10, and \$20 denominations were issued forthwith as legal tender to any amount throughout Australia. A description of these notes is published in Year Book No. 52, page 678. On 29 May 1967 \$5 notes were issued throughout Australia and the Territory of Papua and New Guinea. A description of the \$5 note is published in Year Book No. 53, page 678.

#### Gold reserves against the note issue

The *Australian Notes Act* 1910 provided that the Treasurer should hold, in gold coin, a reserve of an amount not less than one-fourth of the notes issued up to \$14,000,000 and an amount equal to the excess over \$14,000,000. In 1911 this provision was amended and the Treasurer was required only to hold, in gold coin, an amount not less than one-fourth of the total amount of Australian notes issued. In June 1931, to permit further shipments of gold to meet short-term obligations in London, an amendment to the Commonwealth Bank Act provided for the reduction of the gold reserve for the two years ended 30 June 1933 to not less than 15 per cent. The reserve was to be increased, by graduated steps, to 25 per cent by 30 June 1935. In May 1932 a further amendment to the Commonwealth Bank Act provided that the reserve might be held 'in gold or in English sterling or partly in gold and partly in English sterling'. English sterling was defined as 'currency which is legal tender in the United Kingdom, and included (a) balances standing to the credit of the Bank at the Bank of England or at any other of its bankers in London; (b) Bills of Exchange or advances secured by Bills of Exchange which (i) are payable in the United Kingdom in currency which is legal tender in the United Kingdom; (ii) will mature in not more than three months, and the security for the payment of which bills is, in the opinion of the Bank, satisfactory; and (c) Treasury Bills or other securities of the United Kingdom which will mature in not more than three months'.

The statutory reserve against the note issue was abolished by the *Commonwealth Bank Act* 1945 which provided that the assets of the Note Issue Department should be held in gold, on deposit with any bank, or in securities of the Government of the United Kingdom or of the Commonwealth or a State. This provision was continued in the *Reserve Bank Act* 1959.

#### Australian notes in circulation

##### AUSTRALIAN NOTES IN CIRCULATION, JUNE 1963 TO 1967

(\$'000)

Denomination	Last Wednesday in June—				
	1963	1964	1965	1966	1967
\$1 and 10s . . . . .	26,276	27,550	28,396	32,204	33,214
\$2 and £1 . . . . .	138,104	141,290	143,308	138,164	127,997
\$5 . . . . .	..	..	..	..	42,829
\$10 and £5 . . . . .	386,136	390,728	392,980	369,247	389,201
\$20 and £10 . . . . .	310,578	304,964	297,479	309,713	344,943
£20 . . . . .	4	4	2	2	1
£50 . . . . .	58	56	45	43	43
£100 . . . . .	64	62	41	41	40
£1,000 . . . . .	8,224	5,656	164	..	..
Held by banks . . . . .	125,938	133,710	138,783	154,117	162,006
Held by public . . . . .	743,506	736,600	723,631	695,298	776,263
<b>Total . . . . .</b>	<b>869,444</b>	<b>870,310</b>	<b>862,414</b>	<b>849,414</b>	<b>938,269</b>

## Reserve Bank—Note Issue Department

**RESERVE BANK OF AUSTRALIA: NOTE ISSUE DEPARTMENT**  
**LIABILITIES AND ASSETS, 30 JUNE 1966 AND 1967**  
(\$ million)

<i>Liabilities</i>	<i>1966</i>	<i>1967</i>	<i>Assets</i>	<i>1966</i>	<i>1967</i>
Notes on issue(a)	835.3	930.1	Gold and balances held abroad (including money at short call)	435.0	394.5
Special reserve—Premium on gold sold	9.5	9.5	Other overseas securities	134.8	174.8
Other liabilities(a)	21.5	22.1	Government securities (including Commonwealth Treasury bills)	296.2	391.7
			Other assets	0.2	0.7
<b>Total</b>	<b>866.2</b>	<b>961.7</b>	<b>Total</b>	<b>866.2</b>	<b>961.7</b>

(a) Notes of a denomination not exceeding one pound which have been on issue for more than twenty years and notes of a denomination exceeding one pound which have been on issue for more than forty years are not included in the item Notes on issue but are included in the item Other liabilities.

Until June 1951 all profits of the Note Issue Department, with the exception of \$4,000,000 and \$2,400,000 paid to the capital accounts of the Rural Credits Department and Mortgage Bank Department respectively, were paid to the Commonwealth Consolidated Revenue Fund. For the years 1951–52 to 1955–56 the profits were distributed as follows: (a) \$1,000,000 per annum to the capital accounts of the Commonwealth Trading Bank (prior to 3 December 1953 the General Banking Division of the Commonwealth Bank) and the several departments of the Commonwealth Bank, distributed two-sevenths each to the Commonwealth Trading Bank, Mortgage Bank Department and Industrial Finance Department and one-seventh to the Rural Credits Department, and (b) the balance to the Commonwealth Consolidated Revenue Fund. Since 1955–56 the profits have been paid to the Commonwealth Consolidated Revenue Fund. Profits of the Note Issue Department in 1966–67 amounted to \$34,318,000.

### Rates of exchange

In the following table the par of exchange (based on par values agreed with the International Monetary Fund) and average telegraphic transfer selling rates of exchange for Sydney on a number of overseas countries are shown. Generally, the averages, which are averages of daily quotations, are based on rates quoted by the Commonwealth Trading Bank. Where these were not available, rates used by the Department of Customs and Excise in converting import values to \$A for purposes of calculating customs duty are shown.

**OVERSEAS EXCHANGE RATES: PAR OF EXCHANGE AND AVERAGE TELEGRAPHIC  
TRANSFER SELLING RATES FOR SYDNEY ON OVERSEAS COUNTRIES, 1966-67**

<i>Country</i>	<i>Basis of quotation</i>	<i>Australian decimal currency equivalents</i>		<i>Country</i>	<i>Basis of quotation</i>	<i>Australian decimal currency equivalents</i>	
		<i>Par of exchange (a)</i>	<i>Selling rate 1966-67</i>			<i>Par of exchange (a)</i>	<i>Selling rate 1966-67</i>
Belgium	Francs to \$A1	56.011	55.10	Netherlands	Guilders to \$A1	4.054	3.998
Canada	Dollars to \$A1	1.211	1.200	New Zealand	\$A to \$NZ1	2.483	2.491
Ceylon	Rupees to \$A1	5.333	5.266	Norway	Kroner to \$A1	8.000	7.90
China (mainland)	New Yuan to \$A1	(b)	4.74	Pakistan	Rupees to \$A1	5.333	5.284
China (Taiwan)	Dollars to \$A1	(c)	44.70	Portugal	Escudos to \$A1	32.200	31.90
Denmark	Kroner to \$A1	7.736	7.65	Singapore	Dollars to \$A1	3.429	3.396
Fiji	\$A to £F1	2.2522	2.2600	South Africa	Rands to \$A1	0.800	0.795
Finland	Markkas to \$A1	3.584	3.58	Sweden	Kronor to \$A1	5.794	5.713
France	Francs to \$A1	5.530	5.461	Switzerland	Francs to \$A1	(b)	4.794
Germany, Fed.	Deutsche Marks			United Arab Republic	£E to \$A1	0.390	0.478
Rep. of	to \$A1	4.480	4.405	United Kingdom	\$A to £stg1	2.500	2.510
Hong Kong	Dollars to \$A1	6.400	6.370	United States of America	Dollars to \$A1	1.120	1.1111
India	Rupees to \$A1	8.391	8.329	U.S.S.R.	Roubles to \$A1	(b)	1.004
Italy	Lire to \$A1	700.429	691.00				
Japan	Yen to \$A1	403.199	400.98				

(a) As at 30 June 1967, established under International Monetary Fund Agreement. (b) Not a member of the International Monetary Fund. (c) No par value established.



## VOLUME OF MONEY

## VOLUME OF MONEY: AUSTRALIA, JUNE 1963 TO 1967

(Source: Reserve Bank of Australia)

(\$ million)

June—	Notes and coin in hands of public	Deposits of public with all cheque-paying banks(a)		Deposits with all savings banks (b)	Total volume of money
		Current	Fixed		
1963 . . . . .	818	2,646	1,147	3,906	8,517
1964 . . . . .	815	2,917	1,380	4,444	9,556
1965 . . . . .	814	2,977	1,688	4,858	10,337
1966 . . . . .	783	3,033	1,898	5,223	10,938
1967 . . . . .	882	3,192	2,026	5,724	11,824
December(c) 1967 . . .	992	3,503	2,185	6,059	12,739

(a) Excludes Government and inter-bank deposits, but includes deposits of the public with the Reserve Bank.  
 (b) Interpolated 'weekly average' based on end of month figures. (c) Excludes one Wednesday.

## BANKING

The Australian banking system has developed along the lines of the British system with widespread branch banking conducted by relatively few banks.

## Development since federation

With federation in 1901 the new Commonwealth Parliament was given power, under section 51 of the Commonwealth Constitution, to legislate with respect to 'Banking, other than State Banking, also State Banking extending beyond the limits of the State concerned, the incorporation of banks, and the issue of paper money'. In 1911 the Commonwealth entered the field of banking, with the establishment of the Commonwealth Bank of Australia, which conducted both trading bank and savings bank operations. A separate Commonwealth Savings Bank was established in 1928.

## Central bank

Central banking functions of the Commonwealth Bank developed gradually over the years prior to and during the second world war. In November 1935 a Royal Commission was appointed by the Commonwealth Government to inquire into the monetary and banking systems in operation in Australia and to report whether any, and if so what, alterations were desirable in the interests of the people of Australia as a whole, and the manner in which any such alterations should be effected. The Commission presented its report in July 1937, and a summary of the recommendations appears in Year Book No. 31, page 1010.

In 1945 the Commonwealth Government legislated to give full legal effect to the central banking functions already being exercised by the Commonwealth Bank of Australia and to regulate the banking system as a whole. The Commonwealth Bank of Australia further developed as mainly a central bank when from 3 December 1953 the Commonwealth Trading Bank of Australia was established to take over most of the general trading bank functions of the Commonwealth Bank of Australia.

Legislation in 1959 completed the separation of the trading banking and central banking functions of the Commonwealth Bank of Australia with the establishment of the Commonwealth Development Bank of Australia under the *Commonwealth Banks Act* 1959 to take over the Industrial Finance Department and Mortgage Bank Department of the Commonwealth Bank of Australia.

A new bank, the Reserve Bank of Australia, was established under the *Reserve Bank Act* 1959 as the nation's central bank to administer the provisions of a new banking Act (*Banking Act* 1959). A statutory corporation, The Commonwealth Banking Corporation, was set up under the *Commonwealth Banks Act* 1959 to control the Commonwealth Trading Bank of Australia, the Commonwealth Development Bank of Australia, and the Commonwealth Savings Bank of Australia.

### Trading banks

Commercial banking in Australia is predominantly carried on by eight major trading banks. One of these banks is owned by the Commonwealth Government and seven are privately owned companies established by Act or Charter or incorporated under State or British law. Two of these private banks are owned by British interests. Since 1945 no new private trading banks may be established without the approval of the Commonwealth. State-owned trading banks operate in three States under State law and confine their activities to their own States. One small trading bank confines its operations to one city and three foreign banks operate on a restricted basis.

A new bank, The Australian Resources Development Bank Limited, owned by the trading banks of Australia, was established in 1967. The bank will use funds raised from banks, the public and overseas lenders in the financing of large-scale projects whose principal activity is the development of Australia's natural resources. Finance will be made available either by direct lending or by the refinancing of loans by the trading banks. The Bank commenced operations in February 1968.

### *Term Loan Fund*

Lending by trading banks is generally conducted on an overdraft basis. A departure from this practice followed discussions during 1961–62 involving the Commonwealth Government, the Reserve Bank and the major trading banks, which resulted in arrangements whereby the banks agreed to create a fund known as the Term Loan Fund, the resources of which would be employed to make loans for capital expenditure on production in the rural, industrial and (to a lesser extent) commercial fields and to finance exports. The loans would be made for fixed terms, varying usually between three and eight years. The term lending arrangements operated from April 1962.

### *Farm Development Loan Fund*

Discussions in March 1966 between the Commonwealth Government, the Reserve Bank and the major trading banks resulted in the establishment of a fund known as the Farm Development Loan Fund, from which resources would be available to provide rural producers, particularly smaller producers, with greater access to medium and long-term finance. The Fund was established in April 1966.

### Savings banks

Until 1956 savings bank operations were, apart from two small trustee banks in Tasmania, conducted by the Commonwealth Government and some State Governments. In January 1956 private savings banks were established as subsidiary companies by two of the private trading banks. By mid-1962 all the major private trading banks had established savings bank subsidiary companies.

### Current legislation

Operations of banks and banking in Australia are currently governed by (i) Commonwealth legislation enacted in 1959 in respect of banking other than State banking, and (ii) State legislation relating to the incorporation of banks and management of State banks.

### *Commonwealth banking legislation*

(a) The *Banking Act 1959–1967* provides for the regulation of banking and for the protection of the currency and the public credit of the Commonwealth. This Act, which replaced the *Banking Act 1945–1953*, was assented to on 23 April 1959 and came into operation on 14 January 1960 as the *Banking Act 1959*. It was amended by the *Banking Act 1965* and the *Statute Law Revision (Decimal Currency) Act 1966* in order to make certain changes required by the change to decimal currency and by the *Banking Act 1967* relating to the Papua and New Guinea Development Bank and the Australian Resources Development Bank Limited. It applies to all banks, including savings banks, operating in Australia or the Territories of the Commonwealth except State banks trading in their own State. The objects of the Act are: (i) to provide a legal framework uniform throughout Australia for regulating the banking system; (ii) to safeguard depositors of the banks from loss; (iii) to provide for the co-ordination of banking policy under the direction of the Reserve Bank; (iv) to control the volume of credit in circulation and bank interest rates; (v) to mobilise and to provide machinery for the control of the foreign exchange and gold resources of the Australian economy. A summary of the main provisions of the *Banking Act 1959* is given in Year Book No. 46, pages 759–60.

(b) The *Reserve Bank Act 1959–1966* provides for the constitution and management of the Reserve Bank of Australia and the management of the Australian note issue.

(c) The *Commonwealth Banks Act 1959–1966* provides for the constitution and management of the Commonwealth Banking Corporation, Commonwealth Trading Bank of Australia, Commonwealth Savings Bank of Australia, and Commonwealth Development Bank of Australia.

The Commonwealth Banking Corporation came into being on 14 January 1960. It is the controlling body for the Commonwealth Trading Bank, Commonwealth Savings Bank and Commonwealth Development Bank. Under the *Banking Act 1959-1967* the Corporation and its constituent banks are subject to the same central banking controls as are the private trading banks.

The Board of the Corporation consists of the Managing Director of the Corporation, the Deputy Managing Director, the Secretary to the Treasury, and eight other members appointed by the Governor-General of whom one is Chairman and another Deputy Chairman. In addition, there is an Executive Committee of the Board for each of the three separate banks. These Executive Committees are appointed by the Treasurer, after consultation with the Board, and are charged with taking such action as is necessary to ensure that effect is given by the respective banks to the policies laid down for them and to any directions given by the Board in relation to their affairs. Under the Board the Corporation is managed by the Managing Director and the Deputy Managing Director. Each of the three constituent banks of the Corporation has its own statutory functions and responsibilities and its separate identity within the framework of the Corporation. Each bank is managed by a General Manager under the Managing Director of the Corporation.

On page 644 details are given of the assets and liabilities of the Commonwealth Development Bank. Details for the Commonwealth Savings Bank are shown on pages 669-71. Details for the Commonwealth Trading Bank are included in statistics of cheque-paying banks—Major Trading Banks, on pages 646-52.

#### *State banking legislation*

The State Acts under which the various banks are incorporated differ. While some of the older banks were incorporated by special Act or Charter, e.g. the Bank of New South Wales by Act of Council 1817, the Bank of Adelaide by Act of the South Australian Parliament, and the Bank of New Zealand by Act of the General Assembly of New Zealand, most of the banks are incorporated under a Companies Act of the States or the United Kingdom. This is also the case with those banks which were reconstructed after the financial crisis of 1893. State banks, constituted under State Acts, transacting general banking business are The Rural Bank of New South Wales, the State Bank of South Australia, and the Rural and Industries Bank of Western Australia. State savings banks, constituted under State Acts, transacting savings bank business are The State Savings Bank of Victoria, The Savings Bank of South Australia and the Savings Bank Division of the Rural and Industries Bank of Western Australia (see pages 668-73).

#### **Presentation of banking statistics**

Because of the different purposes they serve in the Australian financial system, Australian banks have been divided for statistical purposes into the following four groups and a separate series is presented for each.

- (i) *The Reserve Bank of Australia.* Statistics of the Central Banking Business, the Note Issue Department, and the Rural Credits Department are shown separately. (See pages 641-3.)
- (ii) *The Commonwealth Development Bank of Australia.* The prime purpose of this Bank is to assist in the development of worthwhile enterprises in the field of both primary and secondary industries which would otherwise be unable to obtain the necessary finance on reasonable and suitable terms and conditions. (See pages 644-5.)
- (iii) *Cheque-paying banks—Major Trading Banks.* These comprise the Commonwealth Trading Bank of Australia, Australia and New Zealand Bank Ltd, The Bank of Adelaide, Bank of New South Wales, The Commercial Bank of Australia Ltd, The Commercial Banking Company of Sydney Ltd, The English, Scottish and Australian Bank Ltd, The National Bank of Australasia Ltd. (See pages 645-66.)

*All cheque-paying banks.* These comprise the major trading banks and the following banks—the Bank of China, Bank of New Zealand, The Brisbane Permanent Building and Banking Co. Ltd, Banque Nationale de Paris, the General Bank Department of the Rural Bank of New South Wales, the State Bank of South Australia, and the Rural Department of the Rural and Industries Bank of Western Australia. (See pages 645 and 651-6.)

*Australian cheque-paying banks* (see pages 646-50) comprises all cheque-paying banks except the Bank of China, Bank of New Zealand and Banque National de Paris.

- (iv) *Savings Banks.* Savings banks operating at 30 June 1967 were—the Commonwealth Savings Bank of Australia, the Australia and New Zealand Savings Bank Ltd, the Bank of New South Wales Savings Bank Ltd, and the National Bank Savings Bank Ltd (in all States and Territories within and without Australia); The Bank of Adelaide Savings Bank Ltd (all States except Tasmania); The Commercial Savings Bank of Australia Ltd and the E.S. & A.

Savings Bank Ltd (in all States and Territories within Australia), the C.B.C. Savings Bank Ltd (in all States and in the Australian Capital Territory); the State Savings Bank of Victoria, The Savings Bank of South Australia, the Savings Bank Division of The Rural and Industries Bank of Western Australia, and the two trustee banks, The Hobart Savings Bank and Launceston Bank for Savings. (See pages 668-77.)

### Reserve Bank of Australia

The Reserve Bank of Australia, established under the *Reserve Bank Act* 1959, which came into operation on 14 January 1960, continued in existence the body corporate known as the Commonwealth Bank of Australia. An account of the progress and development of that bank is given in earlier issues of the Year Book (see No. 37, pages 570-2, and No. 45, pages 735-7).

The general functions of the Reserve Bank are set out in Section 10 of the *Reserve Bank Act* 1959-1966, which states:

'It is the duty of the Board, within the limits of its powers, to ensure that the monetary and banking policy of the Bank is directed to the greatest advantage of the people of Australia and that the powers of the Bank under this Act, the *Banking Act* 1959, and regulations under that Act are exercised in such a manner as, in the opinion of the Board, will best contribute to,

- (a) the stability of the currency of Australia;
- (b) the maintenance of full employment in Australia; and
- (c) the economic prosperity and welfare of the people of Australia.'

In addition to its functions as a Central Bank, the Bank controls the Australian note issue through a Note Issue Department, provides special banking facilities through the Rural Credits Department, and acts as banker to the Commonwealth and some of the States.

#### Management

Under the provisions of the *Reserve Bank Act* 1959-1966 the policy of the Reserve Bank is determined by a Board consisting of the Governor (Chairman), the Deputy Governor, the Secretary to the Treasury, and seven other members appointed by the Governor-General. The Bank is managed by the Governor, who acts in accordance with the policy of the Board and with any directions of the Board. The Bank is required to inform the Government of the monetary and banking policy of the Board. In the event of a disagreement between the Government and the Board as to whether the monetary and banking policy of the Bank is directed to the greatest advantage of the people of Australia, the Governor-General, acting with the advice of the Executive Council, may determine the policy to be adopted by the Bank.

#### Central banking business

Under the powers it possessed under the *Commonwealth Bank Act* 1911-1943 and under its war-time powers under the National Security Regulations the Commonwealth Bank gradually assumed the functions of a Central Bank. Part III of the *Commonwealth Bank Act* 1945 formally constituted the Bank as a Central Bank and granted the necessary powers to carry on the business of a Central Bank, and these powers were carried through into the present Act constituting the Reserve Bank. Under the provisions of the *Reserve Bank Act* 1959-1966 the capital for the Central Banking Business is the capital of the Commonwealth Bank for Central Banking purposes immediately prior to 14 January 1960, and such other sums as are transferred from the Reserve Bank Reserve Fund. The profits of the Bank are distributed as follows: (a) such sums as the Treasurer, after consultation with the Bank, determines shall be placed to the credit of the Reserve Bank Reserve Fund and (b) the remainder shall be paid to the Commonwealth.

#### Note Issue Department

The Note Issue Department, established in 1920 when the control of the Australian note issue was transferred from the Commonwealth Treasury to the Commonwealth Bank, was maintained in the same form under the *Reserve Bank Act* 1959. The Reserve Bank may, through this Department, issue, re-issue and cancel Australian notes. Under the *Reserve Bank Act* 1959-1966 the profits of the Note Issue Department are paid to the Commonwealth.

#### Rural Credits Department

The Rural Credits Department, established in 1925 for the purpose of making short-term credit available for the orderly marketing of primary produce, was continued in the same form under the *Reserve Bank Act* 1959. The Reserve Bank may, through this Department, make advances upon the security of primary produce placed under the legal control of the Bank, or other security associated

with the production or marketing of primary produce, to co-operative associations or marketing boards formed under the laws of the Commonwealth or a State or Territory of the Commonwealth or other bodies specified by proclamation. The period of the advance shall not exceed one year. Under the provisions of the *Reserve Bank Act 1959-1966* the capital of the Rural Credits Department is the capital of the Rural Credits Department of the Commonwealth Bank immediately prior to 14 January 1960, and \$4,000,000 provided by the Reserve Bank. The profits of the Rural Credits Department are dealt with as follows: (a) one-half to the credit of the Rural Credits Department Reserve Fund and (b) one-half to the credit of the Rural Credits Development Fund.

#### Reserve Bank liabilities and assets—all Departments

##### RESERVE BANK OF AUSTRALIA: LIABILITIES, 30 JUNE 1963 TO 1967

(\$ million)

30 June—	Capital and reserve funds	Develop- ment fund	Special reserve— premium on gold sold	Australian notes on issue	Deposits of trading banks		Deposits of savings banks	Other deposits, bills payable and other liabilities	Total
					Statutory reserve deposit accounts	Other			
CENTRAL BANKING BUSINESS									
1963 .	51.6	..	..	..	445.2	102.9	370.1	331.9	1,301.7
1964 .	56.5	..	..	..	676.3	101.8	432.3	327.9	1,594.8
1965 .	61.3	..	..	..	654.7	100.4	429.6	347.2	1,593.2
1966 .	65.3	..	..	..	471.9	130.2	418.6	351.6	1,437.6
1967 .	68.8	..	..	..	473.8	98.9	492.5	355.3	1,489.3
NOTE ISSUE DEPARTMENT									
1963 .	..	..	9.5	860.3	..	..	..	20.9	890.7
1964 .	..	..	9.5	856.1	..	..	..	21.1	886.7
1965 .	..	..	9.5	862.4	..	..	..	21.3	893.2
1966 .	..	..	9.5	835.3	..	..	..	21.5	866.2
1967 .	..	..	9.5	930.1	..	..	..	22.1	961.7
RURAL CREDITS DEPARTMENT									
1963 .	13.7	0.5	..	..	..	..	..	196.3	210.6
1964 .	14.2	0.6	..	..	..	..	..	116.1	130.9
1965 .	14.7	0.6	..	..	..	..	..	227.7	243.1
1966 .	15.3	0.7	..	..	..	..	..	158.7	174.7
1967 .	16.0	0.7	..	..	..	..	..	344.2	361.0
TOTAL(a)									
1963 .	65.3	0.5	9.5	860.3	445.2	102.9	370.1	338.4	2,217.7
1964 .	70.8	0.6	9.5	856.1	676.3	101.8	432.3	341.1	2,509.0
1965 .	76.1	0.6	9.5	862.4	654.7	100.4	429.6	362.4	2,515.6
1966 .	80.7	0.7	9.5	835.3	471.9	130.2	418.6	370.3	2,335.8
1967 .	84.8	0.7	9.5	930.1	473.8	98.9	492.5	393.6	2,483.9

(a) Inter-departmental accounts have been offset.

**RESERVE BANK OF AUSTRALIA: ASSETS, 30 JUNE 1963 TO 1967**  
(\$ million)

30 June—	Gold and balances held abroad (a)	Other overseas securities	Australian notes, coin	Australian Government securities (b)	Cheques and bills of other banks	Loans, advances, bills discounted, all other assets (c)	Bank premises (d)	Bills receivable and remittances in transit	Total
<b>CENTRAL BANKING BUSINESS</b>									
1963 .	592.7	35.5	14.0	431.6	4.5	203.6	10.0	9.8	1,301.7
1964 .	866.1	122.6	12.7	411.6	5.5	131.6	15.1	29.6	1,594.8
1965 .	506.3	237.1	10.1	464.4	32.6	277.1	22.4	43.1	1,593.2
1966 .	551.5	171.3	24.0	392.2	15.7	220.4	29.1	33.5	1,437.6
1967 .	396.9	168.8	12.4	420.6	9.2	396.1	30.9	54.3	1,489.3
<b>NOTE ISSUE DEPARTMENT</b>									
1963 .	500.0	31.9	..	358.7	..	0.1	..	..	890.7
1964 .	546.2	77.1	..	263.3	..	0.1	..	..	886.7
1965 .	381.1	174.1	..	337.8	..	0.2	..	..	893.2
1966 .	435.0	134.8	..	296.2	..	0.2	..	..	866.2
1967 .	394.5	174.8	..	391.7	..	0.7	..	..	961.7
<b>RURAL CREDITS DEPARTMENT</b>									
1963 .	..	..	..	..	..	210.6	..	..	210.6
1964 .	..	..	..	..	..	130.9	..	..	130.9
1965 .	..	..	..	..	..	243.1	..	..	243.1
1966 .	..	..	..	..	..	174.7	..	..	174.7
1967 .	..	..	..	..	..	361.0	..	..	361.0
<b>TOTAL(e)</b>									
1963 .	1,092.7	67.4	14.0	790.3	4.5	229.0	10.0	9.8	2,217.7
1964 .	1,412.3	199.6	12.7	675.0	5.5	159.1	15.1	29.6	2,509.0
1965 .	887.3	411.3	10.1	802.3	32.6	306.5	22.4	43.1	2,515.6
1966 .	986.5	306.1	24.0	688.5	15.7	252.4	29.1	33.5	2,335.8
1967 .	791.4	343.6	12.4	812.4	9.2	429.6	30.9	54.3	2,483.9

(a) Includes currency at short call. for debts considered bad or doubtful. been offset.

(b) Includes Treasury bills and Treasury notes.

(d) At cost, less amounts written off.

(c) After deducting provision

(e) Inter-departmental accounts have

**Reserve Bank profits**

**RESERVE BANK OF AUSTRALIA: NET PROFITS, 1962-63 TO 1966-67**  
(\$ million)

Year	Central Banking Business	Note Issue Department	Rural Credits Department	Total	Distributed to—			
					Commonwealth of Australia	Reserve Bank Reserve fund	Rural Credits Department Reserve fund	Development fund
1962-63 . . .	6.7	25.6	0.9	33.2	28.9	3.4	0.4	0.4
1963-64 . . .	10.0	27.0	1.0	37.9	32.0	5.0	0.5	0.5
1964-65 . . .	15.3	30.5	1.0	46.8	41.0	4.8	0.5	0.5
1965-66 . . .	8.7	31.1	1.2	41.0	35.8	4.0	0.6	0.6
1966-67 . . .	7.9	34.3	1.3	43.6	38.8	3.5	0.7	0.7

### Commonwealth Development Bank of Australia

The Commonwealth Development Bank of Australia was established by the *Commonwealth Banks Act* 1959 and commenced operations on 14 January 1960. It was formed basically from an amalgamation of the Mortgage Bank and Industrial Finance Departments of the Commonwealth Bank. Under the Act the Bank is authorised to provide assistance for the development of worthwhile enterprises in the fields of primary and secondary industries, which would otherwise be unable to obtain the necessary finance on reasonable and suitable terms and conditions. The Commonwealth Development Bank is managed by a General Manager under the Managing Director of the Commonwealth Banking Corporation, and its policy is determined by the Board of that Corporation. The capital of the Development Bank consists of the capital of the Mortgage Bank and Industrial Finance Departments of the Commonwealth Bank immediately prior to 14 January 1960, \$10,000,000 provided by the Reserve Bank, \$20,000,000 appropriated from the Consolidated Revenue Fund in 1961–62 by the *Commonwealth Banks Act* 1961 and the *Commonwealth Banks Act* 1962, \$10,000,000 appropriated in 1963–64 by the *Commonwealth Banks Act* 1963, and such other sums as are provided from the Commonwealth Development Bank Reserve Fund. The net profits of the Bank are paid to the Commonwealth Development Bank Reserve Fund.

#### Liabilities and assets

#### COMMONWEALTH DEVELOPMENT BANK OF AUSTRALIA: LIABILITIES 30 JUNE 1963 TO 1967 (\$ million)

30 June—	Capital	Reserve fund	Balances due to other banks	Deposits, bills payable, all other liabilities	Total
1963 . . . . .	51.7	14.9	28.2	20.2	115.0
1964 . . . . .	61.7	16.8	27.2	22.9	128.6
1965 . . . . .	61.7	19.0	45.0	25.1	150.8
1966 . . . . .	61.7	21.2	65.9	27.8	176.6
1967 . . . . .	61.7	23.2	91.3	30.0	206.1

#### COMMONWEALTH DEVELOPMENT BANK OF AUSTRALIA: ASSETS 30 JUNE 1963 TO 1967 (\$ million)

30 June—	Coin, bullion, notes and cash at bankers	Australian public securities (incl. Treasury bills)	Other securities	Loans to authorised dealers in short-term money market	Cheques and bills of other banks	Loans, advances, and bills discounted	All other assets	Total
1963 . . . . .	0.8	5.3	0.4	0.4	0.8	106.9	0.3	115.0
1964 . . . . .	0.6	3.0	0.4	..	0.9	123.4	0.4	128.6
1965 . . . . .	0.3	1.2	0.4	0.7	1.0	146.8	0.5	150.8
1966 . . . . .	0.5	1.2	0.3	0.4	1.1	172.6	0.6	176.6
1967 . . . . .	0.3	1.2	0.3	0.5	1.2	202.0	0.6	206.1

#### Profit and loss

The profit and loss of the Commonwealth Development Bank for the years 1962–63 to 1966–67 is shown in the following table. The net profit was appropriated to the Commonwealth Development Bank Reserve Fund.

**COMMONWEALTH DEVELOPMENT BANK OF AUSTRALIA**  
**PROFIT AND LOSS, 1962-63 TO 1966-67**  
(\$ million)

<i>Year</i>	<i>Discount and interest earned, etc. (a)</i>	<i>Expenses (b)</i>	<i>Taxes and payments in lieu of taxes</i>	<i>Net profit</i>
1962-63 . . .	5.6	3.8	..	1.8
1963-64 . . .	6.1	4.1	..	1.9
1964-65 . . .	7.2	5.0	0.1	2.1
1965-66 . . .	8.7	6.5	0.1	2.2
1966-67 . . .	10.7	8.7	0.1	2.0

(a) Discount and interest earned, net exchange commissions and other items (including transfers from contingencies accounts)—after deducting interest paid and accrued on deposits, rebate on bills current at balance date, amounts written off assets, and losses on realisation of assets and transfers to the credit of contingencies accounts (out of which accounts provision for all bad and doubtful debts has been made).  
(b) Includes proportion of expenses of Commonwealth Banking Corporation attributable to the Development Bank.

### Cheque-paying banks

#### Banks transacting business in Australia

At 30 June 1967 the fifteen banks operating in Australia transacted all classes of banking business at 4,602 branches and 1,653 agencies. The major trading banks have branches throughout Australia. The Rural Bank of New South Wales, the State Bank of South Australia, and The Rural and Industries Bank of Western Australia, being State Government banks, have branches only in their respective States. The Brisbane Permanent Building and Banking Co. Ltd transacts business only in Brisbane. The remaining three banks are branches of overseas banks.

**CHEQUE-PAYING BANKS: NUMBER OF BRANCHES<sup>(a)</sup>**  
**STATES AND TERRITORIES, 30 JUNE 1967**

<i>Banks</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
Major trading banks . . .	1,567	1,201	687	402	348	101	13	35	4,354
Other cheque-paying banks . . .	157	2	2	35	52	..	..	..	248
All cheque-paying banks—									
Metropolitan area . . .	796	680	224	208	189	29	4	29	2,159
Elsewhere . . .	928	523	465	229	211	72	9	6	2,443
<b>Total . . .</b>	<b>1,724</b>	<b>1,203</b>	<b>689</b>	<b>437</b>	<b>400</b>	<b>101</b>	<b>13</b>	<b>35</b>	<b>4,602</b>

(a) Includes head offices. Excludes 1,653 agencies.

#### Australian cheque-paying banks—balance sheets

Liabilities and assets of individual Australian cheque-paying banks at balance dates in 1967 (and corresponding totals for these banks in 1966) are shown in the following tables. The information for the Major Trading Banks and The Brisbane Permanent Building and Banking Co. Ltd has been obtained from the annual returns lodged with the Commonwealth Statistician under Section 52 of the *Banking Act* 1959-1967, whereas that for the other banks has been compiled from information published in their annual reports.



AUSTRALIAN CHEQUE-PAYING BANKS: LIABILITIES(a), 1966 AND 1967  
(\$'000)

Bank	Paid-up capital	Reserve funds (used in business of bank)	Final divi- dend pro- posed	Balance of profit and loss account	Total share- holders' funds or total capital and reserve funds	Balances due to other banks	Deposits, bills payable and other lia- bilities (b)	Total
<b>1967—</b>								
<b>Major Trading Banks—</b>								
Commonwealth Trading Bank of Australia . . . . .	(c)14,858	13,470	..	..	28,328	15,422	1,240,850	1,284,600
Australia and New Zealand Bank Ltd . . . . .	38,654	28,074	2,706	5,110	74,544	126,023	1,270,008	1,470,574
The Bank of Adelaide . . . . .	5,600	5,650	280	600	12,130	1,100	91,267	104,497
Bank of New South Wales . . . . .	52,680	44,890	2,634	3,064	103,268	55,981	1,694,387	1,853,636
The Commercial Bank of Australia Ltd . . . . .	17,658	13,000	756	1,001	32,415	5,621	652,117	690,153
The Commercial Banking Co. of Sydney Ltd . . . . .	17,000	15,828	850	1,730	35,408	7,985	575,003	618,396
The English, Scottish and Australian Bank Ltd . . . . .	17,570	11,672	1,265	2,464	32,970	4,651	476,410	514,032
The National Bank of Australasia Ltd . . . . .	25,223	20,000	1,261	1,441	47,925	3,563	963,753	1,015,241
<i>Total, Major Trading Banks</i> . . . . .	<i>189,243</i>	<i>152,584</i>	<i>9,752</i>	<i>15,410</i>	<i>366,988</i>	<i>220,346</i>	<i>6,963,795</i>	<i>7,551,129</i>
<b>Other banks—</b>								
The Brisbane Permanent Building and Banking Co. Ltd . . . . .	2,500	1,075	100	144	3,819	..	9,090	12,909
The Rural Bank of New South Wales (General Bank Department) . . . . .	(d)18,209	(e)37,960	..	..	56,169	935	277,384	334,488
State Bank of South Australia . . . . .	(f)13,920	6,817	..	..	20,737	..	(g)105,501	126,238
The Rural and Industries Bank of Western Australia (Rural Department) . . . . .	(h)22,230	2,581	..	..	24,811	..	(i)103,490	128,301
<i>Total, other banks</i> . . . . .	<i>56,859</i>	<i>48,433</i>	<i>100</i>	<i>144</i>	<i>105,536</i>	<i>935</i>	<i>495,465</i>	<i>601,936</i>
<b>Total, all banks 1967</b> . . . . .	<b>246,102</b>	<b>201,017</b>	<b>9,852</b>	<b>15,553</b>	<b>472,524</b>	<b>221,281</b>	<b>7,459,260</b>	<b>8,153,065</b>
<b>Total, all banks 1966</b> . . . . .	<b>246,358</b>	<b>182,605</b>	<b>9,994</b>	<b>15,582</b>	<b>454,540</b>	<b>137,939</b>	<b>7,053,219</b>	<b>7,645,698</b>

(a) For dates of balance-sheets see table on page 649. (b) Includes provision for contingencies. (c) Amount specified as capital in the *Commonwealth Banks Act 1959*. (d) Inscribed stock and debentures issued for capital purposes. (e) Includes special reserve built up from share of profits of the Commonwealth Savings Bank in New South Wales. (f) Capital provided by State Government of South Australia. (g) Includes \$65,057,000 of advances by State Treasurer to Home Builders' Fund. (h) Capital provided by State Government of Western Australia. The Sinking Fund established for redemption of capital has been deducted. (i) Includes Savings Bank deposits, \$43,538,000.

AUSTRALIAN CHEQUE-PAYING BANKS: ASSETS(a), 1966 AND 1967  
(\$'000)

Bank	Coin, bullion, notes and cash at Reserve Bank	Money at short call over- seas	Australian public securities					Loans to author- ised dealers in short- term money market	
			Commonwealth Government		Local and semi- govt. author- ities	Other public secur- ities	Other secur- ities		
			Treas- ury bills and notes	Other secur- ities					
1967—									
Major Trading Banks—									
Commonwealth Trading Bank of Australia . . . . .	32,315	7,750	10,696	261,532	15,324	148	5,563	10,000	
Australia and New Zealand Bank Ltd . . . . .	27,885	29,242	10,708	126,979	..	37,607	6,590	15,857	
The Bank of Adelaide . . . .	3,744	1,050	950	12,687	..	..	4,542	100	
Bank of New South Wales . . .	45,327	13,175	12,792	311,516	489	7,140	29,887	26,465	
The Commercial Bank of Australia Ltd . . . . .	23,371	2,625	1,000	85,954	843	2,847	8,552	8,000	
The Commercial Banking Co. of Sydney Ltd . . . . .	12,608	4,500	6,965	94,566	..	..	11,901	8,150	
The English, Scottish and Aus- tralian Bank Ltd . . . . .	17,160	3,640	3,200	72,950	..	1,224	10,490	5,525	
The National Bank of Australasia Ltd . . . . .	19,629	1,500	3,002	173,706	..	3,234	9,972	7,300	
<i>Total, Major Trading Banks</i> . .	<i>182,039</i>	<i>63,481</i>	<i>49,313</i>	<i>1,139,890</i>	<i>16,656</i>	<i>52,200</i>	<i>87,498</i>	<i>81,397</i>	
Other banks—									
The Brisbane Permanent Building and Banking Co. Ltd . . . .	194	..	..	1,368	13	..	672	150	
The Rural Bank of New South Wales (General Bank Depart- ment) . . . . .	10,134	..	..	64,676	1,310	..	..	20,407	
State Bank of South Australia . .	1,398	..	..	7,537	..	..	4,614	..	
The Rural and Industries Bank of Western Australia (Rural Depart- ment)(d) . . . . .	(e)10,006	..	..	49,613	14,385	..	..	..	
<i>Total, other banks</i> . . . . .	<i>21,732</i>	..	..	<i>123,194</i>	<i>15,708</i>	..	<i>5,286</i>	<i>20,557</i>	
<i>Total, all banks 1967</i> . . . .	<i>203,771</i>	<i>63,481</i>	<i>49,313</i>	<i>1,263,084</i>	<i>32,364</i>	<i>52,200</i>	<i>92,784</i>	<i>101,954</i>	
<i>Total, all banks, 1966</i> . . . .	<i>211,977</i>	<i>46,148</i>	<i>61,088</i>	<i>1,168,732</i>	<i>26,052</i>	<i>47,053</i>	<i>84,339</i>	<i>106,828</i>	

For footnotes see next page.

AUSTRALIAN CHEQUE-PAYING BANKS: ASSETS(a), 1966 AND 1967—continued  
(\$'000)

Bank	Statutory reserve deposit account with Reserve Bank	Cheques and bills of, and balances with and due from other banks	Loans(b), advances and bills discounted	Bank premises, furniture and sites	Bills receivable and remittances in transit	All other assets	Total
<b>1967—</b>							
<b>Major Trading Banks—</b>							
Commonwealth Trading Bank of Australia . . . . .	89,873	26,120	561,391	11,439	242,152	10,298	1,284,600
Australia and New Zealand Bank Ltd . . . . .	65,033	101,608	726,941	29,927	289,643	2,553	1,470,574
The Bank of Adelaide . . . . .	7,217	6,302	57,792	4,517	4,047	1,548	104,497
Bank of New South Wales . . . . .	113,769	131,754	882,037	29,500	244,176	5,607	1,853,636
The Commercial Bank of Australia Ltd . . . . .	44,541	42,162	398,061	18,471	51,010	2,715	690,153
The Commercial Banking Co. of Sydney Ltd . . . . .	45,798	28,884	315,977	15,128	63,283	10,636	618,396
The English, Scottish and Australian Bank Ltd . . . . .	37,338	23,813	245,754	13,703	73,625	5,610	514,032
The National Bank of Aust- ralasia Ltd . . . . .	68,730	33,544	472,499	24,336	155,542	42,246	1,015,241
<i>Total, major trading banks</i>	<i>472,299</i>	<i>394,188</i>	<i>3,660,452</i>	<i>147,022</i>	<i>1,123,480</i>	<i>81,213</i>	<i>7,551,129</i>
<b>Other banks—</b>							
The Brisbane Permanent Building and Banking Co. Ltd . . . . .	149	1,037	9,171	144	..	11	12,909
The Rural Bank of New South Wales (General Bank De- partment) . . . . .	..	5,903	204,495	13,058	10,151	4,354	334,488
State Bank of South Australia . . . . .	..	493	(c)105,320	1,549	3,184	2,143	126,238
The Rural and Industries Bank of Western Australia (Rural Department)(d) . . . . .	..	(f)	46,395	4,097	3,805	..	128,301
<i>Total, other banks . . . . .</i>	<i>149</i>	<i>7,433</i>	<i>365,381</i>	<i>18,848</i>	<i>17,140</i>	<i>6,508</i>	<i>601,936</i>
<b>Total, all banks, 1967 . . . . .</b>	<b>472,448</b>	<b>401,621</b>	<b>4,025,833</b>	<b>165,870</b>	<b>1,140,620</b>	<b>87,721</b>	<b>8,153,065</b>
<b>Total, all banks, 1966 . . . . .</b>	<b>469,461</b>	<b>399,603</b>	<b>3,640,043</b>	<b>161,932</b>	<b>1,152,955</b>	<b>69,487</b>	<b>7,645,698</b>

(a) For dates of balance-sheets see table on page 649.  
money market.

(b) Other than loans to authorised dealers in the short-term  
extended terms—Home Builders' Fund. (c) Includes \$65,011,170 advances under  
assets held against Savings Bank deposits of \$43,538,100. (d) Includes  
with Coin, bullion, notes and cash at Reserve Bank. (e) Includes accounts with State Treasury. (f) Included

## Australian cheque-paying banks—profit and loss accounts

AUSTRALIAN CHEQUE-PAYING BANKS: PROFIT AND LOSS, 1966 AND 1967  
(\$'000)

<i>Bank</i>	<i>Year ended</i>	<i>Net earnings (a)</i>	<i>Expenses (b)</i>	<i>Income, land and other taxes and payments in lieu of taxes</i>	<i>Net profit</i>
<b>1967—</b>					
<b>Major Trading Banks—</b>					
Commonwealth Trading Bank of Australia . . . . .	30.6.67	46,694	41,398	2,487	2,809
Australia and New Zealand Bank Ltd . . . . .	30.9.67	61,820	49,083	6,137	6,600
The Bank of Adelaide . . . . .	30.9.67	5,750	4,639	357	754
Bank of New South Wales . . . . .	30.9.67	77,654	61,658	7,325	8,670
The Commercial Bank of Australia Ltd . . . . .	30.6.67	27,459	22,716	2,666	2,078
The Commercial Banking Co. of Sydney Ltd . . . . .	30.6.67	24,366	19,366	1,996	3,003
The English, Scottish and Australian Bank Ltd . . . . .	30.6.67	27,625	22,418	2,867	2,340
The National Bank of Australasia Ltd . . . . .	30.9.67	38,179	29,680	4,511	3,988
<i>Total, Major Trading Banks . . . . .</i>		<i>309,546</i>	<i>250,958</i>	<i>28,346</i>	<i>30,243</i>
<b>Other banks—</b>					
The Brisbane Permanent Building and Banking Co. Ltd . . . . .	31.8.67	699	245	203	252
The Rural Bank of New South Wales (General Bank Department) . . . . .	30.6.67	11,304	10,428	n.a.	876
State Bank of South Australia . . . . .	30.6.67	(g)6,274	5,527	n.a.	747
The Rural and Industries Bank of Western Australia (Rural Department)(h) . . . . .	31.3.67	(g)6,861	6,420	n.a.	441
<i>Total other banks . . . . .</i>		<i>25,138</i>	<i>22,620</i>	<i>203</i>	<i>2,315</i>
<b>Total, all banks, 1967 . . . . .</b>		<b>334,684</b>	<b>273,578</b>	<b>28,549</b>	<b>32,557</b>
<b>Total, all banks, 1966 . . . . .</b>		<b>289,094</b>	<b>239,733</b>	<b>22,545</b>	<b>26,816</b>

For footnotes see next page.

**AUSTRALIAN CHEQUE-PAYING BANKS: APPROPRIATION OF PROFITS**  
**1966 AND 1967**  
**(\$'000)**

Bank	Reserve funds (c)	Writing- off bank premises	Other appro- priations	Dividends(d)		Rate per annum (per cent)
				Gross	Net	
1967—						
Major Trading Banks—						
Commonwealth Trading Bank of Australia . . . . .	1,175	458	(e)1,175	..	..	..
Australia and New Zealand Bank Ltd . . . . .	1,255	..	..	4,638	4,638	12.0
The Bank of Adelaide . . . . .	150	..	..	560	560	10.0
Bank of New South Wales . . . . .	1,000	1,223	..	7,375	7,375	10.0
The Commercial Bank of Australia Ltd . . . . .	450	150	..	1,512	1,512	(f)
The Commercial Banking Co. of Sydney Ltd . . . . .	700	200	..	1,700	1,700	10.0
The English, Scottish and Australian Bank Ltd . . . . .	..	..	..	1,968	1,968	10.0
The National Bank of Australasia Ltd . . . . .	2,000	..	..	2,522	2,522	10.0
Total, Major Trading Banks . . . . .	6,730	2,032	1,175	20,276	20,276	..
Other banks—						
The Brisbane Permanent Building and Banking Co. Ltd . . . . .	50	..	..	200	200	8.0
The Rural Bank of New South Wales (General Bank Department) . . . . .	876	..	..	..	..	..
State Bank of South Australia . . . . .	747	..	..	..	..	..
The Rural and Industries Bank of Western Australia (Rural Department)(h) . . . . .	441	..	..	..	..	..
Total, other banks . . . . .	2,114	..	..	200	200	..
Total, all banks, 1967 . . . . .	8,844	2,032	1,175	20,476	20,476	..
Total, all banks, 1966 . . . . .	5,059	1,962	1,083	18,072	18,000	..

(a) Discount and interest earned, net exchange, commissions and other items (including transfers from contingencies accounts) after deducting interest paid and accrued on deposits, rebate on bills current at balance date, amounts written off assets and losses on realisation of assets, and transfers to the credit of contingencies accounts (out of which accounts provision for all bad and doubtful debts has been made). (b) Includes directors' fees. (c) Excludes accumulated profits and profit and loss accounts. (d) Dividends paid or payable out of profits earned during the year. (e) Commonwealth of Australia. (f) Four per cent on Preference shares and ten per cent on Ordinary shares. (g) Earnings represent gross earnings; expenses include interest paid, management expenses and provisions for contingencies. (h) Includes profit and loss on account of Savings Bank business.

## All cheque-paying banks—average liabilities and assets within Australia

Particulars of the average liabilities and assets *within Australia* for all cheque-paying banks in Australia for the months of June 1967 and earlier years are shown in the following tables. The details in these tables relate only to liabilities and assets within Australia and include the overseas banks, the Bank of China, Bank of New Zealand, and Banque Nationale de Paris. The tables on pages 646-8, Australian cheque-paying banks, relate to liabilities and assets both inside and outside Australia and exclude the overseas banks.

**ALL CHEQUE-PAYING BANKS: AVERAGE LIABILITIES WITHIN AUSTRALIA(a)**  
**MONTH OF JUNE 1967**  
**(\$'000)**

Bank	Deposits repayable in Australia				Balances due to other banks	Bills payable and all other liabilities to the public	Total
	Fixed	Current		Total			
		Bearing interest	Not bearing interest				
Major Trading Banks—							
Commonwealth Trading Bank of Australia . . . . .	458,327	59,323	496,876	1,014,526	6,788	14,886	1,036,201
Australia and New Zealand Bank Ltd . . . . .	280,829	31,116	412,405	724,350	7,451	15,342	747,142
The Bank of Adelaide . . . . .	30,681	4,628	46,943	82,252	1,553	845	84,650
Bank of New South Wales . . . . .	493,111	83,040	678,418	1,254,569	1,022	20,883	1,276,474
The Commercial Bank of Australia Ltd . . . . .	196,625	21,848	273,814	492,287	3,234	7,351	502,872
The Commercial Banking Co. of Sydney Ltd . . . . .	204,177	35,072	268,011	507,260	3,795	17,701	528,756
The English, Scottish and Australian Bank Ltd . . . . .	152,482	25,824	239,229	417,534	3,364	19,179	440,077
The National Bank of Australasia Ltd . . . . .	312,874	60,303	398,802	771,979	3,050	33,280	808,309
Total, Major Trading Banks . . . . .	2,129,106	321,154	2,814,497	5,264,756	30,258	129,467	5,424,480
Other banks—							
Bank of China . . . . .	18	..	1,823	1,841	..	22	1,863
Bank of New Zealand . . . . .	2,086	154	6,327	8,567	266	538	9,372
The Brisbane Permanent Building and Banking Co. Ltd . . . . .	1,285	6,123	..	7,409	190	694	8,292
Banque Nationale de Paris . . . . .	2,137	2,431	3,910	8,478	1,710	135	10,322
The Rural Bank of New South Wales (General Bank Department) . . . . .	105,285	44,366	91,880	241,531	6,820	19,941	268,292
State Bank of South Australia . . . . .	16,173	1,784	19,664	37,620	5	78,934	116,559
The Rural and Industries Bank of Western Australia (Rural Department) . . . . .	18,713	2,912	21,875	43,499	390	26,340	70,229
Total, other banks . . . . .	145,697	57,769	145,478	348,944	9,381	126,604	484,928
Total, all banks . . . . .	2,274,803	378,923	2,959,975	5,613,700	39,638	256,071	5,909,409

(a) Includes Papua and New Guinea.

**ALL CHEQUE-PAYING BANKS: AVERAGE ASSETS WITHIN AUSTRALIA(a)  
MONTH OF JUNE 1967  
(\$'000)**

<i>Bank</i>	<i>Coin, bullion, notes and cash at Reserve Bank</i>	<i>Commonwealth Government Securities</i>	<i>Treasury bills and notes</i>	<i>Other securities</i>	<i>Loans to authorised dealers in short- term money market</i>	<i>Statutory Reserve Deposit Account with Reserve Bank</i>	<i>Loans(b), advances and bills discounted</i>	<i>All other assets (c)</i>	<i>Total</i>
<b>Major Trading Banks—</b>									
Commonwealth Trading Bank of Australia . . .	30,814	6,575	264,778	11,119	89,932	544,834	75,220	1,023,271	
Australia and New Zealand Bank Ltd . . .	23,199	4,265	112,762	11,487	65,578	453,198	60,995	731,483	
The Bank of Adelaide . . .	3,971	125	12,031	600	7,554	53,744	16,709	94,733	
Bank of New South Wales . . .	31,159	1,891	277,115	19,710	113,378	781,587	102,725	1,327,564	
The Commercial Bank of Australia Ltd . . .	15,311	..	88,452	5,050	44,738	312,337	47,205	513,092	
The Commercial Banking Co. of Sydney Ltd . . .	14,452	7,403	94,712	4,540	46,001	309,804	51,215	528,127	
The English, Scottish and Australian Bank Ltd . . .	14,530	500	73,659	6,086	37,414	250,032	49,768	431,988	
The National Bank of Australasia Ltd . . .	26,595	3,298	142,319	14,910	69,403	475,322	89,351	821,198	
<i>Total, Major Trading Banks</i> . . .	<i>160,030</i>	<i>24,056</i>	<i>1,065,827</i>	<i>73,502</i>	<i>473,998</i>	<i>3,180,857</i>	<i>493,188</i>	<i>5,471,456</i>	
<b>Other banks—</b>									
Bank of China . . .	107	..	..	1,638	91	31	532	2,398	
Bank of New Zealand . . .	157	569	2,266	606	607	4,763	3,164	12,131	
The Brisbane Permanent Building and Banking Co. Ltd . . .	66	..	1,265	..	146	8,835	1,835	12,147	
Banque Nationale de Paris . . .	301	..	1,100	775	325	7,499	1,889	11,889	
The Rural Bank of New South Wales (General Bank Department) . . .	8,654	..	78,426	11,311	..	201,193	18,329	317,914	
State Bank of South Australia . . .	1,716	..	7,539	..	..	104,999	9,923	124,176	
The Rural and Industries Bank of Western Australia (Rural Department) . . .	1,297	..	30,580	963	..	39,591	6,238	78,669	
<i>Total, other banks</i> . . .	<i>12,298</i>	<i>569</i>	<i>121,176</i>	<i>15,293</i>	<i>1,169</i>	<i>366,911</i>	<i>41,908</i>	<i>559,322</i>	
<b>Total, all banks</b> . . .	<b>172,327</b>	<b>24,626</b>	<b>1,187,003</b>	<b>88,794</b>	<b>475,166</b>	<b>3,547,768</b>	<b>535,094</b>	<b>6,030,777</b>	

(a) Includes Papua and New Guinea. (b) Other than loans to authorised dealers in the short-term money market.  
(c) Includes local government and semi-governmental securities.

**ALL CHEQUE-PAYING BANKS: AVERAGE LIABILITIES WITHIN AUSTRALIA(a)**  
**JUNE 1963 TO 1967**

(\$ million)

June—	Deposits repayable in Australia				Balances due to other banks	Bills payable and all other liabilities to the public	Total
	Fixed	Current		Total			
		Bearing interest	Not bearing interest				
Major Trading Banks—							
1963 . . . . .	1,227.6	235.6	2,383.8	3,846.9	24.7	74.9	3,946.5
1964 . . . . .	1,499.1	260.2	2,618.9	4,378.2	23.1	85.1	4,486.4
1965 . . . . .	1,791.1	304.2	2,651.2	4,746.4	34.6	124.0	4,904.9
1966 . . . . .	2,002.6	316.7	2,673.2	4,992.4	25.8	139.2	5,157.4
1967 . . . . .	2,129.1	321.2	2,814.5	5,264.8	30.3	129.5	5,424.5
All cheque-paying banks—							
1963 . . . . .	1,295.5	279.4	2,489.5	4,064.3	28.0	162.1	4,254.5
1964 . . . . .	1,604.8	305.3	2,739.2	4,649.3	26.7	180.5	4,856.5
1965 . . . . .	1,909.7	353.0	2,775.7	5,038.4	39.4	229.6	5,307.4
1966 . . . . .	2,136.0	370.9	2,801.5	5,308.4	35.0	253.9	5,597.3
1967 . . . . .	2,274.8	378.9	2,960.0	5,613.7	39.6	256.1	5,909.4

(a) Includes Papua and New Guinea.

**ALL CHEQUE-PAYING BANKS: AVERAGE ASSETS WITHIN AUSTRALIA(a)**  
**JUNE 1963 TO 1967**

(\$ million)

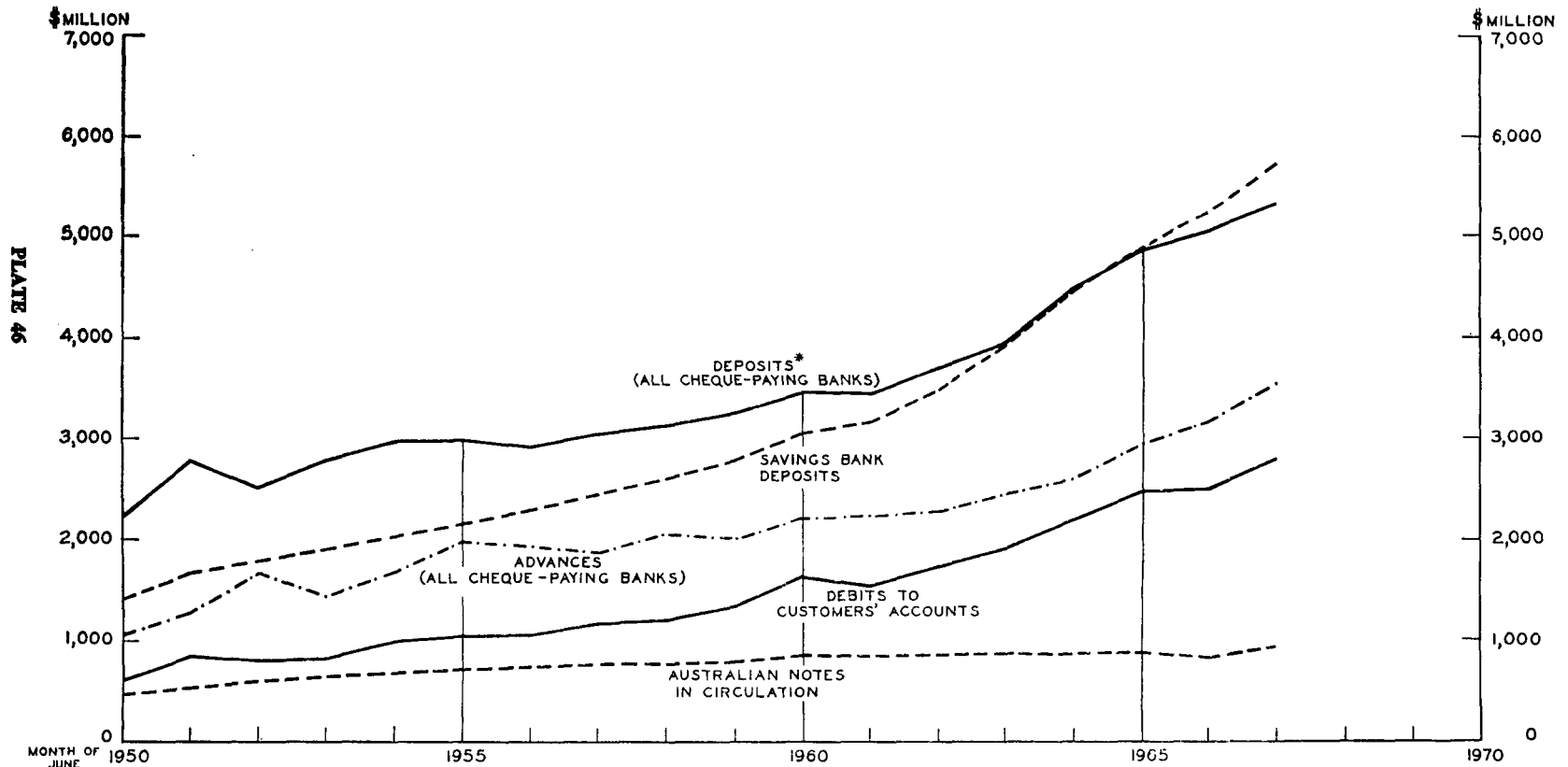
June—	Coin, bullion, notes and cash at Reserve Bank	Commonwealth Government securities		Loans to author- ised dealers in short- term money market	Statutory Reserve Deposit Account with Reserve Bank	Loans(b), advances and bills dis- counted	All other assets (c)	Total
		Treasury bills and notes	Other securities					
Major Trading Banks—								
1963	130.9	53.3	733.8	53.6	446.4	2,202.3	347.0	3,967.3
1964	136.1	50.4	865.3	56.6	677.7	2,333.2	347.9	4,467.2
1965	159.9	20.6	871.2	77.4	656.1	2,631.1	410.9	4,827.1
1966	150.2	38.5	1,019.0	61.0	472.6	2,844.6	504.2	5,090.1
1967	160.0	24.1	1,065.8	73.5	474.0	3,180.9	493.2	5,471.5
All cheque-paying banks—								
1963	138.5	58.8	784.6	58.0	447.3	2,464.8	380.0	4,331.9
1964	144.0	53.4	959.1	67.3	678.8	2,609.9	383.6	4,896.0
1965	168.4	22.2	952.0	93.7	657.2	2,955.1	447.9	5,296.5
1966	162.8	40.0	1,116.6	74.8	473.5	3,182.8	548.4	5,598.9
1967	172.3	24.6	1,187.0	88.8	475.2	3,547.8	535.1	6,030.8

(a) Includes Papua and New Guinea. (b) Excludes loans to authorised dealers in the short-term money market.  
(c) Includes local government and semi-governmental securities.



# BANKING: AUSTRALIA

1950 TO 1967



\* EXCLUDES COMMONWEALTH AND STATE GOVERNMENTS

## All cheque-paying banks—ratios of assets and liabilities to total deposits

The following tables show, for the Major Trading Banks and for all cheque-paying banks, the ratios of selected assets and liabilities to total deposits for the months of June 1963 to 1967. The ratios are based on the average liabilities and assets for the month of June in the years shown.

## ALL CHEQUE-PAYING BANKS: RATIOS OF SELECTED ASSETS AND LIABILITIES TO TOTAL DEPOSITS(a), JUNE 1963 TO 1967

(Per cent)

June—	Coin, bullion, notes and cash at Reserve Bank			Commonwealth and State Government securities	Statutory Reserve Deposit Account with Reserve Bank		Loans(b), advances and bills discounted	Deposits not bearing interest	
				Treasury bills and notes	Other				
Major Trading Banks—									
1963	.	.	.	3.4	1.4	19.1	11.6	57.2	62.0
1964	.	.	.	3.1	1.2	19.8	15.5	53.3	59.8
1965	.	.	.	3.4	0.4	18.4	13.8	55.4	55.9
1966	.	.	.	3.0	0.8	20.4	9.5	57.0	53.5
1967	.	.	.	3.0	0.5	20.2	9.0	60.4	53.5
All cheque-paying banks—									
1963	.	.	.	3.4	1.5	19.3	11.0	60.6	61.3
1964	.	.	.	3.1	1.2	20.6	14.6	56.1	58.9
1965	.	.	.	3.0	0.4	18.9	13.0	58.7	55.1
1966	.	.	.	3.1	0.8	21.0	8.9	60.0	52.8
1967	.	.	.	3.1	0.4	21.1	8.5	63.2	52.7

(a) Based on deposits and assets within Australia (including Papua and New Guinea) and excludes London Funds.  
 (b) Excludes loans to authorised dealers in short-term money market.

ALL CHEQUE-PAYING BANKS: PROPORTION OF NON-INTEREST BEARING DEPOSITS TO TOTAL DEPOSITS, STATES AND TERRITORIES  
JUNE 1963 TO 1967

(Per cent)

June—	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.(a)
Major Trading Banks—									
1963 . . .	62.7	60.9	61.8	59.2	63.3	66.7	64.0	70.6	62.0
1964 . . .	60.5	58.6	60.7	56.7	59.6	65.2	64.2	68.2	59.8
1965 . . .	56.6	54.3	56.7	53.2	57.0	61.5	63.2	65.9	55.9
1966 . . .	54.2	51.7	53.5	52.5	55.9	60.1	60.8	63.2	53.5
1967 . . .	53.9	51.5	54.3	51.5	57.8	57.1	60.4	64.5	53.5
All cheque-paying banks—									
1963 . . .	61.1	61.0	61.0	58.6	64.4	66.7	64.0	70.6	61.3
1964 . . .	58.3	58.7	60.0	56.8	60.7	65.2	64.2	68.2	58.9
1965 . . .	54.8	54.3	56.2	53.4	57.3	61.5	63.2	65.9	55.1
1966 . . .	52.4	51.7	53.0	52.8	55.7	60.1	60.8	63.2	52.8
1967 . . .	52.2	51.7	54.3	57.4	64.9	57.1	60.4	64.5	52.7

(a) Includes Papua and New Guinea.

**ALL CHEQUE-PAYING BANKS: RATIO OF ADVANCES TO TOTAL DEPOSITS  
STATES AND TERRITORIES, JUNE 1963 TO 1967**

(Per cent)

<i>June—</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust. (a)</i>
<b>Major Trading Banks—</b>									
1963 . .	60.5	52.7	59.5	50.8	65.4	64.0	31.7	30.7	57.2
1964 . .	57.6	47.4	54.9	47.4	64.1	58.0	35.1	31.0	53.3
1965 . .	58.6	49.1	59.8	52.1	64.8	55.5	35.7	52.8	55.4
1966 . .	61.8	52.0	59.5	55.2	55.6	51.0	35.0	30.3	57.0
1967 . .	65.7	55.3	59.2	58.6	63.9	55.3	32.5	38.5	60.4
<b>All cheque-paying banks—</b>									
1963 . .	65.1	52.9	60.3	63.9	71.7	64.0	31.7	30.7	60.6
1964 . .	60.3	47.4	55.7	62.5	70.5	58.0	35.1	31.0	56.1
1965 . .	61.8	49.3	60.4	70.1	70.6	55.5	35.7	52.8	58.7
1966 . .	64.3	52.2	60.1	75.0	59.7	51.0	35.0	30.3	60.0
1967 . .	67.5	55.4	59.8	81.1	67.2	55.3	32.5	38.5	63.2

(a) Includes Papua and New Guinea.

**Major Trading Banks—classification of bank advances within Australia**

Classification of bank advances of the Major Trading Banks outstanding for each State at 10 January 1968 and for Australia at July 1965 to 1967 and January 1968 are shown in the following tables.

Resident borrowers cover institutions (including branches of overseas institutions) engaged in business in Australia and persons permanently residing in Australia. Non-resident borrowers cover all other persons and institutions incorporated abroad, which, though represented, do not carry on business in Australia.

Advances to resident borrowers have been classified as business advances, advances to public authorities, personal advances, and advances to non-profit organisations.

Business advances have been further classified to the main industry of the borrower and include advances to partnerships, companies and other institutions engaged in business in Australia, advances to persons actively engaged in business on their own behalf if the advance is mainly for business purposes, advances to mutual, co-operative and benefit societies which distribute their profits or surpluses (if any) to members by way of dividends, rebates on charges for goods and services, or increased benefits.

Advances to public authorities cover advances to local and semi-governmental authorities including separately constituted government business undertakings but not the Commonwealth or State Governments. Personal advances cover advances to persons for purposes other than carrying on a business. Advances to non-profit organisations cover advances to organisations which are not carried on for the purpose of making a profit or gain to individual members, any income of the organisation being used for the purposes of the organisation or for the benefit of the community.

**MAJOR TRADING BANKS: CLASSIFICATION OF ADVANCES WITHIN AUSTRALIA(a),  
STATES, 10 JANUARY 1968**

<i>Classification</i>	<i>N.S.W. (b)</i> \$ mill.	<i>Vic.</i> \$ mill.	<i>Qld (a)</i> \$ mill.	<i>S.A. (c)</i> \$ mill.	<i>W.A.</i> \$ mill.	<i>Tas.</i> \$ mill.	<i>Aust. (a)</i> \$ mill.	<i>Pro- portion of total (per cent)</i>	<i>Term loan com- ponent \$ mill.</i>
<b>RESIDENT BORROWERS</b>									
Business advances classified according to main industry of borrower—									
Agriculture, grazing and dairying . . . . .	304.3	161.4	160.8	65.0	64.8	19.3	775.7	23.7	105.4
Manufacturing . . . . .	266.6	212.5	59.2	38.2	20.0	12.3	608.9	18.6	99.0
Transport, storage and communication . . . . .	17.5	18.1	7.6	3.7	3.7	1.6	52.1	1.6	7.0
Finance—									
Building and housing societies . . . . .	19.8	14.7	1.9	0.9	0.4	0.3	37.9	1.2	0.2
Other . . . . .	51.1	40.3	12.8	9.1	3.9	5.5	122.8	3.7	0.9
Total, finance . . . . .	70.9	55.0	14.7	10.0	4.3	5.8	160.7	4.9	1.1
Commerce—									
Retail trade . . . . .	107.3	69.0	43.5	20.4	16.2	7.4	263.9	8.1	5.5
Wholesale trade(d) . . . . .	138.0	79.8	15.6	15.0	19.4	5.8	273.7	8.4	14.6
Total, commerce . . . . .	245.3	148.8	59.1	35.5	35.7	13.2	537.6	16.4	20.1
Building and construction	43.0	31.3	13.6	5.7	7.6	1.9	103.0	3.1	7.3
Other businesses . . . . .	129.5	89.6	54.8	17.1	22.6	4.7	318.3	9.7	32.2
Unclassified . . . . .	12.2	11.5	3.4	3.6	1.7	0.4	32.9	1.0	1.5
Total, business advances—									
Companies(e) . . . . .	669.3	452.9	134.9	95.6	67.2	31.7	1,451.6	44.3	167.2
Other(e) . . . . .	420.2	275.2	238.4	83.1	93.2	27.5	1,137.6	34.7	106.4
Total . . . . .	1,089.5	728.2	373.3	178.7	160.4	59.2	2,589.3	79.0	273.6
Advances to public authorities(f) . . . . .	14.1	28.0	1.9	1.2	0.9	0.3	46.4	1.4	1.6
Personal advances—									
Building or purchasing own home (individuals) . . . . .	136.8	62.3	36.0	16.0	17.3	4.1	272.6	8.3	..
Other (including personal loans) . . . . .	130.0	86.2	39.6	17.8	20.0	6.0	299.6	9.1	0.1
Total, personal . . . . .	266.8	148.6	75.6	33.8	37.4	10.1	572.2	17.5	0.2
Advances to non-profit organisations . . . . .	32.7	16.8	9.3	3.0	4.2	0.9	66.9	2.0	0.2
Total, advances to resident borrowers . . . . .	1,403.0	921.5	460.0	216.7	202.8	70.6	3,274.6	100.0	275.6
<b>NON-RESIDENT BORROWERS</b>									
Advances to non-resident borrowers . . . . .	0.6	0.4	0.1	..	0.1	..	1.2	..	0.1
<b>TOTAL ADVANCES TO ALL BORROWERS</b>									
Grand total . . . . .	1,403.6	921.9	460.2	216.7	202.9	70.6	3,275.9	100.0	275.6

(a) Includes Papua and New Guinea. (b) Includes Australian Capital Territory. (c) Includes Northern Territory.  
 (d) Includes temporary advances to woolbuyers. (e) The combined advances for these two groups are distributed over the industries above. (f) Includes local government and semi-governmental bodies.

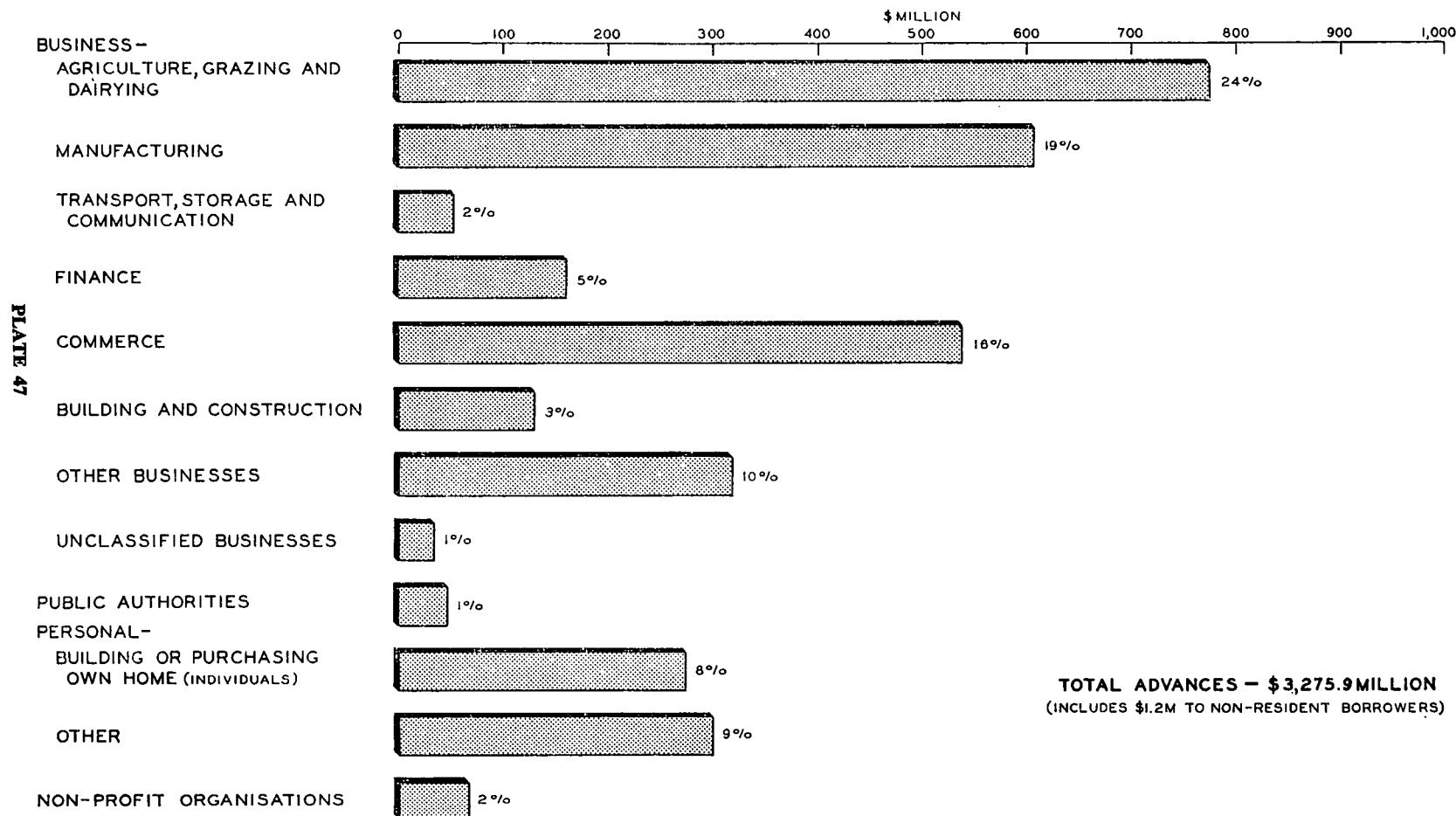
**MAJOR TRADING BANKS: CLASSIFICATION OF ADVANCES WITHIN AUSTRALIA(a)**  
**JULY 1965 TO JANUARY 1968**

Classification	July— 1965		July— 1966		July— 1967		January— 1968	
	Amount (\$ mill.)	Per cent	Amount (\$ mill.)	Per cent	Amount (\$ mill.)	Per cent	Amount (\$ mill.)	Per cent
<b>RESIDENT BORROWERS</b>								
Business advances classified according to main industry of borrower—								
Agriculture, grazing and dairying . . . .	584.1	21.8	650.4	22.2	750.5	23.1	775.7	23.7
Manufacturing . . . .	572.9	21.4	620.0	21.2	638.9	19.6	608.9	18.6
Transport, storage and communication . . . .	42.7	1.6	46.5	1.6	56.2	1.7	52.1	1.6
Finance—								
Building and housing societies . . . .	43.2	1.6	41.1	1.4	39.7	1.2	37.9	1.2
Other . . . .	96.7	3.6	96.0	3.3	96.0	3.0	122.8	3.7
Total, finance . . . .	139.9	5.2	137.1	4.7	135.8	4.2	160.7	4.9
Commerce—								
Retail trade . . . .	242.1	9.1	272.2	9.3	290.4	8.9	263.9	8.1
Wholesale trade(b) . . . .	275.8	10.3	286.5	9.8	298.2	9.2	273.7	8.4
Total, commerce . . . .	517.9	19.4	558.7	19.1	588.6	18.1	537.6	16.4
Building and construction . . . .	84.5	3.2	88.2	3.0	102.8	3.2	103.0	3.1
Other businesses . . . .	215.1	8.0	254.1	8.7	315.4	9.7	318.3	9.7
Unclassified . . . .	22.8	0.9	25.3	0.9	32.4	1.0	32.9	1.0
Total, business advances—								
Companies(c) . . . .	1,291.5	48.3	1,408.8	48.2	1,510.1	46.4	1,451.6	44.3
Other(c) . . . .	888.2	33.2	971.5	33.2	1,110.5	34.1	1,137.6	34.7
Total . . . .	2,179.7	81.5	2,380.3	81.4	2,620.6	80.5	2,589.3	79.0
Advances to public authorities(d) . . . .	19.9	0.8	28.7	1.0	28.2	0.9	46.4	1.4
Personal advances classified according to main purpose of advance—								
Building or purchasing own home (individuals) . . . .	219.3	8.2	229.5	7.8	261.3	8.0	272.6	8.3
Other (including personal loans) . . . .	206.1	7.7	231.0	7.9	280.3	8.6	299.6	9.1
Total, personal . . . .	425.4	15.9	460.5	15.7	541.6	16.6	572.2	17.5
Advances to non-profit organisations . . . .	49.1	1.8	55.2	1.9	62.2	1.9	66.9	2.0
Total, advances to resident borrowers . . . .	2,674.2	100.0	2,924.7	100.0	3,252.6	100.0	3,274.6	100.0
<b>NON-RESIDENT BORROWERS</b>								
Advances to non-resident borrowers . . . .	0.9	..	1.0	..	1.4	..	1.2	..
<b>TOTAL ADVANCES TO ALL BORROWERS</b>								
Grand total . . . .	2,675.1	100.0	2,925.7	100.0	3,254.0	100.0	3,275.9	100.0

(a) Includes Papua and New Guinea. (b) Includes temporary advances to woolbuyers. (c) The combined advances for these two groups are distributed over the industries above. (d) Includes local government and semi-governmental bodies.

# MAJOR TRADING BANKS: CLASSIFICATION OF ADVANCES WITHIN AUSTRALIA

JANUARY 1968



**Major Trading Banks—classification of bank deposits within Australia**

A classification of bank deposits (excluding deposits of Commonwealth and State Governments) of the Major Trading Banks for July 1965 to 1967 and January 1968 is given in the following table. The classification is similar to that used for advances (*see* page 656).

**MAJOR TRADING BANKS: CLASSIFICATION OF DEPOSITS(a) WITHIN AUSTRALIA(b)  
JULY 1965 TO JANUARY 1968**

Classification	July— 1965		July— 1966		July— 1967		January— 1968	
	Amount (\$ mill.)	Per cent	Amount (\$ mill.)	Per cent	Amount (\$ mill.)	Per cent	Amount (\$ mill.)	Per cent
<b>RESIDENT DEPOSITORS</b>								
Business deposits classified according to main industry of depositor—								
Agriculture, grazing and dairying . . . . .	791.1	17.8	801.2	16.9	833.4	16.5	912.6	16.6
Manufacturing . . . . .	283.8	6.4	284.1	6.0	311.1	6.2	373.3	6.8
Transport, storage and communication . . . . .	72.8	1.6	77.5	1.6	78.6	1.6	85.3	1.5
Finance . . . . .	311.9	7.0	339.9	7.2	353.4	7.0	375.0	6.8
Commerce . . . . .	370.3	8.3	382.1	8.1	397.2	7.9	468.2	8.4
Building and construction . . . . .	137.4	3.1	148.8	3.1	158.3	3.1	188.0	3.3
Other businesses . . . . .	518.7	11.6	548.8	11.6	576.6	11.4	621.2	11.2
Unclassified . . . . .	45.6	1.0	62.5	1.3	54.5	1.1	63.5	1.5
Total, business deposits—								
Companies(c) . . . . .	982.2	22.0	1,074.4	22.6	1,127.8	22.4	1,273.2	23.1
Other(c) . . . . .	1,549.5	34.8	1,570.6	33.1	1,635.3	32.4	1,814.0	33.0
Total . . . . .	2,531.6	56.8	2,645.0	55.7	2,763.1	54.8	3,087.1	56.1
Deposits of public authorities . . . . .	267.0	6.0	242.0	5.1	264.9	5.3	248.0	4.5
Personal deposits . . . . .	1,425.8	32.0	1,611.0	33.9	1,729.7	34.3	1,859.1	33.8
Deposits of non-profit organisations . . . . .	187.9	4.2	201.4	4.2	229.1	4.5	239.1	4.3
Total, resident depositors	4,412.3	99.0	4,699.4	99.0	4,986.7	98.9	5,433.4	98.7
<b>NON-RESIDENT DEPOSITORS</b>								
Total, non-resident depositors . . . . .	43.8	1.0	47.9	1.0	57.7	1.1	73.5	1.3
<b>TOTAL—ALL DEPOSITORS</b>								
Grand total . . . . .	4,456.0	100.0	4,747.4	100.0	5,044.4	100.0	5,506.9	100.0

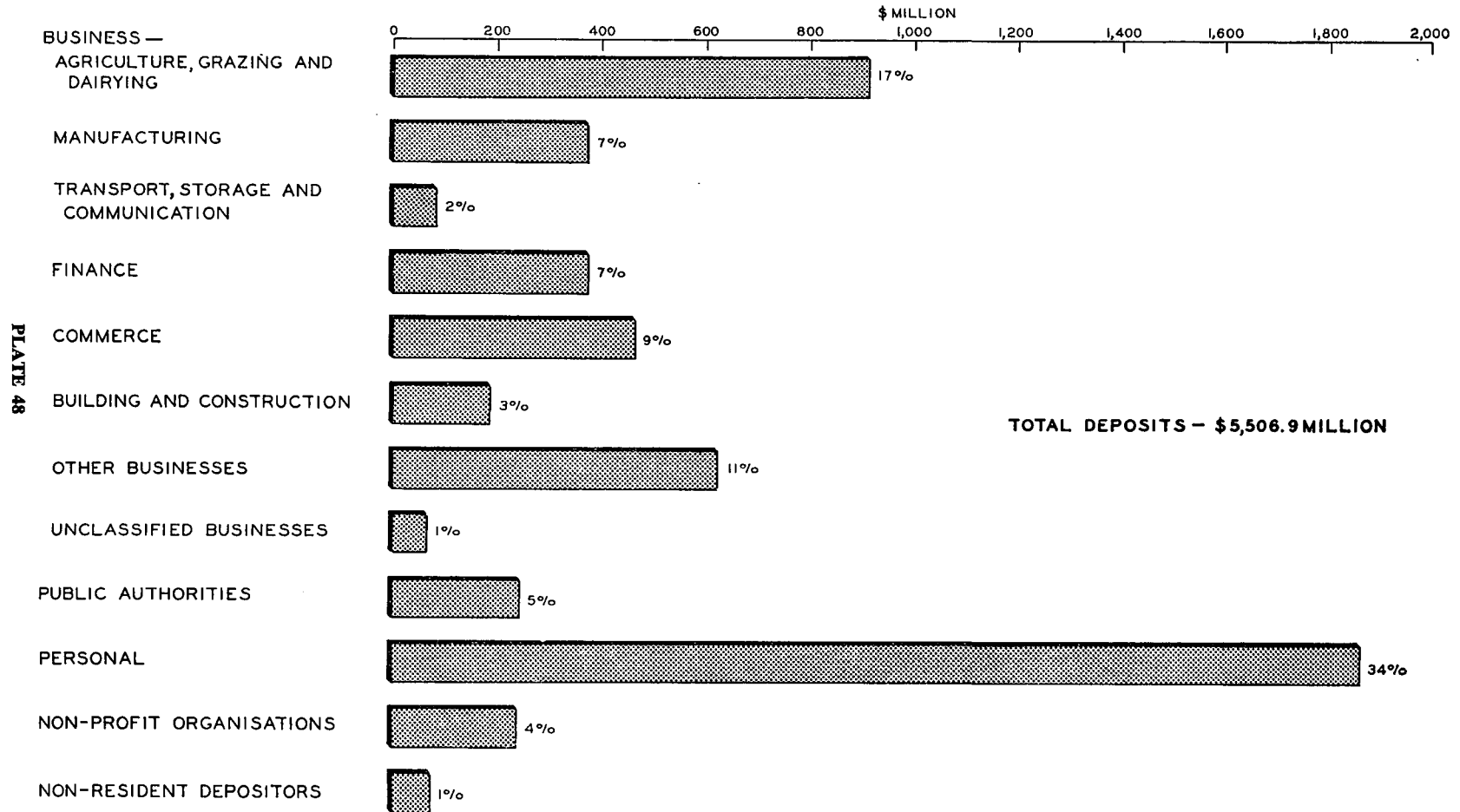
(a) Excludes deposits of Commonwealth and State Governments. (b) Includes Papua and New Guinea. (c) The combined deposits of these two groups are distributed over the industries above.

**Major Trading Banks—new and increased lending commitments and overdraft limits**

Particulars of new and increased lending commitments and overdraft limits of the Major Trading Banks are shown on page 662. The figures represent gross new lending commitments of banks and do not take account of cancellations and reductions of existing limits. Figures for cancellations and reductions of existing limits can be obtained from this series (after deducting term loan component and adjusting the weekly averages to a monthly basis) in conjunction with that of overdraft limits shown in the following table. However, these derived figures should be regarded as an approximation only, since there are unavoidable differences in the basis of compilation of the two series.

# MAJOR TRADING BANKS: CLASSIFICATION OF DEPOSITS WITHIN AUSTRALIA

JANUARY 1968



EXCLUDES DEPOSITS OF COMMONWEALTH AND STATE GOVERNMENTS



**MAJOR TRADING BANKS: NEW AND INCREASED LENDING COMMITMENTS  
AND OVERDRAFT LIMITS, 1962-63 TO 1966-67 AND JULY 1966  
TO DECEMBER 1967**

(Source: Reserve Bank of Australia)

(\$ million)

New and increased lending commitments(a)						Overdraft limits(b)			
Weekly average for period ending second Wednesday of—			Aggre- gate	Term loan com- ponent	Farm develop- ment com- ponent	Second Wednesday of—			Total out- standing
1962-63(c)	.	.	22.1	1.9	..	1963—July	.	.	3,642.7
1963-64(c)	.	.	22.5	1.7	..	1964—July	.	.	3,801.0
1964-65(c)	.	.	21.7	1.4	..	1965—July	.	.	3,932.2
1965-66(c)	.	.	22.8	1.3	0.1	1966—July	.	.	4,089.8
1966-67(c)	.	.	30.9	2.2	0.5	1967—July	.	.	4,506.7
1966-67—						1966-67—			
July	.	.	28.6	1.2	0.4	July	.	.	4,089.8
August	.	.	26.8	1.8	0.5	August	.	.	4,111.4
September	.	.	25.8	1.7	0.4	September	.	.	4,146.8
October	.	.	27.4	2.0	0.6	October	.	.	4,173.1
November	.	.	29.0	1.5	0.4	November	.	.	4,214.4
December	.	.	30.5	1.8	0.4	December	.	.	4,260.6
January	.	.	25.7	2.2	0.4	January	.	.	4,250.3
February	.	.	28.4	2.0	0.5	February	.	.	4,257.0
March	.	.	42.6	3.3	0.6	March	.	.	4,330.1
April	.	.	35.2	2.0	0.5	April	.	.	4,397.3
May	.	.	35.9	3.2	0.7	May	.	.	4,448.2
June	.	.	31.1	2.7	0.8	June	.	.	4,495.3
1967-68—						1967-68—			
July	.	.	33.0	2.1	0.6	July	.	.	4,506.7
August	.	.	32.6	2.0	0.6	August	.	.	4,544.0
September	.	.	30.7	1.7	0.5	September	.	.	4,577.6
October	.	.	28.5	1.6	0.5	October	.	.	4,601.6
November	.	.	33.5	1.7	0.6	November	.	.	4,631.8
December	.	.	34.5	1.6	0.6	December	.	.	4,686.9

(a) Excludes commitments in respect of temporary advances to woolbuyers. (b) Excludes limits in respect of temporary advances to woolbuyers, term loans and farm development loans. (c) Year ended second Wednesday of July.

The following table shows new and increased lending commitments in respect of the Major Trading Banks to selected industrial groups for the six months ended July 1966 to January 1968. The classification is an abridgment of that used for bank advances (see page 656).

The table indicates the sources of demand for new lending. If taken in conjunction with the classification of overdraft limits outstanding (see foot of page), it shows the approximate rate of cancellations and reductions of limits in the main industrial groups.

**MAJOR TRADING BANKS: NEW AND INCREASED LENDING COMMITMENTS  
TO SELECTED INDUSTRIAL GROUPS(a), SIX MONTHS ENDED  
JULY 1966, JANUARY 1967, JULY 1967, JANUARY 1968**

(Source: Reserve Bank of Australia)

(\$ million)

Classification	Six months ended second Wednesday of—							
	July 1966		January 1967		July 1967		January 1968	
	Aggre- gate	Term loan com- ponent	Aggre- gate	Term loan com- ponent	Aggre- gate	Term loan com- ponent	Aggre- gate	Term loan com- ponent
<b>Business—</b>								
Agriculture, grazing and dairying . . . . .	(b)142.9	18.1	(b)144.2	16.6	(b)189.7	25.9	(b)167.3	18.6
Manufacturing . . . . .	104.8	8.4	114.3	14.6	145.0	18.2	101.7	15.0
Finance . . . . .	19.5	..	25.6	0.2	37.2	0.1	39.0	0.1
Commerce(a) . . . . .	97.3	1.7	101.9	3.8	112.9	2.5	115.8	2.1
Building and construction . . . . .	27.5	0.5	36.6	3.2	36.8	1.7	44.2	0.7
<b>Persons—</b>								
Advances for building or purchase of own home (to individuals) . . . . .	75.1	..	86.2	..	99.7	..	98.4	..
Other (including personal loans) . . . . .	76.1	..	82.0	..	102.6	..	106.2	..
All other . . . . .	105.6	5.8	126.3	8.8	167.0	17.1	150.3	7.9
<b>Total . . . . .</b>	<b>(b)648.7</b>	<b>34.5</b>	<b>(b)717.0</b>	<b>47.3</b>	<b>(b)890.8</b>	<b>65.6</b>	<b>(b)822.8</b>	<b>44.5</b>

(a) Excludes commitments in respect of temporary advances to woolbuyers. (b) Includes Farm Development Loan approvals: \$4.6 million, July 1966; \$11.2 million, January 1967; \$15.9 million, July 1967; \$13.5 million, January 1968.

The following table shows the classification of overdraft limits outstanding in respect of the Major Trading Banks for January 1965 to 1968. The classification is similar to that used for advances (see page 656). The table shows the trend of net new lending classified by industry. If used in conjunction with the classification of bank advances, it shows the range of limits usage by industry, and if used in conjunction with the classification of new and increased lending commitments (see above), it shows the approximate rate of cancellations and reductions of limits by industry.

**MAJOR TRADING BANKS: CLASSIFICATION OF OVERDRAFT LIMITS  
OUTSTANDING(a), JANUARY 1965 TO 1968**

(Source: Reserve Bank of Australia)

(\$ million)

Classification	Second Wednesday of—						
	January 1965	July 1965	December 1965	July 1966	January 1967	July 1967	January 1968

**RESIDENT BORROWERS**

Business overdraft limits classified accord-  
ing to main industry of borrower—

Agriculture, grazing and dairying—

Mainly sheep grazing . . . . .	289.5	299.5	317.1	334.4	352.6	368.0	386.4
Mainly wheat growing . . . . .	69.5	71.6	78.9	81.1	88.7	93.8	110.0
Mainly dairying and pig raising . . . . .	103.8	102.8	104.2	104.2	103.9	109.0	113.5
Other . . . . .	177.1	186.3	189.1	201.2	208.9	225.3	237.5
<b>Total, agriculture, etc. . . . .</b>	<b>639.9</b>	<b>660.2</b>	<b>689.2</b>	<b>720.8</b>	<b>754.1</b>	<b>796.1</b>	<b>847.4</b>

(a) Excludes limits in respect of temporary advances to woolbuyers and term loans.

MAJOR TRADING BANKS: CLASSIFICATION OF OVERDRAFT LIMITS  
OUTSTANDING(a), JANUARY 1965 TO 1968—*continued*  
(\$ million)

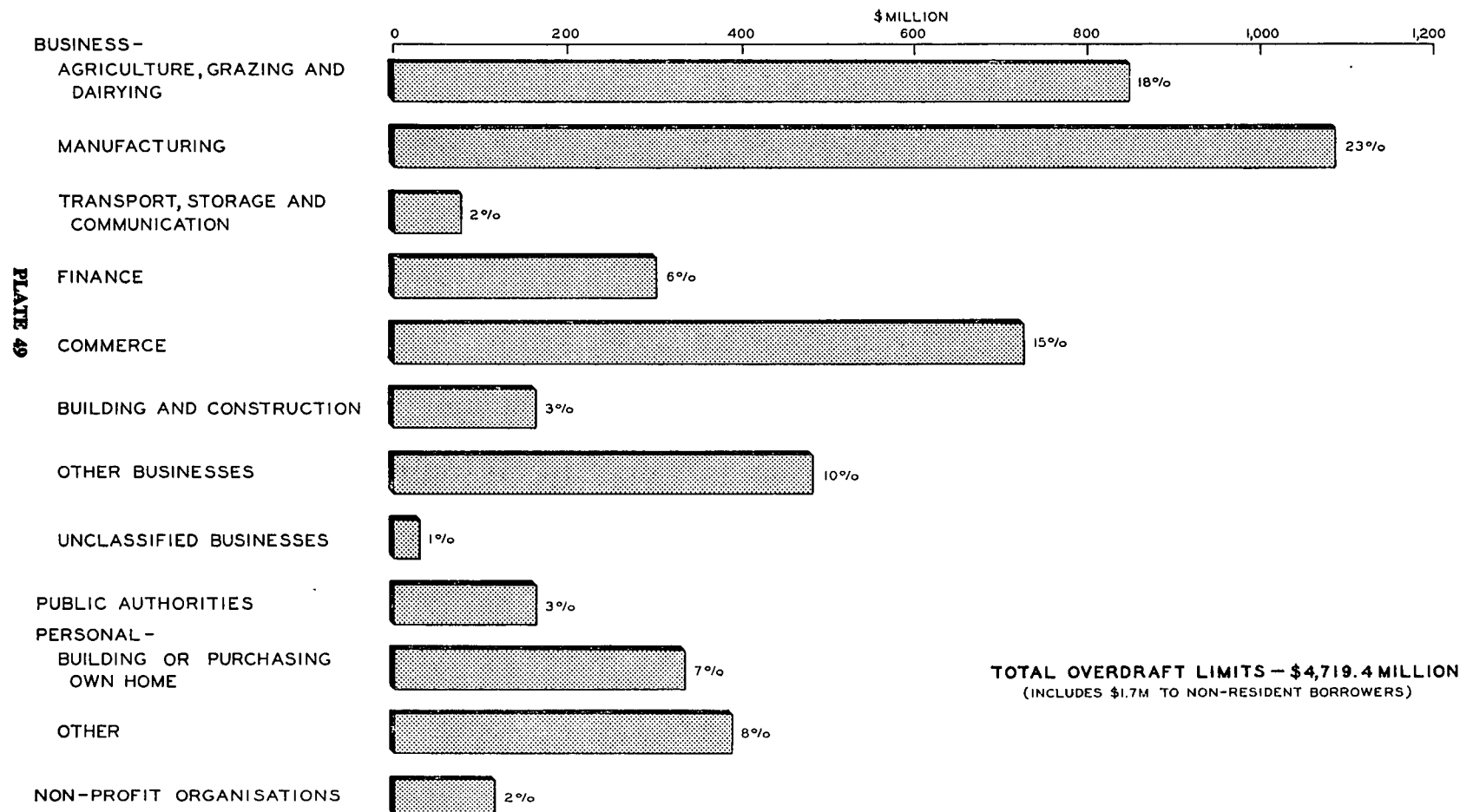
Classification	Second Wednesday of—						
	January 1965	July 1965	December 1965	July 1966	January 1967	July 1967	January 1968
RESIDENT BORROWERS— <i>continued</i>							
Manufacturing . . . . .	933.5	995.3	997.1	1,012.7	1,017.8	1,086.4	1,087.3
Transport, storage and communica- tion . . . . .	68.7	62.8	63.6	66.0	67.6	71.9	77.3
Finance—							
Building and housing societies . .	60.5	58.1	56.0	56.1	55.2	53.0	52.0
Pastoral finance companies . . .	92.6	87.2	88.7	80.0	81.1	75.9	95.0
Hire purchase and other finance companies . . . . .	86.2	84.3	81.8	76.4	80.5	81.9	79.5
Other . . . . .	82.5	72.1	74.0	69.6	71.1	76.8	76.0
<i>Total, finance</i> . . . . .	<i>321.8</i>	<i>301.7</i>	<i>300.6</i>	<i>282.1</i>	<i>288.0</i>	<i>287.7</i>	<i>302.5</i>
Commerce(a)—							
Retail trade . . . . .	362.1	375.1	384.6	384.6	405.2	425.3	420.3
Wholesale trade . . . . .	277.2	289.5	283.6	290.7	292.7	292.7	304.8
<i>Total, commerce(a)</i> . . . . .	<i>639.3</i>	<i>664.6</i>	<i>668.2</i>	<i>675.3</i>	<i>697.9</i>	<i>718.0</i>	<i>725.1</i>
Building and construction . . . .	117.3	123.3	124.2	127.4	135.9	145.1	163.3
Other businesses—							
Mining . . . . .	40.4	45.1	47.1	52.4	62.1	66.6	93.2
Other . . . . .	291.2	283.5	292.7	305.5	321.1	365.1	388.8
<i>Total, other businesses</i> . . . .	<i>331.5</i>	<i>328.5</i>	<i>339.8</i>	<i>357.9</i>	<i>383.2</i>	<i>431.7</i>	<i>482.0</i>
Unclassified . . . . .	25.5	24.3	24.7	26.2	24.7	26.9	28.6
<i>Total, business overdraft limits</i>	<i>3,077.6</i>	<i>3,160.6</i>	<i>3,207.5</i>	<i>3,268.4</i>	<i>3,369.1</i>	<i>3,563.9</i>	<i>3,713.4</i>
Overdraft limits of public authorities .	137.2	122.4	134.8	137.3	152.8	153.6	163.9
Personal overdraft limits—							
Building or purchasing own home .	269.9	272.9	273.8	280.7	297.1	320.3	332.8
Other . . . . .	267.3	274.0	275.1	297.4	320.7	354.6	391.0
<i>Total, personal overdraft limits</i>	<i>537.1</i>	<i>546.9</i>	<i>548.9</i>	<i>578.1</i>	<i>617.7</i>	<i>674.8</i>	<i>723.8</i>
Overdraft limits of non-profit organisa- tions . . . . .	99.9	100.2	102.7	104.3	109.1	112.5	116.6
<i>Total, overdraft limits of resi-     dent borrowers</i> . . . . .	<i>3,851.8</i>	<i>3,930.2</i>	<i>3,993.8</i>	<i>4,088.2</i>	<i>4,248.7</i>	<i>4,504.8</i>	<i>4,717.8</i>
NON-RESIDENT BORROWERS							
<i>Overdraft limits of non-resident borrowers</i>	<i>1.5</i>	<i>2.0</i>	<i>1.5</i>	<i>1.5</i>	<i>1.5</i>	<i>1.9</i>	<i>1.7</i>
TOTAL OVERDRAFT LIMITS							
Grand total . . . . .	3,853.3	3,932.2	3,995.3	4,089.8	4,250.3	4,507.0	4,719.4

(a) Excludes limits in respect of temporary advances to woolbuyers, term loans and farm development loans.

# MAJOR TRADING BANKS: CLASSIFICATION OF OVERDRAFT LIMITS OUTSTANDING

## AUSTRALIA

JANUARY 1968



## Major Trading Banks—bank advances and fixed deposits, by rate of interest

MAJOR TRADING BANKS: ADVANCES, BY RATE OF INTEREST<sup>(a)</sup>  
JUNE 1964 TO 1967 AND JANUARY 1968(Source: Reserve Bank of Australia)  
(Proportion at each rate to total—per cent)

Interest rate per annum	End of—				
	June 1964	June 1965	June 1966	June 1967	Jan. 1968
5 per cent and less . . . . .	10.9	4.0	3.6	3.6	4.2
More than 5 per cent but less than 5½ per cent . . . . .	2.4	2.3	1.3	1.0	0.8
5½ per cent . . . . .	8.0	5.0	6.1	0.8	0.7
More than 5½ per cent but less than 6 per cent . . . . .	6.4	7.9	7.0	4.4	4.4
6 per cent . . . . .	12.3	6.7	4.9	10.0	9.1
More than 6 per cent but less than 6½ per cent . . . . .	6.9	9.1	9.3	9.8	9.2
6½ per cent . . . . .	21.4	10.0	10.2	9.8	9.4
More than 6½ per cent but less than 7 per cent . . . . .	4.9	17.1	17.5	16.8	17.1
7 per cent . . . . .	26.7	10.7	11.5	11.1	10.9
More than 7 per cent and up to 7½ per cent . . . . .	..	27.1	28.5	32.6	33.8
More than 7½ per cent <sup>(b)</sup> . . . . .	..	..	..	0.2	0.4
Total . . . . .	100.0	100.0	100.0	100.0	100.0

(a) Excludes term loans and farm development loans. (b) Comprises categories of loans specifically exempted from the prescribed maximum overdraft requirement—short-term mortgage and bridging loans and post-shipment wool advances subject to a disincentive rate of interest.

On 17 November 1960 the maximum rate chargeable on advances was 7 per cent, but the average rate of interest on all advances was not to exceed 6 per cent. The maximum average rate requirement was discontinued on 13 April 1962. The maximum rate chargeable on advances was reduced from 7 per cent per annum to 6½ per cent per annum on 1 April 1963, and was raised to 7 per cent per annum on 27 April 1964 and to 7½ per cent per annum on 10 March 1965.

MAJOR TRADING BANKS: FIXED DEPOSITS<sup>(a)</sup>, BY RATE  
OF INTEREST, JUNE 1963 TO 1967 AND JANUARY 1968(Source: Reserve Bank of Australia)  
(Proportion at each rate to total—per cent)

Interest rate per annum	End of—					
	June 1963	June 1964	June 1965	June 1966	June 1967	Jan. 1968
3 . . . . .	..	0.2	..	..	..	..
3½ . . . . .	17.6	5.6	..	..	0.1	..
3¾ . . . . .	20.5	51.1	0.2	..	..	0.1
3½ . . . . .	4.0	20.7	2.3	0.1	..	..
4 . . . . .	57.9	22.4	32.6	0.5	26.6	29.3
4½ . . . . .	..	..	37.0	35.4	27.1	29.6
4½ . . . . .	..	..	27.9	64.0	46.1	41.0
Total . . . . .	100.0	100.0	100.0	100.0	100.0	100.0

(a) Excludes Commonwealth and State Government fixed deposits.

## Cheque-paying banks—interest rates on deposits

CHEQUE-PAYING BANK FIXED DEPOSIT RATES SINCE 1960: AUSTRALIA  
(Per cent per annum)

Date from which operative	Deposits for—	
	3 months but less than 12 months	12 months
1960—17 November . . . . .	4	4½
1961—1 July . . . . .	..	4½
1962—13 April . . . . .	3½	4
		12 months to 15 months
10 September . . . . .	..	4
1963—1 April . . . . .	3½	3½
	30 days but less than 3 months	3 months but less than 12 months
1964—8 April . . . . .	3½	3½
		12 months to 18 months
29 September . . . . .	..	4
1965—10 March . . . . .	4½	4½
1966—17 August . . . . .	4	4½
		Over 18 months to 24 months
		4½

## Cheque-paying banks—debits to customers' accounts

Statistics of debits to customers' accounts have been collected since September 1945. Generally they represent the total of all cheques drawn by the customers of the banks. The following table shows the average weekly debits to customers' accounts of all cheque-paying banks (including the Rural Credits Department of the Reserve Bank and the Commonwealth Development Bank). Debits to accounts of Australian Governments in capital cities are excluded, as they are subject to abnormal influences and are not uniform for each State.

## CHEQUE-PAYING BANKS: AVERAGE WEEKLY DEBITS TO CUSTOMERS' ACCOUNTS, STATES AND TERRITORIES, 1962-63 TO 1966-67

(Excluding debits to Commonwealth and State Government accounts in capital cities)  
(\$ million)

Year	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
1962-63 . . . . .	713.1	650.5	185.1	131.6	88.2	35.1	2.5	10.2	1,816.4
1963-64 . . . . .	824.8	733.2	213.2	155.1	96.4	37.1	2.8	11.5	2,073.9
1964-65 . . . . .	935.2	825.3	232.9	170.4	106.3	41.3	3.4	14.5	2,329.3
1965-66 . . . . .	949.0	847.7	232.5	172.8	122.4	43.2	3.8	15.3	2,386.7
1966-67 . . . . .	1,080.2	940.0	256.9	184.4	138.6	47.3	4.5	17.0	2,668.9

## Trading bank charges

In October 1962 the trading banks instituted a system of charges on current accounts, and abolished the interstate exchange rates obtaining prior to this date. Details of interstate exchange rates prior to October 1962 may be found in Year Book No. 48, page 785. Charges on current account comprise a basic maintenance fee, a ledger activity fee and a cheque collection fee, each calculated on a quarterly basis and debited as a composite item to accounts four times a year. These charges were revised from 1 October 1966. The following are the current charges.

*Basic maintenance current account fee.* Sixty-five cents quarterly (non-rebated).

*Ledger activity fee (quarterly).* Up to ½ folio (20 entries), 25 cents; over ½ folio to 1 folio, 80 cents; over 1 folio to 2 folios, \$2.25; over 2 folios to 3 folios, \$5; over 3 folios to 4 folios, \$7.75; over 4 folios to 5 folios, \$10.50; over 5 folios to 6 folios, \$13.25; over 6 folios to 7 folios, \$16; over 7 folios to 15 folios, \$16, plus \$2.25 per folio or part thereof exceeding 7; over 15 folios to 35 folios, \$34, plus \$1.75 per folio or part thereof exceeding 15; over 35 folios, \$69, plus \$1.25 per folio or part thereof exceeding 35. Rebates of one free folio (or equivalent of approximately

40 entries) will be allowed for each complete \$1,000 minimum quarterly credit balance. Where rebates are applicable the number of free folios is deducted before the activity fee is calculated.

*Collection fee on cheques, etc., deposited.* Up to 20 cheques per quarter, free; 21 to 100, 60 cents, plus 30 cents per 10 cheques or part thereof exceeding 20; 101 to 500, \$3.00, plus \$1.50 per each 50 or part thereof exceeding 100; 501 to 1,000, \$15, plus \$3 for each 100 or part thereof exceeding 500; 1,001 to 10,000, \$30, plus \$15 per each 500 or part thereof exceeding 1,000; 10,001 to 50,000, \$300, plus \$20 per each 1,000 or part thereof exceeding 10,000; 50,001 to 100,000, \$1,100, plus \$75 per each 5,000, or part thereof exceeding 50,000; over 100,000, \$1,850, plus \$125 per each 10,000 or part thereof exceeding 100,000.

## Savings banks

### Savings banks in Australia

For information on the origin of savings banks in Australia and the facilities currently available, see Year Book No. 46, page 779, and earlier issues.

All savings banks, including trustee savings banks, but not State savings banks, are subject to the *Banking Act* 1959-1967. Details of this Act and the special provisions applying to savings banks are given in Year Book No. 46, pages 759-60.

*Commonwealth Savings Bank.* The Commonwealth Savings Bank of Australia was established as a separate institution on 9 June 1928, having functioned previously as a department of the Commonwealth Bank (for particulars of the origin of the Savings Bank Department and the extension of its services see Year Book No. 46, page 782, and earlier issues). It has since then operated independently, publishing its own balance-sheets and profit and loss accounts. The *Commonwealth Bank Act* 1927, which provided for the establishment of the Commonwealth Savings Bank as a separate institution, provided for a Commission of three members to manage the savings bank. This Commission was never appointed, and the *Commonwealth Bank Act* 1945 placed the control of the Commonwealth Savings Bank under the Governor of the Commonwealth Bank. Under the provisions of the *Commonwealth Banks Act* 1959-1966, which came into operation on 14 January 1960, the Commonwealth Savings Bank was maintained in the same form, but was placed under the control of the Commonwealth Banking Corporation (see also page 640).

*State savings banks.* State savings banks at present operating (with date of establishment shown in parentheses) are: The State Savings Bank of Victoria (1841); The Savings Bank of South Australia (1848); the Savings Bank Division of the Rural and Industries Bank of Western Australia (1956).

*Trustee savings banks.* Two trustee savings banks, The Hobart Savings Bank and Launceston Bank for Savings, operate within Tasmania. These banks commenced business in 1845 and 1835 respectively.

*Private savings banks.* The Bank of New South Wales Savings Bank Ltd., the Australia and New Zealand Savings Bank Ltd., and the C.B.C. Savings Bank Ltd. commenced business in 1956, the E.S. & A. Savings Bank Ltd. in 1961, The Bank of Adelaide Savings Bank Ltd., The National Bank Savings Bank Ltd., and The Commercial Savings Bank of Australia Ltd. in 1962.

### Savings banks, branches and agencies

#### SAVINGS BANKS: NUMBERS OF BRANCHES AND AGENCIES 30 JUNE 1967

<i>Bank</i>	<i>Branches</i>	<i>Agencies</i>
Commonwealth Savings Bank . . . . .	940	8,074
Australia and New Zealand Savings Bank Ltd . . . . .	619	845
The Bank of Adelaide Savings Bank Ltd . . . . .	96	74
Bank of New South Wales Savings Bank Ltd . . . . .	851	2,818
The Commercial Savings Bank of Australia Ltd . . . . .	474	264
C.B.C. Savings Bank Ltd . . . . .	464	105
E.S. & A. Savings Bank Ltd . . . . .	418	116
The National Bank Savings Bank Ltd . . . . .	701	257
The State Savings Bank of Victoria . . . . .	501	705
The Savings Bank of South Australia . . . . .	130	788
The Rural and Industries Bank of Western Australia . . . . .	52	270
Launceston Bank for Savings . . . . .	25	52
The Hobart Savings Bank . . . . .	21	26
<b>Total . . . . .</b>	<b>5,292</b>	<b>14,394</b>

## Savings banks—balance-sheets

The information in the following tables for the Commonwealth Savings Bank, the trustee savings banks and the private savings banks has been obtained from the annual returns lodged with the Commonwealth Statistician under section 53 of the *Banking Act* 1959–1967, whereas that for State savings banks has been compiled from information in their annual reports.

**SAVINGS BANKS: LIABILITIES(a), 1966 AND 1967**  
(\$'000)

<i>Bank</i>	<i>Paid-up capital</i>	<i>Reserve funds (used in the business of the bank)</i>	<i>Balance of profit and loss account</i>	<i>Total share-holders' funds</i>	<i>Depositors' balances</i>	<i>Balances due to other banks</i>	<i>Bills payable and all other liabilities (b)</i>	<i>Total</i>
<b>1967—</b>								
Commonwealth Savings Bank of Australia . . . . .	..	34,445	..	(c)34,445	2,500,953	2,167	81,843	2,619,408
<b>State savings banks(d)—</b>								
The State Savings Bank of Victoria(e) . . . . .	..	29,945	1,063	(c)31,008	966,307	7,247	49,004	1,053,566
The Savings Bank of South Australia . . . . .	..	25,763	332	(c)26,095	362,190	3,224	385	391,894
<i>Total, State savings banks . . . . .</i>	..	55,708	1,395	(c)57,103	1,328,497	10,471	49,389	1,445,460
<b>Trustee savings banks—</b>								
The Hobart Savings Bank . . . . .	..	2,190	115	2,305	46,857	2	213	49,378
Launceston Bank for Savings . . . . .	..	2,050	98	2,148	40,166	11	250	42,576
<i>Total, trustee savings banks . . . . .</i>	..	4,240	214	4,454	87,023	14	463	91,954
<b>Private savings banks—</b>								
Australia and New Zealand Savings Bank Ltd . . . . .	4,016	4,600	603	(f)9,701	381,852	..	14,324	405,878
The Bank of Adelaide Savings Bank Ltd . . . . .	1,000	350	146	1,496	27,474	..	485	29,454
Bank of New South Wales Savings Bank Ltd . . . . .	8,000	7,500	1,793	17,293	788,684	..	23,787	829,765
The Commercial Savings Bank of Australia Ltd . . . . .	2,000	1,225	320	3,545	138,377	..	2,001	143,923
C.B.C. Savings Bank Ltd . . . . .	4,000	3,200	284	7,484	220,119	..	4,982	232,584
E.S. & A. Savings Bank Ltd . . . . .	2,000	1,500	57	3,557	135,934	..	3,404	142,895
The National Bank Savings Bank Ltd . . . . .	2,000	1,400	652	4,052	231,129	..	4,853	240,034
<i>Total, private savings banks . . . . .</i>	23,016	19,775	3,855	(f)47,128	1,923,569	..	53,835	2,024,532
<b>Total, all savings banks, 1967</b>	<b>23,016</b>	<b>114,168</b>	<b>5,463</b>	<b>(f)143,130</b>	<b>5,840,042</b>	<b>12,652</b>	<b>185,530</b>	<b>6,181,354</b>
<b>Total, all savings banks, 1966</b>	<b>23,016</b>	<b>105,637</b>	<b>4,879</b>	<b>133,531</b>	<b>5,311,287</b>	<b>14,148</b>	<b>168,700</b>	<b>5,627,666</b>

(a) At various balance-sheet dates during 1967—see table on page 672. (b) Includes provision for contingencies.  
(c) Total reserve funds. (d) Excludes Savings Bank Division of the Rural and Industries Bank of Western Australia.  
(e) Includes *Crédit Foncier* Department. (f) Includes \$481,920 final dividend proposed.



SAVINGS BANKS: ASSETS(a), 1966 AND 1967  
(\$'000)

Bank	Coin, bullion and notes	Deposits with Reserve Bank	Deposits in Australia with trading banks	Money at short call overseas	Australian public securities			
					Commonwealth and States		Local and semi- governmental authorities	Other public securities
					Treasury bills and notes	Other securities		
1967—								
Commonwealth Savings Bank of Australia . . . . .	3,799	243,410	27,498	..	8,487	1,168,689	342,044	1,245
State savings banks(b)—								
The State Savings Bank of Victoria(c) . . . . .	5,828	49,171	53,987	..	7,621	225,278	326,299	..
The Savings Bank of South Australia . . . . .	411	10,418	25,196	..	..	134,505	70,370	..
Total, State savings banks . . . . .	6,239	59,589	79,184	..	7,621	359,782	396,668	..
Trustee savings banks—								
The Hobart Savings Bank . . . . .	129	450	3,306	..	..	9,332	20,998	..
Launceston Bank for Savings . . . . .	78	100	3,008	..	..	10,308	13,246	..
Total, trustee savings banks . . . . .	207	550	6,315	..	..	19,640	34,243	..
Private savings banks—								
Australia and New Zea- land Savings Bank Ltd . . . . .	..	38,810	8,314	..	..	123,435	112,974	671
The Bank of Adelaide Savings Bank Ltd . . . . .	..	2,800	270	..	..	6,658	7,369	..
Bank of New South Wales Savings Bank Ltd . . . . .	2,000	78,700	10,581	..	..	231,615	239,642	2,196
The Commercial Savings Bank of Australia Ltd . . . . .	..	14,000	1,851	..	..	47,759	42,325	..
C.B.C. Savings Bank Ltd . . . . .	..	22,300	3,670	..	400	98,190	46,003	..
E.S. & A. Savings Bank Ltd . . . . .	13	13,665	3,861	..	..	42,869	41,238	..
The National Bank Savings Bank Ltd . . . . .	..	23,400	4,086	..	..	85,453	74,235	..
Total, private savings banks . . . . .	2,013	193,675	32,633	..	400	635,979	563,786	2,866
Total, all savings banks, 1967 . . . . .	12,258	497,224	145,629	..	16,507	2,184,090	1,336,742	4,111
Total, all savings banks, 1966 . . . . .	10,705	416,133	138,566	..	41,982	2,098,571	1,201,291	4,060

(a) For dates of balance-sheets see table on page 672. (b) Excludes Savings Bank Division of the Rural and Industries Bank of Western Australia. (c) Includes *Crédit Foncier* Department.

SAVINGS BANKS: ASSETS(a), 1966 AND 1967—continued  
(\$'000)

Bank	Other securities	Loans to authorised dealers in short-term money market	Cheques and bills of, and balances with and due from, other banks	Loans(b), advances and bills discounted	Bank premises, furniture and sites	Bills receivable and remittances in transit	All other assets	Total
1967—								
Commonwealth Savings Bank of Australia . . . . .	..	6,000	1,359	742,411	42,780	6,650	25,036	2,619,408
State savings banks(c)—								
The State Savings Bank of Victoria(d) . . . . .	..	13,860	..	341,053	15,100	..	15,369	1,053,566
The Savings Bank of South Australia . . . . .	..	1,400	..	139,703	5,930	(e)	3,962	391,894
Total, State savings banks	..	15,260	..	480,755	21,030	..	19,332	1,445,460
Trustee savings banks—								
The Hobart Savings Bank . . . . .	..	2,520	76	11,036	790	..	742	49,378
Launceston Bank for Savings . . . . .	..	1,100	44	13,163	831	..	697	42,576
Total, trustee savings banks . . . . .	..	3,620	120	24,199	1,621	..	1,440	91,954
Private savings banks—								
Australia and New Zealand Savings Bank Ltd . . . . .	4,975	13,800	704	98,714	..	..	3,481	405,878
The Bank of Adelaide Savings Bank Ltd . . . . .	..	3,050	..	8,574	480	..	252	29,454
Bank of New South Wales Savings Bank Ltd . . . . .	496	..	5,759	244,177	6,600	..	7,998	829,765
The Commercial Savings Bank of Australia Ltd . . . . .	..	400	..	35,591	584	..	1,413	143,923
C.B.C. Savings Bank Ltd . . . . .	..	..	..	60,233	579	..	1,209	232,584
E.S. & A. Savings Bank Ltd . . . . .	..	3,110	..	35,575	1,286	..	1,278	142,895
The National Bank Savings Bank Ltd . . . . .	..	1,500	..	49,096	..	..	2,265	240,034
Total, private savings banks	5,471	21,860	6,463	531,960	9,529	..	17,896	2,024,532
Total, all savings banks, 1967 . . . . .	5,471	46,740	7,942	1,779,326	74,960	6,650	63,703	6,181,354
Total, all savings banks, 1966 . . . . .	5,646	30,930	7,593	1,541,329	67,195	4,595	59,070	5,627,666

(a) For dates of balance-sheets see table on page 672. (b) Other than loans to authorised dealers in the short-term money market. (c) Excludes Savings Bank Division of the Rural and Industries Bank of Western Australia. (d) Includes *Crédit Foncier* Department. (e) Not available. Included in All other assets.

## Savings banks—profit and loss accounts

## SAVINGS BANKS: PROFIT AND LOSS, APPROPRIATION OF PROFITS AND DIVIDENDS, 1966 AND 1967

(\$'000)

Bank	Year ended	Profit and loss			Income, land and other taxes and payments in lieu of taxes	Net profit
		Net earnings (a)	Expenses (b)			
1967—						
Commonwealth Savings Bank of Australia . . .	30.6.67	45,227	37,590	551	7,086	
State savings banks(c)—						
The State Savings Bank of Victoria(d) . . .	30.6.67	20,532	18,121	n.a.	2,410	
The Savings Bank of South Australia . . .	30.6.67	5,902	4,853	n.a.	1,049	
Total, State savings banks . . . . .		26,433	22,974	n.a.	3,459	
Trustee savings banks—						
The Hobart Savings Bank . . . . .	31.8.67	775	559	26	190	
Launceston Bank for Savings . . . . .	31.8.67	754	524	19	211	
Total, trustee savings banks . . . . .		1,529	1,083	45	401	
Private savings banks—						
Australian and New Zealand Savings Bank Ltd	30.9.67	7,282	5,204	930	1,148	
The Bank of Adelaide Savings Bank Ltd . . .	30.9.67	602	318	94	190	
Bank of New South Wales Savings Bank Ltd .	30.9.67	15,344	10,663	1,950	2,732	
The Commercial Savings Bank of Australia Ltd	30.6.67	2,355	1,474	377	504	
C.B.C. Savings Bank Ltd . . . . .	30.6.67	4,094	2,514	659	922	
E.S. & A. Savings Bank Ltd . . . . .	30.6.67	2,398	1,477	454	467	
The National Bank Savings Bank Ltd . . .	30.9.67	3,957	2,708	520	729	
Total, private savings banks . . . . .		36,032	24,357	4,983	6,692	
Total, all savings banks, 1967 . . . . .		109,221	86,004	5,579	17,638	
Total, all savings banks, 1966(e) . . . . .		97,127	73,592	4,734	18,801	

(a) Discount and interest earned, net exchange, commissions and other items (including transfers from contingencies accounts), after deducting interest paid and accrued on deposits, rebate on bills current at balance date, amounts written off assets, and losses on realisation of assets and transfers to the credit of contingencies accounts (out of which accounts provisions for all bad and doubtful debts have been made). (b) Includes directors' fees. (c) Excludes Savings Bank Division of the Rural and Industries Bank of Western Australia. (d) Includes *Crédit Foncier* Department. (e) Balancing dates as in 1967.

SAVINGS BANKS: PROFIT AND LOSS, APPROPRIATION OF PROFITS AND  
DIVIDENDS, 1966 AND 1967—*continued*  
(\$'000)

Bank	Year ended	Profits appropriated to—			Dividends(b)		
		Reserve funds (a)	Written-off bank premises	Other appropriations	Gross	Net	Rates per annum per cent
1967—							
Commonwealth Savings Bank of Australia . . . . .	30.6.67	2,070	1,226	(c)3,790	..	..	..
State savings banks(d)—							
The State Savings Bank of Victoria(e)	30.6.67	1,295	708	400	..	..	..
The Savings Bank of South Australia	30.6.67	1,050	(f)	..	..	..	..
Total, State savings banks . . . . .	..	2,345	708	400	..	..	..
Trustee savings banks—							
The Hobart Savings Bank . . . . .	31.8.67	150	25	15	..	..	..
Launceston Bank for Savings . . . . .	31.8.67	80	114	17	..	..	..
Total, trustee savings banks . . . . .	..	230	139	32	..	..	..
Private savings banks—							
Australia and New Zealand Savings Bank Ltd . . . . .	30.9.67	600	..	..	482	482	12
The Bank of Adelaide Savings Bank Ltd . . . . .	30.9.67	100	..	..	50	50	5
Bank of New South Wales Savings Bank Ltd . . . . .	30.9.67	1,000	331	..	1,000	1,000	12.5
The Commercial Savings Bank of Australia Ltd . . . . .	30.6.67	450	..	..	..	..	..
C.B.C. Savings Bank Ltd . . . . .	30.6.67	550	..	..	400	400	10
E.S. & A. Savings Bank Ltd . . . . .	30.6.67	300	..	..	200	200	10
The National Bank Savings Bank Ltd	30.9.67	550	..	..	100	100	5
Total, private savings banks . . . . .		3,550	331	..	2,232	2,232	..
Total, all savings banks, 1967 . . . . .		8,195	2,404	4,222	2,232	2,232	..
Total, all savings banks, 1966(g)		8,619	2,279	5,580	2,132	2,132	..

(a) Excludes accumulated profits and profit and loss accounts. (b) Dividends paid or payable out of profits earned during year. (c) Provisions for settlements under Savings Bank Amalgamation Agreements, \$1,720,517 and Commonwealth of Australia, \$2,069,801. Under the terms of the Savings Bank Amalgamation Agreements relating to the absorption of the State savings banks by the Commonwealth Bank, the profits of the Commonwealth Savings Bank in New South Wales and Queensland are equally divided between the Bank and the former controlling authorities in those States. (d) Excludes Savings Bank Division of the Rural and Industries Bank of Western Australia. (e) Includes *Crédit Foncier* Department. (f) Included in expenses. (g) Balancing dates as in 1967.

**Savings banks—operative accounts**

The following table shows the number of operative savings bank accounts in existence at the end of June 1966 and 1967. The figures relate to the number of accounts and not necessarily to the number of depositors.

**SAVINGS BANKS: NUMBER OF OPERATIVE ACCOUNTS(a)**  
**JUNE 1966 AND 1967**  
 ('000)

<i>State or Territory</i>	<i>End of June(b)—</i>	
	<i>1966</i>	<i>1967</i>
New South Wales . . . . .	4,347	4,568
Victoria . . . . .	3,815	4,026
Queensland . . . . .	1,626	1,715
South Australia . . . . .	1,319	1,371
Western Australia . . . . .	848	905
Tasmania . . . . .	395	413
Northern Territory . . . . .	33	38
Australian Capital Territory . . . . .	86	97
<b>Australia . . . . .</b>	<b>12,469</b>	<b>13,134</b>

(a) Excludes school bank accounts and small inoperative accounts. (b) Private savings banks at last Wednesday in June, Launceston Bank for Savings at last Monday in June, other savings banks at end of June.

**Savings banks—business transacted**

**SAVINGS BANKS: BUSINESS TRANSACTED IN AUSTRALIA, 1965-66 AND 1966-67(a)**  
 (\$'000)

<i>State or Territory</i>	<i>1965-66</i>				<i>1966-67</i>			
	<i>Deposits</i>	<i>With- drawals (b)</i>	<i>Interest added (b)</i>	<i>Depositors' balances at end of year</i>	<i>Deposits</i>	<i>With- drawals (b)</i>	<i>Interest added (b)</i>	<i>Depositors' balances at end of year</i>
New South Wales . . . . .	2,217,560	2,166,572	57,149	1,827,781	2,409,000	2,313,637	61,191	1,984,335
Victoria . . . . .	2,440,714	2,365,717	50,574	1,745,979	2,622,516	2,496,370	54,584	1,926,713
Queensland . . . . .	769,191	744,509	19,944	637,652	851,942	811,206	21,641	700,029
South Australia . . . . .	721,481	699,068	17,176	558,857	784,741	757,442	19,011	605,167
Western Australia . . . . .	397,581	375,075	8,711	292,871	467,401	439,255	9,790	330,807
Tasmania . . . . .	153,444	145,489	4,710	148,401	189,026	175,621	5,300	167,106
Northern Territory . . . . .	18,059	16,954	301	10,586	23,677	22,103	348	12,508
Australian Capital Territory . . . . .	62,114	59,139	928	31,551	76,619	71,244	1,092	38,018
<b>Australia . . . . .</b>	<b>6,780,144</b>	<b>6,572,523</b>	<b>159,493</b>	<b>5,253,678</b>	<b>7,424,926</b>	<b>7,086,878</b>	<b>172,957</b>	<b>5,764,683</b>

(a) Private savings banks at last Wednesday in June, Launceston Bank for Savings at last Monday in June, other savings banks at end of June. (b) Includes inter-branch transfers.

**Savings banks—depositors' balances**

The amount at credit of depositors' accounts and the average per head of population for each State and Territory at the end of June 1963 to 1967 are shown in the following table. Deposits stock and non-interest bearing cheque accounts at the State Savings Bank of Victoria and the Savings Bank of South Australia and fixed deposit and non-interest bearing cheque accounts at the Trustee Savings Banks in Tasmania are included in the depositors' balances shown in the following table. Separate details are not available.

## SAVINGS BANKS: DEPOSITORS' BALANCES IN AUSTRALIA, JUNE 1963 TO 1967

<i>End of June(a)—</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
AMOUNT (\$ million)									
1963 . . .	1,408	1,298	470	416	209	113	7	18	3,940
1964 . . .	1,583	1,479	542	476	240	125	8	23	4,476
1965 . . .	1,720	1,620	593	519	262	136	9	28	4,887
1966 . . .	1,828	1,746	638	559	293	148	11	32	5,254
1967 . . .	1,984	1,927	700	605	331	167	13	38	5,765

PER HEAD OF POPULATION  
(\$)

1963 . . .	347.65	426.88	298.10	411.73	264.87	312.85	144.31	251.58	359.78
1964 . . .	385.41	476.24	336.72	458.38	296.58	342.49	157.16	289.92	400.86
1965 . . .	411.85	512.08	360.60	486.40	316.95	368.93	170.47	312.54	429.11
1966 . . .	431.29	542.19	380.84	510.38	345.32	399.53	187.34	328.54	452.92
1967 . . .	460.73	588.42	411.39	544.47	377.48	443.93	210.80	367.00	488.11

(a) Private savings banks at last Wednesday in June, Launceston Bank for Savings at last Monday in June, other savings banks at end of June.

## Savings banks—cheque accounts

At most savings banks cheque accounts are available to non-profit organisations such as friendly, co-operative and charitable societies. Similar facilities are also available to other depositors at The State Savings Bank of Victoria, The Savings Bank of South Australia and the Trustee Savings Bank in Tasmania. Details of the transactions on these accounts during the year ended June 1967 (excluding The Savings Bank of South Australia), together with the number of operative accounts and the amount on deposit at the end of June 1967, were as follows: deposits during the year \$1,576.7 million; withdrawals during the year, \$1,566.3 million; interest added during the year, \$3.1 million; amount on deposit at end of year, \$158.8 million; number of operative accounts at the end of year, 334,908. These figures are included in the statistics in previous paragraphs.

## School savings banks

Agencies of the savings banks have been established at most of the schools throughout Australia. Particulars of operative accounts within Australia at the end of June 1963 to 1967 appear below.

## SCHOOL SAVINGS BANKS: AUSTRALIA, JUNE 1963 TO 1967

<i>End of June(a)—</i>	<i>Number of school agencies</i>	<i>Number of operative accounts</i>	<i>Deposits</i>	<i>Average deposit per operative account</i>
		'000	\$'000	\$
1963 . . .	9,551	1,255	19,331	15.41
1964 . . .	9,878	1,294	20,374	15.75
1965 . . .	9,544	1,364	22,055	16.16
1966 . . .	9,999	1,390	23,313	16.77
1967 . . .	10,301	1,445	24,815	17.18

(a) Private savings banks at last Wednesday in June, Launceston Bank for Savings at last Monday in June, other savings banks at end of June.

**Savings banks—assets**

The assets within Australia of all savings banks at the end of June 1966 and 1967 are shown in the following table. In the table on pages 670–1 assets are shown at balance-sheet date which are not in June for some banks. In addition, the table on pages 670–1 excludes statistics for the Savings Bank Division of the Rural and Industries Bank of Western Australia, which are included in the table below.

**SAVINGS BANKS: ASSETS WITHIN AUSTRALIA<sup>(a)</sup>, JUNE 1966 AND 1967**  
(\$ million)

	<i>End of June<sup>(b)</sup>—</i>	
	1966	1967
Coin, bullion and Australian notes . . . . .	10.7	12.3
Deposits with Reserve Bank . . . . .	419.2	492.5
Deposits in Australia with trading banks . . . . .	129.0	136.3
Australian public securities—		
Commonwealth and States (including Treasury bills and Treasury notes) . . . . .	2,125.8	2,184.5
Local government and semi-governmental authorities . . . . .	1,198.8	1,328.5
Other securities . . . . .	5.1	5.4
Loans to authorised dealers in the short-term money market . . . . .	34.2	50.5
Cheques and bills of other banks and balances with and due from other banks . . . . .	0.5	0.8
Loans, advances and bills discounted—		
Housing . . . . .	1,358.5	1,548.8
Other . . . . .	176.5	222.3
Bank premises, furniture and sites . . . . .	68.8	76.0
Bills receivable and all other assets . . . . .	18.8	19.5
<b>Total . . . . .</b>	<b>5,545.9</b>	<b>6,077.3</b>

<sup>(a)</sup> Includes assets in Papua, New Guinea and other external Territories. <sup>(b)</sup> Private savings banks at last Wednesday in June, Launceston Bank for Savings at last Monday in June, other savings banks at end of June.

**Savings banks—rates of interest on deposits**

**SAVINGS BANKS: INTEREST RATES ON DEPOSITS<sup>(a)</sup>, 30 JUNE 1963 TO 1967**  
(Per cent per annum)

<i>Size of account</i>	<i>30 June—</i>				
	1963	1964	1965	1966	1967
Ordinary accounts (including cheque accounts)—					
\$1 to \$10,000 <sup>(b)</sup> . . . . .	3.00	3.25	3.50	3.50	3.50
Friendly and other society accounts—					
\$1 to \$6,000 . . . . .	3.00	3.25	3.50	3.50	3.50
\$6,001 and over . . . . .	1.50	1.75	2.00	2.00	2.00

<sup>(a)</sup> Rates allowed by the Commonwealth Savings Bank, private savings banks and The State Savings Bank of Victoria. Trustee savings banks and The Savings Bank of South Australia allow slightly higher rates of interest. <sup>(b)</sup> Before 1 March 1967 no interest was payable on amounts greater than \$6,000. From 1 March 1967 no interest is payable on amounts greater than \$10,000.

**Savings banks—predominant lending rates**

The following table shows the predominant lending rates in respect of different types of loans by savings banks from 1961 to 1967.

**SAVINGS BANKS: PREDOMINANT LENDING RATES OF INTEREST**

(Per cent per annum)

<i>Date of change in rate</i>	<i>Loans to local government authorities</i>	<i>Crédit foncier housing loans (a)</i>	<i>Loans to co-operative housing societies</i>
1961—1 January . . . . .	5.75—5.875	5.25—5.75	(b) 5.25—5.50
1962—26 January . . . . .	5.375—5.50	..	..
1963—11 April . . . . .	..	4.75—5.25	4.75—5.00
17 June . . . . .	5.00—5.125	..	..
2 October . . . . .	4.875—5.00	..	..
1964—1 June . . . . .	..	4.75—5.50	4.75—5.25
August . . . . .	5.50	..	..
1965—1 April . . . . .	..	5.00—5.75	5.00—5.50
8 April . . . . .	5.75	..	..
1967—2 February . . . . .	5.875	..	..

(a) The rate of interest on *crédit foncier* loans may be varied only at the expiration of each ten years of the currency of a loan. (b) The changes in interest rates on 1 January 1961 applied to all societies then financed and to future loans.

**FINANCE COMPANIES**

Information relating to the lending operations of finance companies in Australia is given in the following tables. A comprehensive account of the scope of these statistics and fuller details of the transactions of finance companies is provided in the bulletin *Finance Companies—July 1964 to September 1967* and in the monthly statements *Finance Companies*. For the purpose of these statistics, finance companies are defined as companies which are engaged mainly in providing to the general public (businesses as well as persons in their private capacity) credit facilities of the following types: hire purchase and other instalment credit for retail sales, wholesale hire purchase, other consumer and commercial loans, and factoring. The finance companies covered in these statistics, insofar as they provide instalment credit for retail sales, are also included in the statistics of Instalment Credit for Retail Sales (see pages 704–8).

In general, companies which are engaged both in financing activities and other activities come within the scope of these statistics, provided that the major portion of their assets consists of financial assets of the types listed above and or a major proportion of their income is derived from such assets. Companies are excluded if the major proportion of their balances outstanding consists of agreements written for the purpose of financing their own sales. Companies which are engaged mainly in financing, in any way, the operations of related companies ('related' as defined in the Companies Act) are also excluded from these statistics, as are unincorporated finance companies. Also excluded are the following classes of financial and quasi-financial institutions: banks; life insurance companies; fire, marine, and general insurance companies; short-term money market dealers; pastoral finance companies; investment companies; unit trusts; land trusts; mutual funds and management companies for the foregoing trusts and funds; pension and superannuation funds; building and friendly societies including credit unions.

Summary definitions of the categories into which finance agreements have been classified and of the items of data given in the tables are as follows.

*Instalment credit for retail sales.* This category is defined in the same way as in the Instalment Credit for Retail Sales statistics, and covers the operations of all types of instalment credit schemes undertaken by finance companies which relate primarily to the financing of retail sales of goods. In general, the term *instalment credit* is defined as relating to schemes in which repayment is made in regular predetermined instalments. Types of schemes covered include hire purchase, time payment, and personal loan schemes relating primarily to the financing of retail sales of goods. In these statistics, the term 'retail sales' relates not only to retail sales coming within the scope of the censuses of retail establishments conducted periodically by this Bureau, but includes also other sales of goods to final purchasers (e.g. plant and machinery, tractors, etc.). This category does not cover credit accounts which do not involve repayment by regular predetermined instalments, financing of sales of land and buildings, property improvements, or services such as repair work and travel facilities.



**Wholesale hire purchase.** This term is adopted in accordance with finance companies' usage, although not all the transactions covered by this category are strictly 'hire purchase' contracts. The category relates mainly to the financing of motor vehicle dealers' stocks held under bailment or floor plan schemes, but it also includes finance in respect of other trading stock.

**Other consumer and commercial loans.** This broad term is used to cover the following three categories.

**Personal loans.** All loans to persons in their private capacity, other than loans classified to the categories instalment credit for retail sales or mortgage loans.

**Mortgage loans.** All loans, for any business or private purpose, which are secured over houses, home units (whether new or existing) and residential land.

**Commercial loans.** All loans and advances to businesses, not included elsewhere in these statistics. Commercial loans secured on existing finance agreements are also included in this item. This category is sub-divided into the following two classes.

(a) *Loans and advances repayable at call or within ninety days* of the time of origin of the loan or investment (including loans and advances in the form of short-term commercial loans, intercompany lending, and notes, debentures, deposits, etc., repayable at call or within ninety days). Loans of this type to other finance companies are excluded.

(b) *Other commercial loans and advances.*

**Factoring.** The term 'factoring' is used by finance companies in different senses, but in these statistics it is applied to the category comprising loans on the security of 'trade' debts (i.e. debts due to businesses for goods and services supplied to other businesses for use in their business or for resale), and trade debts purchased. While there is little uniformity in the terminology used by finance companies, it is fairly common for finance companies to group these types of transactions as a separate category in their accounts.

**Loans to related non-finance companies.** This category includes loans made by a finance company to any related company other than a related finance company (as defined above). Investments in shares of related companies are excluded.

**Leasing of business equipment and plant.** This category comprises the transactions, by finance companies and their related companies, in the form of leasing agreements in respect of business equipment and plant. Broadly, a 'leasing agreement' is a legal agreement between an owner of property (the lessor) and a user of that property (the lessee) whereby the lessee compensates the lessor for permitting the lessee to retain possession and use of the property. The types of goods covered by leasing agreements in this bulletin are restricted to business equipment and plant including motor vehicles for business use. Leasing agreements relating to all other types of goods and property (including real estate and consumer goods) are excluded from the tables; the total balances outstanding in respect of such leasing agreements made by finance companies and their related companies are estimated not to have exceeded \$2.5 m during the period July 1964 to June 1967. It is thought that almost all of the leasing transactions included in these statistics relate to agreements initially written for a period of at least eighteen months.

**Bills of exchange.** This item relates to the drawing and discounting of bills of exchange by finance companies and their related companies. A bill of exchange is defined for the purpose of these statistics in the *Bills of Exchange Act 1909-1958* as 'an unconditional order in writing, addressed by one person to another, signed by the person giving it, requiring the person to whom it is addressed to pay on demand, or at a fixed or determinable future time, a sum certain in money to, or to the order of, a specified person, or to bearer'. Promissory notes used as collateral security for any of the other types of loans specified in this paragraph are excluded.

**Amount financed.** Amount financed is the actual amount of cash provided. It excludes interest, insurance, hiring, and other charges and initial deposits. For purchases of existing finance agreements and trade debts purchased, it represents the amount of cash paid to the seller. Amount financed in respect of instalment credit for retail sales agreements is further classified by type of commodity.

**Balances outstanding.** Balances outstanding represents the amounts owing on all finance agreements entered into prior to the end of the relevant period as shown in the books of the companies concerned. Accounting practice with respect to inclusion, in balances outstanding, of unmatured charges, interest and insurance differs between finance companies and between types of finance agreements. Because of this, separate details of balances outstanding are given in the tables for those contracts for which balances outstanding are recorded including such charges, and for those contracts for which balances outstanding are recorded excluding such charges. It is not practicable to adjust either to a common basis. Figures for 'balances outstanding excluding unmatured charges' do, however, include any charges, etc. (e.g. monthly and annual interest charges) accrued and unpaid at the end of the period concerned.

*Collections and other liquidations of balances.* This item covers cash collections of capital repayments, hiring charges, interest and insurance, and also other liquidations such as bad debts written off and rebates for early payouts. For reasons stated on page 678 separate details of collections and other liquidations are given for contracts recorded including charges, etc., and contracts recorded excluding charges, etc. The item 'collections and other liquidations' in respect of instalment credit for retail sales agreements is divided between cash collections and other liquidations.

*Initial capital cost of business equipment and plant newly leased.* The initial capital cost is the actual cost to finance companies for business equipment and plant newly leased during the period, and the depreciated value of business equipment and plant re-leased during that period. This item can be considered to correspond broadly with amount financed for the other categories listed on page 678.

*Balances outstanding on leasing agreements.* The basis of valuation specified for this item is the initial capital cost of business equipment and plant less depreciation to date. However, as yet it has not been practicable to obtain data on leasing transactions by finance companies on a completely uniform basis because of the varying methods adopted by companies to record these transactions in their accounts. For example, various methods are used to record and report depreciation of the business equipment and plant on lease. Furthermore, some companies record leasing transactions on a similar basis to other forms of financing (namely balances outstanding including unmatured charges) and so are unable to report on the specified basis. Although different methods are used by companies to report their leasing transactions, an attempt has been made to ensure that each company has reported on a consistent basis throughout the period covered by the statistics. In these circumstances, although the statistics of balances outstanding on leasing agreements should be treated with caution, it is thought that the movement in this series should provide a reasonable indication of the broad trend in this category of financing. This series should be regarded as subject to revision until agreement has been reached with companies on a uniform basis of reporting.

*Amounts paid for bills acquired.* This item includes the amounts paid for bills drawn by finance companies, bills discounted for the first time, and bills purchased from banks, authorised dealers in the short-term money market, and others. Broadly, this item corresponds with the item amount financed for the other categories listed on page 678.

*Amounts received for bills sold and matured.* This item comprises amounts received from sales of bills to banks, and to authorised dealers in the short-term money market, and from maturities (including early maturities). This item broadly corresponds with the item collections and other liquidations of balances for the other categories listed above.

*Balances outstanding.* This represents the amounts owing on all bills of exchange held at the end of the period.

Additional classifications of amount financed, and collections and other liquidations of balances are provided for the instalment credit for retail sales transactions of finance companies. Amount financed is classified according to the following types of commodities.

*Motor vehicles, etc.:* motor cars and motor cycles, commercial vehicles, tractors, caravans, trailers, motor parts and accessories, etc. (new and used separately).

*Plant and machinery:* farm machinery and implements, earth-moving equipment, aircraft, industrial plant and machinery, business machinery and equipment (including commercial refrigeration equipment), etc.

*Household and personal goods:* furniture, furnishings and floor coverings, domestic refrigerators electrical goods, radios, television, musical instruments, bicycles, motor mowers, clothing, etc.

The item collections and other liquidations of balances in respect of instalment credit for retail sales agreements is divided between cash collections and other liquidations. Cash collections comprise the actual flow of cash from the public to finance companies; other liquidations consist of rebates for early payouts, bad debts written off, and any other reductions in balances outstanding other than by cash collections.

## Summary of transactions by finance businesses

The following table gives a summary of the amount financed, collections and other liquidations of balances, and balances outstanding in Australia for the period 1964-65 to 1966-67.

**FINANCE COMPANIES: SUMMARY, AUSTRALIA, 1964-65 to 1966-67**  
(\$ million)

Period	Amount financed	Collections and other liquidations		All contracts	Balances outstanding at end of period		
		Contracts including charges	Contracts excluding charges		Contracts including charges	Contracts excluding charges	All contracts (a)
<b>Year—</b>							
1964-65 . . .	1,918.7	1,000.0	1,053.9	2,053.9	1,452.5	361.5	1,814.0
1965-66 . . .	1,901.7	1,067.1	1,057.7	2,124.8	1,476.9	425.7	1,902.6
1966-67 . . .	2,230.9	1,162.6	1,285.9	2,448.4	1,625.6	462.5	2,088.1
<b>Month—</b>							
1964-65—July . .	155.7	81.2	77.6	158.8	1,331.3	321.8	1,653.1
August . . .	151.0	77.7	74.1	151.8	1,344.2	335.0	1,679.2
September . . .	164.3	80.0	83.7	163.8	1,361.2	346.1	1,707.3
October . . .	157.0	81.2	80.8	162.1	1,379.2	348.5	1,727.7
November . . .	162.4	79.2	84.8	164.0	1,395.8	358.6	1,754.4
December . . .	174.5	87.3	98.0	185.3	1,417.6	356.5	1,774.2
January . . .	155.2	75.6	81.4	157.0	1,427.2	369.7	1,796.9
February . . .	144.5	81.9	77.0	158.9	1,430.0	375.3	1,805.3
March . . .	174.6	98.2	98.6	196.8	1,435.4	378.2	1,813.6
April . . .	158.5	83.0	93.6	176.7	1,444.4	376.5	1,820.8
May . . .	160.9	82.6	97.1	179.7	1,452.7	374.7	1,827.5
June . . .	160.0	92.0	107.1	199.0	1,452.5	361.5	1,814.0
1965-66—July . .	177.1	88.4	86.3	174.7	1,462.6	388.2	1,850.8
August . . .	176.2	87.0	94.9	181.9	1,473.8	395.8	1,869.6
September . . .	153.6	85.9	84.6	170.5	1,474.3	402.3	1,876.6
October . . .	153.4	85.3	91.3	176.6	1,476.9	399.8	1,876.6
November . . .	171.1	92.2	84.3	176.5	1,484.7	415.6	1,900.4
December . . .	168.2	92.4	98.4	190.8	1,494.3	412.4	1,906.7
January . . .	121.0	79.0	71.3	150.3	1,491.1	406.1	1,897.3
February . . .	130.3	87.6	65.3	152.9	1,481.4	415.4	1,896.8
March . . .	164.3	101.3	89.5	190.8	1,478.3	420.4	1,898.7
April . . .	152.0	83.0	89.2	172.2	1,480.9	422.0	1,902.9
May . . .	170.5	93.2	96.7	189.9	1,482.9	428.0	1,911.0
June . . .	164.0	91.7	106.0	197.7	1,476.9	425.7	1,902.6
1966-67—July . .	186.1	92.3	101.2	193.5	1,550.9	440.6	1,991.5
August . . .	179.9	100.3	104.4	204.7	1,547.0	447.6	1,994.6
September . . .	179.4	94.3	103.9	198.2	1,556.0	448.6	2,004.7
October . . .	182.8	95.3	98.5	193.9	1,571.5	449.4	2,020.9
November . . .	202.1	97.8	105.8	203.6	1,585.5	462.9	2,048.4
December . . .	199.7	96.5	120.6	217.0	1,604.5	459.5	2,063.9
January . . .	154.6	90.3	88.4	178.7	1,605.0	457.2	2,062.3
February . . .	168.8	99.5	92.3	191.8	1,592.6	472.4	2,065.0
March . . .	193.8	101.4	105.9	207.3	1,597.5	482.7	2,080.1
April . . .	174.8	92.2	113.3	205.5	1,606.8	471.6	2,078.4
May . . .	205.4	103.3	112.3	215.6	1,618.0	480.2	2,098.1
June . . .	203.5	99.5	139.2	238.7	1,625.6	462.5	2,088.1

(a) Amounts shown in this column are intended to provide a broad overall measure of total balances outstanding. However, movements in this series may be affected by changes in the proportions of the two components of the series to the total.

## Amount financed, by type of agreement

The following table shows the separate amount financed, for each type of agreement, i.e. instalment credit for retail sales, wholesale hire purchase, personal loans, mortgage loans, commercial loans (repayable at call or within ninety days, and other), and factoring, in Australia for the period 1964-65 to 1966-67.

FINANCE COMPANIES: AMOUNT FINANCED, BY TYPE OF AGREEMENT  
AUSTRALIA, 1964-65 TO 1966-67  
(\$ million)

Period	Other consumer and commercial loans							
	Instal- ment credit for retail sales	Whole- sale hire purchase	Personal loans	Mort- gage loans	Commercial loans		Fac- toring	Total
					Call or within 90 days	Other com- mercial loans		
Year—								
1964-65 . . . . .	646.3	482.1	63.4	222.3	262.7	154.0	87.8	1,918.7
1965-66 . . . . .	612.1	479.5	70.7	221.3	288.0	150.4	79.8	1,901.7
1966-67 . . . . .	690.4	652.5	94.9	274.2	325.0	131.8	62.1	2,230.9
Month—								
1964-65—July . . . . .	52.1	43.9	5.5	20.1	17.8	9.6	6.9	155.7
August . . . . .	52.7	42.0	5.3	16.9	16.4	10.9	6.9	151.0
September . . . . .	56.2	40.9	5.1	18.3	15.6	20.8	7.3	164.3
October . . . . .	57.3	40.2	5.4	19.1	15.0	11.7	8.3	157.0
November . . . . .	55.2	41.6	5.5	18.8	22.6	10.1	8.4	162.4
December . . . . .	63.8	41.0	6.1	21.2	22.5	11.8	8.1	174.5
January . . . . .	48.8	31.6	4.7	13.6	36.7	15.3	4.6	155.2
February . . . . .	47.1	33.0	5.2	16.3	26.9	9.5	6.6	144.5
March . . . . .	56.6	40.8	5.6	20.9	28.8	13.5	8.4	174.6
April . . . . .	51.1	41.2	4.9	19.9	17.8	15.2	8.5	158.5
May . . . . .	51.7	43.9	5.3	18.5	23.5	10.7	7.3	160.9
June . . . . .	53.8	41.9	4.8	18.7	19.1	15.0	6.6	160.0
1965-66—July . . . . .	53.7	42.9	6.2	17.6	33.6	16.2	6.9	177.1
August . . . . .	57.5	49.1	6.1	16.8	29.4	10.4	6.9	176.2
September . . . . .	51.5	39.2	5.5	17.6	16.6	15.4	7.8	153.6
October . . . . .	50.4	37.5	5.4	17.4	24.8	10.4	7.6	153.4
November . . . . .	53.6	39.1	6.4	19.4	28.7	15.9	8.0	171.1
December . . . . .	55.3	38.7	6.6	20.9	25.5	13.8	7.4	168.2
January . . . . .	43.2	26.1	4.3	12.8	24.7	5.6	4.3	121.0
February . . . . .	44.5	31.5	5.2	15.9	16.1	10.9	6.2	130.3
March . . . . .	54.6	39.6	6.1	21.1	18.1	17.7	7.1	164.3
April . . . . .	47.6	40.7	5.6	17.2	22.2	12.4	6.3	152.0
May . . . . .	52.2	43.0	6.8	20.6	29.3	12.3	6.2	170.5
June . . . . .	47.8	51.8	6.5	24.1	19.2	9.4	5.2	164.0
1966-67—July . . . . .	50.6	48.8	6.1	24.7	42.0	8.5	5.5	186.1
August . . . . .	55.4	50.1	6.7	21.5	30.4	10.5	5.4	179.9
September . . . . .	56.1	47.9	6.9	25.4	23.3	13.9	5.8	179.4
October . . . . .	60.8	57.8	7.5	19.1	20.1	12.0	5.5	182.8
November . . . . .	65.2	58.9	8.4	21.5	32.2	10.7	5.3	202.1
December . . . . .	63.3	59.5	8.7	23.8	24.6	14.0	5.9	199.7
January . . . . .	52.7	37.9	6.8	21.0	21.0	11.2	3.9	154.6
February . . . . .	48.9	50.3	7.4	18.0	29.7	10.2	4.4	168.8
March . . . . .	56.7	63.5	8.6	25.4	24.9	9.4	5.2	193.8
April . . . . .	56.2	57.3	8.4	20.8	18.0	9.3	4.7	174.8
May . . . . .	63.8	64.1	9.7	25.2	27.7	9.7	5.5	205.4
June . . . . .	60.7	56.4	9.8	27.7	31.3	12.5	5.1	203.5

**Collections and other liquidations of balances by type of agreement**

The following table shows the collections and other liquidations of balances, by type of agreement, i.e. instalment credit for retail sales, wholesale hire purchases, other consumer and commercial loans, and factoring, made by finance companies in Australia for the period 1964-65 to 1966-67.

**FINANCE COMPANIES: COLLECTIONS AND OTHER LIQUIDATIONS OF  
BALANCES, BY TYPE OF AGREEMENT, AUSTRALIA, 1964-65 TO 1966-67**  
(\$ million)

Period	Contracts including charges			Contracts excluding charges					All contracts
	Instalment credit for retail sales	Other consumer and commercial loans	Total	Wholesale hire purchase	Other consumer and commercial loans		Factoring	Total	
					Call or within 90 days	Other			
Year—									
1964-65 . . . . .	730.1	269.9	1,000.0	485.5	256.0	210.4	101.9	1,053.9	2,053.9
1965-66 . . . . .	778.0	289.0	1,067.1	476.2	271.8	215.7	94.1	1,057.7	2,124.8
1966-67 . . . . .	850.8	311.8	1,162.6	642.3	342.1	231.1	70.4	1,285.9	2,448.4
Month—									
1964-65—July . . . . .	58.4	22.8	81.2	42.8	13.3	13.7	7.9	77.6	158.8
August . . . . .	57.4	20.3	77.7	42.0	13.6	11.3	7.3	74.1	151.8
September . . . . .	59.5	20.5	80.0	39.6	16.2	19.9	8.1	83.7	163.8
October . . . . .	59.8	21.5	81.2	41.6	15.1	15.4	8.7	80.8	162.1
November . . . . .	57.4	21.8	79.2	40.0	18.3	17.7	8.7	84.8	164.0
December . . . . .	63.4	23.9	87.3	44.2	25.7	19.3	8.8	98.0	185.3
January . . . . .	56.7	18.9	75.6	36.4	23.3	13.9	7.9	81.4	157.0
February . . . . .	60.9	21.0	81.9	35.7	20.0	13.8	7.6	77.0	158.9
March . . . . .	71.4	26.8	98.2	41.5	30.1	18.3	8.7	98.6	196.8
April . . . . .	60.3	22.8	83.0	38.8	25.7	19.1	10.0	93.6	176.7
May . . . . .	61.4	21.2	82.6	41.7	27.0	19.1	9.3	97.1	179.7
June . . . . .	63.6	28.4	92.0	41.4	27.8	28.9	8.9	107.1	199.0
1965-66—July . . . . .	64.0	24.4	88.4	42.5	23.9	12.6	7.3	86.3	174.7
August . . . . .	63.1	23.9	87.0	48.8	21.2	17.1	7.8	94.9	181.9
September . . . . .	62.6	23.3	85.9	38.5	19.9	18.5	7.7	84.6	170.5
October . . . . .	62.1	23.3	85.3	36.7	25.6	20.6	8.4	91.3	176.6
November . . . . .	65.5	26.6	92.2	38.0	19.3	18.0	9.1	84.3	176.5
December . . . . .	65.6	26.8	92.4	40.6	28.0	21.2	8.4	98.4	190.8
January . . . . .	58.4	20.7	79.0	32.1	20.2	11.6	7.5	71.3	150.3
February . . . . .	65.8	21.8	87.6	32.3	9.7	16.2	7.1	65.3	152.9
March . . . . .	75.0	26.3	101.3	40.8	17.5	23.6	7.5	89.5	190.8
April . . . . .	60.6	22.4	83.0	37.6	25.3	18.8	7.5	89.2	172.2
May . . . . .	68.9	24.3	93.2	43.7	27.5	18.0	7.5	96.7	189.9
June . . . . .	66.5	25.2	91.7	44.5	33.6	19.7	8.2	106.0	197.7
1966-67—July . . . . .	66.8	25.5	92.3	46.1	32.2	16.7	6.3	101.2	193.5
August . . . . .	73.2	27.1	100.3	51.9	28.5	17.2	6.8	104.4	204.7
September . . . . .	68.6	25.7	94.3	50.2	29.8	18.0	6.0	103.9	198.2
October . . . . .	69.9	25.4	95.3	51.7	22.8	18.0	6.0	98.5	193.9
November . . . . .	71.0	26.8	97.8	58.8	21.7	18.9	6.4	105.8	203.6
December . . . . .	68.7	27.7	96.5	57.2	38.3	19.0	6.0	120.6	217.0
January . . . . .	67.2	23.1	90.3	48.7	18.2	15.7	5.8	88.4	178.7
February . . . . .	75.1	24.4	99.5	46.2	23.8	17.0	5.2	92.3	191.8
March . . . . .	76.1	25.2	101.4	58.1	21.0	21.0	5.7	105.9	207.3
April . . . . .	69.0	23.2	92.2	54.7	32.0	21.9	4.7	113.3	205.5
May . . . . .	75.5	27.8	103.3	62.2	23.9	20.3	5.9	112.3	215.6
June . . . . .	69.7	29.8	99.5	56.3	49.8	27.5	5.6	139.2	238.7

**Balances outstanding**

The following tables show the balances outstanding in Australia, by type of agreement, and the total balances in each State at the end of each month from July 1964 to June 1967.

**FINANCE COMPANIES: BALANCES OUTSTANDING, BY TYPE OF AGREEMENT, AUSTRALIA, JULY 1964 TO JUNE 1967**

(\$ million)

End of—	Contracts including charges			Contracts excluding charges					All contracts (a)
	Instal- ment credit for retail sales	Other con- sumer and com- mercial loans	Total	Whole- sale hire pur- chase	Other consumer and commercial loans		Fac- toring	Total	
					Call or within 90 days	Other			
1964-65—July . . .	874.5	456.8	1,331.3	61.8	34.5	199.1	26.4	321.8	1,653.1
August . . .	886.2	458.1	1,344.2	62.8	37.4	207.9	26.9	335.0	1,679.2
September . . .	899.4	461.8	1,361.2	64.7	37.0	217.1	27.3	346.1	1,707.3
October . . .	913.4	465.8	1,379.2	64.5	37.0	219.3	27.7	348.5	1,727.7
November . . .	928.1	467.7	1,395.8	67.1	43.3	220.2	28.1	358.6	1,754.4
December . . .	946.3	471.4	1,417.6	64.7	40.8	222.2	28.7	356.5	1,774.2
January . . .	953.6	473.6	1,427.2	60.3	53.7	228.9	26.8	369.7	1,796.9
February . . .	953.5	476.5	1,430.0	58.0	60.7	229.7	26.9	375.3	1,805.3
March . . .	955.5	479.9	1,435.4	57.8	59.1	233.3	28.0	378.2	1,813.6
April . . .	962.6	481.7	1,444.4	60.6	51.3	236.9	27.8	376.5	1,820.8
May . . .	968.6	484.1	1,452.7	63.3	47.8	236.8	26.8	374.7	1,827.5
June . . .	976.4	476.1	1,452.5	64.1	39.5	232.4	25.5	361.5	1,814.0
1965-66—July . . .	982.4	480.3	1,462.6	65.4	49.5	247.3	26.0	388.2	1,850.8
August . . .	993.3	480.5	1,473.8	66.8	57.9	244.9	26.3	395.8	1,869.6
September . . .	997.0	477.3	1,474.3	68.2	54.6	252.0	27.5	402.3	1,876.6
October . . .	999.5	477.3	1,476.9	69.6	53.9	248.4	27.9	399.8	1,876.6
November . . .	1,004.0	480.7	1,484.7	71.5	63.4	253.0	27.8	415.6	1,900.4
December . . .	1,010.1	484.2	1,494.3	70.2	60.9	253.6	27.7	412.4	1,906.7
January . . .	1,006.9	484.2	1,491.1	64.7	65.4	250.7	25.3	406.1	1,897.3
February . . .	998.1	483.3	1,481.4	64.5	72.0	253.7	25.2	415.4	1,896.8
March . . .	993.3	485.1	1,478.3	63.7	72.7	258.2	25.8	420.4	1,898.7
April . . .	994.3	486.6	1,480.9	67.5	68.3	260.7	25.5	422.0	1,902.9
May . . .	993.4	489.5	1,482.9	67.5	71.7	263.7	25.1	428.0	1,911.0
June . . .	988.5	488.4	1,476.9	74.6	63.5	265.0	22.6	425.7	1,902.6
1966-67—July . . .	1,052.5	498.3	1,550.9	78.0	74.3	265.8	22.4	440.6	1,991.5
August . . .	1,050.7	496.3	1,547.0	76.7	76.5	272.7	21.7	447.6	1,994.6
September . . .	1,054.6	501.4	1,556.0	75.2	69.6	281.6	22.2	448.6	2,004.7
October . . .	1,061.7	509.7	1,571.5	81.7	67.1	278.3	22.3	449.4	2,020.9
November . . .	1,073.9	511.5	1,585.5	82.7	78.1	280.2	21.9	462.9	2,048.4
December . . .	1,085.7	518.7	1,604.5	85.6	64.3	287.3	22.3	459.5	2,063.9
January . . .	1,085.9	519.2	1,605.0	75.5	65.2	295.6	20.8	457.2	2,062.3
February . . .	1,074.0	518.6	1,592.6	80.1	74.6	297.2	20.5	472.4	2,065.0
March . . .	1,071.3	526.1	1,597.5	86.1	78.7	297.4	20.5	482.7	2,080.1
April . . .	1,074.3	532.5	1,606.8	89.4	64.3	296.8	21.2	471.6	2,078.4
May . . .	1,079.5	538.4	1,618.0	92.1	67.7	299.0	21.4	480.2	2,098.1
June . . .	1,086.2	539.4	1,625.6	92.9	49.4	298.8	21.4	462.5	2,088.1

(a) Amounts shown in this column are intended to provide a broad overall measure of total balances outstanding. However, movements in this series may be affected by changes in the proportions of the two components of the series to the total.

**FINANCE COMPANIES: BALANCES OUTSTANDING, ALL CONTRACTS  
STATES, JULY 1964 TO JUNE 1967**

(\$ million)

<i>End of—</i>	<i>N.S.W. and A.C.T.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A. and N.T.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>Aust.</i>
1964-65—July . . .	724.3	391.7	215.4	191.6	95.6	34.4	1,653.1
August . . .	737.9	396.0	219.7	194.9	96.4	34.3	1,679.2
September . . .	749.8	402.7	223.1	199.6	97.3	34.9	1,707.3
October . . .	755.1	409.6	227.3	201.3	99.4	34.9	1,727.7
November . . .	766.5	414.0	232.2	205.5	101.3	35.0	1,754.4
December . . .	768.3	420.1	238.1	209.1	103.0	35.6	1,774.2
January . . .	785.4	422.2	238.8	211.6	103.3	35.6	1,796.9
February . . .	793.0	421.3	241.3	212.1	102.0	35.6	1,805.3
March . . .	798.1	418.7	244.1	213.2	103.8	35.8	1,813.6
April . . .	795.5	422.8	246.9	214.2	105.7	35.8	1,820.8
May . . .	791.6	423.0	251.0	217.1	108.6	36.2	1,827.5
June . . .	777.2	420.5	251.9	218.9	109.5	36.0	1,814.0
1965-66—July . . .	799.3	428.1	254.6	221.6	110.8	36.4	1,850.8
August . . .	807.1	432.2	257.6	224.0	112.3	36.5	1,869.6
September . . .	810.6	433.5	258.5	223.3	113.8	36.8	1,876.6
October . . .	802.2	437.0	260.5	224.3	115.8	36.8	1,876.6
November . . .	819.4	439.4	263.3	223.9	117.5	37.0	1,900.4
December . . .	816.4	445.3	265.8	222.4	119.4	37.3	1,906.7
January . . .	810.9	443.0	265.1	221.1	119.5	37.6	1,897.3
February . . .	816.1	440.9	265.5	220.3	116.5	37.5	1,896.8
March . . .	816.7	442.3	266.0	219.0	117.0	37.8	1,898.7
April . . .	816.5	443.7	267.5	218.0	119.3	37.8	1,902.9
May . . .	821.9	442.6	269.2	217.3	121.9	38.0	1,911.0
June . . .	804.1	445.1	271.7	218.8	124.2	38.6	1,902.6
1966-67—July . . .	862.5	462.7	279.7	220.6	126.6	39.3	1,991.5
August . . .	865.7	462.3	279.2	219.8	128.4	39.2	1,994.6
September . . .	867.3	463.7	282.6	220.7	131.7	38.7	2,004.7
October . . .	876.2	464.2	285.7	221.0	134.7	39.2	2,020.9
November . . .	894.3	465.8	288.4	221.6	138.9	39.6	2,048.4
December . . .	897.5	468.4	293.4	221.9	142.5	40.2	2,063.9
January . . .	896.2	472.4	291.0	220.2	142.7	39.7	2,062.3
February . . .	898.7	472.2	293.4	220.2	140.5	40.0	2,065.0
March . . .	909.6	472.1	296.6	219.6	142.4	39.9	2,080.1
April . . .	902.6	473.5	298.6	218.5	145.2	40.1	2,078.4
May . . .	915.3	476.3	299.2	218.2	148.7	40.5	2,098.1
June . . .	893.0	481.6	301.7	218.1	153.0	40.8	2,088.1

**Loans to related non-finance companies**

The following table shows the balances outstanding of loans made by finance companies to related companies other than finance companies in Australia for the months June 1966 to June 1967. Information on this category was not collected before June 1966.

**FINANCE COMPANIES: LOANS TO RELATED  
NON-FINANCE COMPANIES, BALANCES OUT-  
STANDING, AUSTRALIA, JUNE 1966 to JUNE 1967**

(\$ million)

<i>End of—</i>	<i>Balances outstanding</i>
1966-67—June . . .	9.8
July . . .	11.1
August . . .	8.8
September . . .	8.5
October . . .	8.8
November . . .	8.6
December . . .	8.1
January . . .	6.8
February . . .	6.9
March . . .	6.8
April . . .	7.2
May . . .	7.5
June . . .	7.9

**Transactions in bills of exchange**

This table shows the amounts paid and the amounts received for bills of exchange by finance companies in Australia, together with the balances outstanding at the end of the month, for the months June 1966 to June 1967. Information on this category was not collected before June 1966.

**FINANCE COMPANIES: TRANSACTIONS IN BILLS OF EXCHANGE  
AUSTRALIA, JUNE 1966 TO JUNE 1967  
(\$ million)**

<i>Month</i>	<i>Amounts paid for bills acquired</i>	<i>Amounts received for bills disposed of</i>	<i>Balances outstanding at end of month</i>
1966-67—June . . . .	3.4	4.5	2.5
July . . . . .	11.6	6.7	7.2
August . . . . .	2.5	6.4	3.5
September . . . . .	2.2	2.5	3.2
October . . . . .	2.5	2.3	3.4
November . . . . .	2.6	1.0	5.0
December . . . . .	1.6	1.4	5.0
January . . . . .	1.1	1.4	4.8
February . . . . .	1.2	2.1	4.2
March . . . . .	1.6	1.9	4.0
April . . . . .	3.2	2.2	4.9
May . . . . .	5.1	1.9	8.1
June . . . . .	3.4	7.2	4.3

**Initial capital cost of goods newly leased**

The following table shows the initial capital cost of business equipment and plant newly leased by finance companies in each State and in Australia for the months June 1966 to June 1967. Information on this category was not collected before June 1966.

**FINANCE COMPANIES: BUSINESS EQUIPMENT AND PLANT ON LEASE, INITIAL  
CAPITAL COST OF GOODS NEWLY LEASED, STATES, JUNE 1966 TO JUNE 1967  
(\$ million)**

<i>Month</i>	<i>N.S.W. and A.C.T.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A. and N.T.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>Aust.</i>
1966-67—							
June . . . . .	1.5	2.1	0.8	0.4	0.3	0.1	5.0
July . . . . .	1.7	1.3	1.1	0.3	0.1	0.3	4.8
August . . . . .	1.6	1.6	0.7	0.3	0.3	0.3	4.9
September . . . . .	2.4	2.0	0.7	0.4	0.2	0.2	5.8
October . . . . .	2.0	1.6	0.6	0.3	0.2	0.2	5.0
November . . . . .	1.8	2.3	0.9	0.4	0.2	0.1	5.7
December . . . . .	2.3	1.9	0.8	0.4	0.2	0.1	5.7
January . . . . .	1.6	1.9	0.6	0.4	0.2	0.1	4.8
February . . . . .	2.5	0.8	0.9	0.6	0.2	..	5.1
March . . . . .	2.8	3.1	1.2	0.7	0.4	0.2	8.4
April . . . . .	2.7	2.0	1.7	0.4	0.4	0.2	7.5
May . . . . .	3.3	2.6	1.8	0.7	0.6	0.3	9.3
June . . . . .	3.5	3.5	2.3	0.7	0.6	0.2	10.7



**Balances outstanding of business equipment and plant on lease**

The following table shows the balances outstanding of business equipment and plant on lease in each State and in Australia for the months July 1964 to June 1967.

**FINANCE COMPANIES: BUSINESS EQUIPMENT AND PLANT ON LEASE, BALANCES  
OUTSTANDING, STATES, JULY 1964 TO JUNE 1967**  
(\$ million)

<i>End of—</i>	<i>N.S.W. and A.C.T.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A. and N.T.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>Aust.</i>
1964-65—July . . .	22.1	14.5	7.1	3.7	2.3	0.2	50.0
August . . .	22.8	15.1	7.6	4.0	2.3	0.3	52.1
September . . .	23.8	16.3	8.1	4.2	2.2	0.3	54.9
October . . .	24.4	16.6	8.2	4.4	2.3	0.4	56.4
November . . .	25.6	16.5	8.7	4.8	2.3	0.4	58.3
December . . .	26.1	18.9	8.8	4.9	2.3	0.5	61.4
January . . .	26.6	18.9	8.7	5.1	2.3	0.5	62.1
February . . .	27.3	19.6	8.8	5.3	2.8	0.5	64.3
March . . .	28.2	19.8	8.8	5.6	2.9	0.6	65.9
April . . .	28.9	20.4	8.8	6.0	3.1	0.6	67.7
May . . .	29.6	21.0	8.9	6.4	3.1	0.6	69.6
June . . .	29.5	22.2	8.7	6.4	3.0	0.8	70.6
1965-66—July . . .	29.9	23.7	7.5	6.6	3.1	0.9	71.8
August . . .	30.4	23.9	9.1	6.7	3.2	1.0	74.3
September . . .	31.0	24.2	9.2	6.8	3.2	1.2	75.6
October . . .	31.0	24.8	9.2	7.0	3.2	1.3	76.5
November . . .	31.7	27.5	9.4	7.3	3.3	1.3	80.6
December . . .	32.5	28.0	9.9	7.4	3.4	1.5	82.7
January . . .	31.8	27.7	10.0	7.5	3.4	1.5	82.0
February . . .	32.4	29.8	10.6	7.6	3.6	1.5	85.6
March . . .	33.2	30.5	11.1	7.9	3.7	1.7	88.0
April . . .	34.1	31.2	11.3	7.8	3.7	1.8	89.9
May . . .	35.0	31.8	11.6	8.0	3.8	1.8	92.1
June . . .	35.6	32.3	11.5	7.5	3.9	1.9	92.7
1966-67—July . . .	37.4	32.7	11.5	7.6	3.7	1.9	94.8
August . . .	37.3	33.6	11.9	7.7	3.9	2.2	96.7
September . . .	38.5	34.6	12.2	7.9	4.1	2.0	99.1
October . . .	39.2	35.2	12.5	8.0	4.1	2.5	101.5
November . . .	39.7	36.5	13.1	8.2	4.3	2.5	104.3
December . . .	40.7	37.3	13.6	8.3	4.4	2.6	106.9
January . . .	41.9	38.4	13.8	8.5	4.4	2.7	109.7
February . . .	41.7	38.6	14.1	9.1	4.5	2.7	110.6
March . . .	43.6	39.0	14.8	9.9	4.9	2.9	114.9
April . . .	44.7	40.3	16.4	10.0	5.1	3.0	119.6
May . . .	46.9	41.8	17.6	10.4	5.6	3.3	125.6
June . . .	49.0	42.1	18.1	10.4	6.0	3.5	129.0

**Instalment credit for retail sales**

The following table shows additional details, for Australia, of the total instalment credit for retail sales transactions of finance companies. Amount financed is dissected by type of commodity, and collections and other liquidations of balances are divided into cash collections and other liquidations.

**FINANCE COMPANIES: INSTALMENT CREDIT FOR RETAIL SALES  
AMOUNT FINANCED, COLLECTIONS AND OTHER LIQUIDATIONS, AND BALANCES  
OUTSTANDING, AUSTRALIA, 1964-65 TO 1966-67**  
(\$ million)

Period	Amount financed				Total	Collections and other liquidations		Total	Balances outstanding at end of period
	New motor vehicles	Used motor vehicles	Household and personal goods	Plant and machinery		Cash collections	Other liquidations		
<b>Year—</b>									
1964-65 . . .	267.0	270.1	69.7	39.5	646.3	696.7	33.6	730.1	976.4
1965-66 . . .	249.8	250.3	69.0	42.9	612.1	746.2	31.7	778.0	988.5
1966-67 . . .	256.2	263.1	119.9	51.4	690.4	819.3	31.3	850.8	1,086.2
<b>Month—</b>									
<b>1964-65—</b>									
July . . .	20.9	22.4	6.1	2.8	52.1	55.2	3.2	58.4	874.5
August . . .	22.2	21.9	5.9	2.7	52.7	53.8	3.6	57.4	886.2
September . . .	23.3	24.0	6.1	2.9	56.2	56.7	2.9	59.5	899.4
October . . .	23.1	24.6	5.7	3.9	57.3	56.7	3.1	59.8	913.4
November . . .	22.7	22.2	6.0	4.2	55.2	54.9	2.4	57.4	928.1
December . . .	28.0	24.7	7.1	3.9	63.8	60.6	2.8	63.4	946.3
January . . .	19.6	20.9	5.4	2.9	48.8	54.3	2.6	56.7	953.6
February . . .	20.1	19.3	4.9	2.8	47.1	58.4	2.6	60.9	953.5
March . . .	24.0	23.3	5.9	3.5	56.6	68.5	2.9	71.4	955.5
April . . .	20.9	21.6	5.2	3.3	51.1	58.1	2.3	60.3	962.6
May . . .	20.9	22.0	5.7	3.1	51.7	59.1	2.4	61.4	968.6
June . . .	21.3	23.4	5.8	3.4	53.8	60.5	3.1	63.6	976.4
<b>1965-66—</b>									
July . . .	21.3	24.4	5.0	3.1	53.7	60.7	3.3	64.0	982.4
August . . .	24.2	24.1	5.5	3.5	57.5	60.2	3.0	63.1	993.3
September . . .	19.6	23.4	5.8	2.7	51.5	59.8	2.9	62.6	997.0
October . . .	20.0	20.3	5.9	4.2	50.4	59.1	3.0	62.1	999.5
November . . .	21.0	21.6	6.5	4.4	53.6	63.2	2.3	65.5	1,004.0
December . . .	22.2	22.0	7.5	3.6	55.3	62.9	2.8	65.6	1,010.1
January . . .	18.2	17.2	5.1	2.9	43.2	56.1	2.1	58.4	1,006.9
February . . .	18.4	17.8	5.1	3.3	44.5	63.6	2.2	65.8	998.1
March . . .	23.4	21.0	5.6	4.5	54.6	71.9	3.1	75.0	993.3
April . . .	20.6	18.1	5.1	3.9	47.6	58.4	2.2	60.6	994.3
May . . .	22.2	20.4	5.9	3.8	52.2	66.4	2.5	68.9	993.4
June . . .	18.7	20.2	5.8	3.3	47.8	63.9	2.5	66.5	988.5
<b>1966-67—</b>									
July . . .	17.4	20.9	8.9	3.6	50.6	64.1	2.7	66.8	1,052.5
August . . .	20.6	22.9	8.6	3.5	55.4	70.8	2.4	73.2	1,050.7
September . . .	21.2	22.5	9.5	3.1	56.1	65.9	2.7	68.6	1,054.6
October . . .	22.4	21.8	11.4	5.3	60.8	67.8	2.1	69.9	1,061.7
November . . .	23.1	23.7	12.0	6.5	65.2	68.4	2.7	71.0	1,073.9
December . . .	22.8	22.4	12.9	5.0	63.3	66.1	2.6	68.7	1,085.7
January . . .	19.0	20.8	8.7	4.0	52.7	65.2	2.0	67.2	1,085.9
February . . .	18.1	19.0	8.1	3.6	48.9	72.6	2.4	75.1	1,074.0
March . . .	22.9	21.5	8.7	3.8	56.7	73.8	2.4	76.1	1,071.3
April . . .	21.1	20.9	10.1	4.1	56.2	66.2	2.8	69.0	1,074.3
May . . .	24.3	23.8	11.0	4.5	63.8	72.4	3.0	75.5	1,079.5
June . . .	23.3	22.9	10.1	4.3	60.7	66.1	3.5	69.7	1,086.2

## INSURANCE

### Legislation

Section 51 of the Commonwealth Constitution confers the necessary powers on the Commonwealth Parliament to legislate with respect to 'insurance other than State insurance; also State insurance extending beyond the limits of the State concerned'. Commonwealth legislation includes the *Marine Insurance Act* 1909-1966 defining the limits of marine insurance and regulating the terms of contracts, etc., the *Insurance Act* 1932-1966 requiring the lodgment of deposits by insurance companies, and the *Life Insurance Act* 1945-1965 generally regulating life insurance business in Australia. The *Marine Insurance Act* 1909-1966 and the *Insurance Act* 1932-1966 have limited application, and except for life insurance business, which is regulated by the *Life Insurance Act* 1945-1965, insurance business is conducted almost entirely under State laws.

### Insurance Act 1932-1966

Companies, persons or associations of persons carrying on insurance business in Australia or in any Territory of Australia are required to lodge a deposit with the Commonwealth Treasurer. Money deposited is invested by the Treasurer in prescribed securities selected by the depositor, and all interest is paid to depositors. Deposits remain as security against liability to policy holders, and are available to satisfy judgments obtained in respect of policies. Deposits held by States on 1 February 1932 could, however, remain with the States subject to the conditions embodied in the laws of the States, and depositors to the extent of the value of these deposits were exempt from liability to make deposits under the Commonwealth Act.

The following are not regarded as insurance business under the Act: staff superannuation schemes; schemes of religious organisations solely for insurance of their property; friendly society, union and association schemes involving superannuation or insurance benefits to employees.

This Act does not apply to State insurance within the limits of the State concerned, and under the *Life Insurance Act* 1945-1965 ceased to apply to life insurance business.

### Life Insurance Act 1945-1965

The objects of this Act are: (a) to replace all State legislation on the subject of life insurance, except that relating to the life insurance operations of State Government insurance offices within the State concerned, and to provide uniform legislation for the whole of Australia; (b) to appoint an Insurance Commissioner to exercise active supervision of the activities of life insurance companies, with a view to securing the greatest possible protection for policy holders; (c) to set up adequate machinery for dealing with any company that fails to maintain a required minimum standard of solvency. The Act came into operation on 20 June 1946. A summary of the provisions of the Act is given in Year Book No. 37, pages 595-7.

### Deposits under Insurance Acts

Deposits lodged under the Insurance Acts at 30 June 1967 totalled \$34.2 million, comprising \$4.1 million held by the Commonwealth in respect of life insurance, and \$30.1 million held by the Commonwealth in respect of other forms of insurance. The deposits consisted of Commonwealth Government securities \$20.4 million, United Kingdom Government securities \$1.7 million, fixed deposits \$0.4 million, bank guarantees and undertakings \$8.8 million, corporation debentures and stock \$0.9 million, and titles and mortgages \$2.0 million.

## Life insurance

Since 1947, returns lodged under the *Life Insurance Act* 1945-1965 have been used to compile life insurance statistics. Except where otherwise indicated, the figures in the succeeding paragraphs refer only to Australian business. Business in the Territories of Papua and New Guinea is, however, included in the Australian figures. The information shown has been compiled from returns of life insurance business submitted in the financial years which ended during the year stated.

### Offices transacting business

The number of offices which transacted life insurance business in Australia during 1966 was 45, including 12 overseas companies. Of the 33 Australian offices, 6 are purely mutual, including one which transacts general business in respect of which share capital is used, 25 are public companies, and 2 are State Government institutions. Of the total, 33 transacted ordinary business only and the remainder both ordinary and industrial business. Where possible, ordinary, industrial and superannuation business have been kept separate in the following tables.

## Australian business—policies in existence

LIFE INSURANCE: POLICIES EXISTING IN AUSTRALIA, STATES  
AND TERRITORIES, 1966

State or Territory(a)	Insurance and endowment policies				Annuity policies		
	Number of policies	Sum insured (\$'000)	Bonus additions (\$'000)	Annual premiums (\$'000)	Number of policies	Annuities per annum (\$'000)	Annual premiums (\$'000)
ORDINARY BUSINESS							
New South Wales . . .	1,319,584	3,358,809	370,663	91,453	852	354	2
Victoria . . .	1,086,596	3,230,539	332,177	82,189	831	387	6
Queensland(b) . . .	736,762	1,873,176	211,517	45,813	200	64	1
South Australia(c) . . .	465,596	1,176,016	119,341	31,362	196	57	1
Western Australia . . .	319,926	851,047	87,282	22,505	134	49	2
Tasmania . . .	139,028	363,623	39,632	9,347	77	28	3
Australian Capital Terri- tory . . .	120,808	769,837	51,049	16,640	103	97	1
Australia(b) . . .	4,188,300	11,623,046	1,211,660	299,309	2,393	1,037	15
INDUSTRIAL BUSINESS							
New South Wales . . .	990,324	355,926	26,097	14,770	..	..	..
Victoria . . .	788,952	276,027	20,692	11,261	..	..	..
Queensland(b) . . .	344,006	115,945	8,246	4,926	..	..	..
South Australia(c) . . .	275,966	85,515	6,122	3,615	..	..	..
Western Australia . . .	168,393	57,916	4,139	2,417	..	..	..
Tasmania . . .	58,445	19,667	1,435	810	..	..	..
Australian Capital Terri- tory . . .	17,547	7,482	571	313	..	..	..
Australia(b) . . .	2,643,633	918,477	67,302	38,112	..	..	..
SUPERANNUATION BUSINESS							
New South Wales . . .	284,409	494,042	49,314	16,108	147	3,503	834
Victoria . . .	122,125	1,346,885	65,893	33,777	526	7,304	2,909
Queensland(b) . . .	81,119	276,441	19,947	9,245	16	71	14
South Australia(c) . . .	44,975	214,831	20,050	7,864	42	104	16
Western Australia . . .	36,308	154,072	11,702	5,444	21	102	19
Tasmania . . .	15,566	93,641	9,090	3,036	31	58	11
Australian Capital Terri- tory . . .	100,074	1,546,958	49,060	41,765	85	12,158	2,525
Australia(b) . . .	684,576	4,126,869	225,055	117,238	868	23,300	6,328

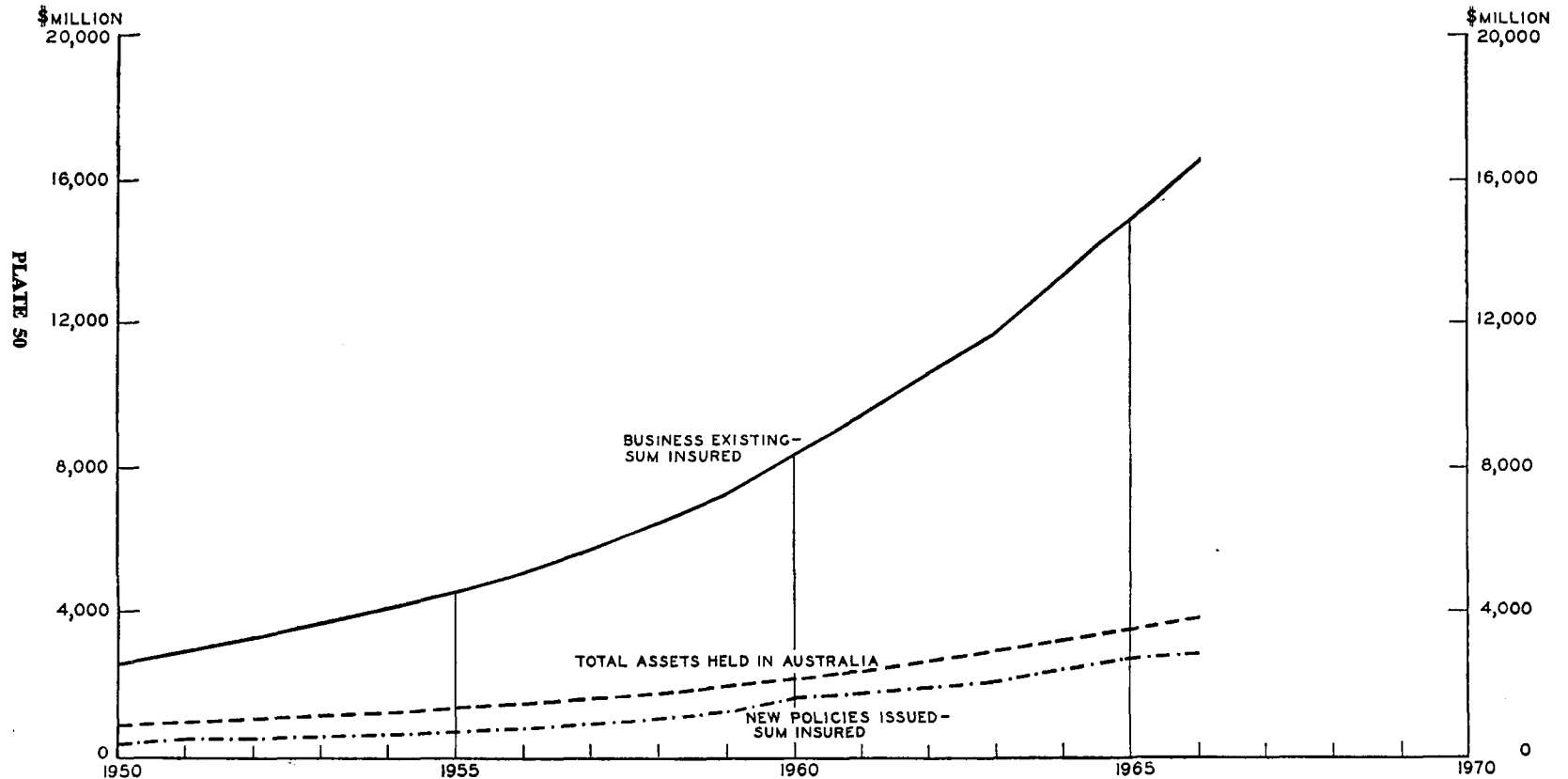
(a) Location of register of policies.

(b) Includes Papua and New Guinea.

(c) Includes Northern Territory.

# LIFE INSURANCE: AUSTRALIA

1950 TO 1966



## LIFE INSURANCE: POLICIES EXISTING IN AUSTRALIA, 1962 TO 1966

At end of year—	Insurance and endowment policies				Annuity policies	
	Number of policies	Sum insured (\$ million)	Average sum insured per policy (\$'000)	Annual premiums (\$ million)	Number of policies	Annuities per annum (\$ million)
ORDINARY BUSINESS						
1962 . . . .	3,690,996	7,543.5	2.0	212.0	2,606	0.9
1963 . . . .	3,794,150	8,377.0	2.2	229.8	2,618	1.0
1964 . . . .	3,921,635	9,384.6	2.4	251.4	2,588	1.0
1965 . . . .	4,058,813	10,457.6	2.6	275.0	2,467	1.0
1966 . . . .	4,188,300	11,623.0	2.8	299.3	2,393	1.0
INDUSTRIAL BUSINESS						
1962 . . . .	3,075,967	743.5	0.2	33.1	..	..
1963 . . . .	2,952,808	777.1	0.3	34.0	..	..
1964 . . . .	2,850,977	823.2	0.3	35.3	..	..
1965 . . . .	2,755,146	870.9	0.3	36.7	..	..
1966 . . . .	2,643,633	918.5	0.4	38.1	..	..
SUPERANNUATION BUSINESS						
1962 . . . .	599,514	2,310.2	3.9	67.6	1,689	24.1
1963 . . . .	607,297	2,632.8	4.3	75.9	1,757	25.3
1964 . . . .	617,184	3,096.1	5.0	86.6	980	26.6
1965 . . . .	645,837	3,599.1	5.6	100.4	853	23.5
1966 . . . .	684,576	4,126.9	6.0	117.2	868	23.3

## New policies issued in Australia

LIFE INSURANCE: NEW POLICIES ISSUED IN AUSTRALIA  
STATES AND TERRITORIES, 1966

State or Territory(a)	Insurance and endowment policies				Annuity policies			
	Number of policies	Sum insured (\$'000)	Premiums		Number of policies	Annuities per annum (\$'000)	Premiums	
			Single (\$'000)	Annual (\$'000)			Single (\$'000)	Annual (\$'000)
ORDINARY BUSINESS								
New South Wales .	116,763	500,720	333	12,067	28	19	147	..
Victoria . . . .	90,534	477,124	581	10,180	23	43	188	1
Queensland(b) . .	61,653	282,497	124	6,122	5	4	30	..
South Australia(c) .	46,105	189,823	102	4,292	7	5	9	..
Western Australia .	32,098	150,016	76	3,307	6	4	35	..
Tasmania . . . .	13,049	57,111	12	1,308	..	..	..	..
Australian Capital Territory .	20,074	159,558	46	3,114	6	4	49	..
Australia(b) . . .	380,276	1,816,850	1,273	40,390	75	79	457	1

(a) Location of register of policies.

(b) Includes Papua and New Guinea.

(c) Includes Northern Territory.

## LIFE INSURANCE: NEW POLICIES ISSUED IN AUSTRALIA, 1966—continued

State or Territory(a)	Insurance and endowment policies				Annuity policies			
	Number of policies	Sum insured (\$'000)	Premiums		Number of policies	Annuities per annum (\$'000)	Premiums	
			Single (\$'000)	Annual (\$'000)			Single (\$'000)	Annual (\$'000)
INDUSTRIAL BUSINESS								
New South Wales .	52,163	53,500	..	2,096	..	..	..	..
Victoria .	34,661	35,866	..	1,350	..	..	..	..
Queensland(b) .	17,860	16,138	..	662	..	..	..	..
South Australia(c) .	13,159	11,021	..	449	..	..	..	..
Western Australia .	10,110	9,532	..	392	..	..	..	..
Tasmania .	3,435	3,368	..	133	..	..	..	..
Australian Capital Territory .	858	895	..	36	..	..	..	..
Australia(b) .	132,246	130,320	..	5,119	..	..	..	..

SUPERANNUATION BUSINESS								
New South Wales . . .	37,549	82,697	245	2,668	5	659	15	194
Victoria . . .	19,295	290,222	3,697	7,440	40	1,023	790	332
Queensland(b) . . .	15,383	65,718	349	2,068	..	18	..	4
South Australia(c) . . .	6,044	46,885	80	1,631	..	11	1	2
Western Australia . . .	5,573	36,377	273	1,306	..	9	..	3
Tasmania . . .	2,749	21,342	530	679	..	6	..	2
Australian Capital Territory . . .	18,862	386,123	2,572	10,757	12	2,090	1,642	522
Australia(b) . . .	105,455	929,364	7,745	26,548	57	3,815	2,447	1,058

(a) Location of register of policies. (b) Includes Papua and New Guinea. (c) Includes Northern Territory.

## LIFE INSURANCE: NEW POLICIES ISSUED IN AUSTRALIA, 1962 TO 1966

Year	Insurance and endowment policies				Annuity policies					
	Number of policies	Sum insured (\$'000)	Premiums		Number of policies	Annui- ties per annum (\$'000)	Premiums			
			Single (\$'000)	Annual (\$'000)			Single (\$'000)	Annual (\$'000)		
ORDINARY BUSINESS										
1962	.	.	334,072	1,286,156	456	29,980	95	62	502	..
1963	.	.	343,450	1,364,384	1,822	31,606	119	96	698	2
1964	.	.	362,118	1,544,162	835	35,338	115	79	615	3
1965	.	.	370,300	1,650,844	1,228	37,940	102	97	702	2
1966	.	.	380,276	1,816,850	1,273	40,390	75	79	457	1
INDUSTRIAL BUSINESS										
1962	.	.	156,316	104,508	..	4,304	..	..	..	..
1963	.	.	130,681	105,970	..	4,232	..	..	..	..
1964	.	.	127,164	115,170	..	4,516	..	..	..	..
1965	.	.	130,249	120,337	..	4,767	..	..	..	..
1966	.	.	132,246	130,320	..	5,119	..	..	..	..
SUPERANNUATION BUSINESS										
1962	.	.	75,459	485,840	1,844	12,626	161	3,900	1,208	1,034
1963	.	.	79,299	559,880	3,216	14,420	155	4,260	1,080	1,148
1964	.	.	78,353	764,038	5,391	18,636	216	4,576	1,339	1,247
1965	.	.	88,798	906,774	8,977	22,977	65	6,448	1,687	1,767
1966	.	.	105,455	929,364	7,745	26,548	57	3,815	2,447	1,058

## Policies discontinued or reduced in Australia

LIFE INSURANCE: POLICIES DISCONTINUED OR REDUCED IN AUSTRALIA  
STATES AND TERRITORIES, 1966(a)

State or Territory(b)	Insurance and endowment policies			Annuity policies		
	Number of policies	Sum insured \$'000	Annual premiums \$'000	Number of policies	Annuities per annum \$'000	Annual premiums \$'000
ORDINARY BUSINESS						
New South Wales . . .	88,111	232,047	6,077	59	36	1
Victoria . . . . .	66,235	183,535	4,262	46	12	3
Queensland(c) . . .	40,054	95,300	2,268	13	6	..
South Australia(d) . .	29,539	73,647	1,849	17	7	..
Western Australia . .	18,060	41,583	1,051	8	2	..
Tasmania . . . . .	9,846	22,907	564	5	1	..
Australian Capital Territory . . . . .	—1,056	2,345	—17	1	..	..
Australia(c) . . . . .	250,789	651,365	16,055	149	65	4
INDUSTRIAL BUSINESS						
New South Wales . . .	90,145	33,931	1,533	..	..	..
Victoria . . . . .	76,287	24,000	1,068	..	..	..
Queensland(c) . . .	29,060	9,286	426	..	..	..
South Australia(d) . .	26,302	7,846	360	..	..	..
Western Australia . .	14,339	5,181	234	..	..	..
Tasmania . . . . .	6,699	2,076	92	..	..	..
Australian Capital Territory . . . . .	927	401	19	..	..	..
Australia(c) . . . . .	243,759	82,720	3,732	..	..	..
SUPERANNUATION BUSINESS						
New South Wales . . .	23,142	74,190	2,479	16	739	288
Victoria . . . . .	19,019	170,331	3,194	11	1,200	428
Queensland(c) . . .	8,088	28,169	936	3	53	13
South Australia(d) . .	4,994	16,091	564	6	30	6
Western Australia . .	5,224	21,344	514	2	5	1
Tasmania . . . . .	2,665	10,571	296	3	11	3
Australian Capital Territory . . . . .	3,584	80,898	1,983	4	1,928	387
Australia(c) . . . . .	66,716	401,595	9,966	45	3,968	1,125

(a) Includes policies matured, surrendered, forfeited, transferred to other State registers, converted to other classes of business, etc. (b) Location of register of policies. (c) Includes Papua and New Guinea. (d) Includes Northern Territory.

Minus sign (—) denotes an increase in existing business in the registers concerned due to an excess of transfers from other States or from overseas, or conversions from other classes of business over discontinuances in those registers.



**LIFE INSURANCE: POLICIES DISCONTINUED OR REDUCED  
IN AUSTRALIA, 1962 TO 1966(a)**

Year	<i>Insurance and endowment policies</i>			<i>Annuity policies</i>		
	<i>Number of policies</i>	<i>Sum insured (\$'000)</i>	<i>Annual premiums (\$'000)</i>	<i>Number of policies</i>	<i>Annuities per annum (\$'000)</i>	<i>Annual premiums (\$'000)</i>
<b>ORDINARY BUSINESS</b>						
1962 . . . .	223,719	489,028	13,236	243	88	6
1963 . . . .	240,296	530,906	13,802	107	42	10
1964 . . . .	234,633	536,573	13,680	144	27	-1
1965 . . . .	233,122	579,660	14,423	224	78	2
1966 . . . .	250,789	651,365	16,055	149	65	4
<b>INDUSTRIAL BUSINESS</b>						
1962 . . . .	279,171	67,818	3,290	..	..	..
1963 . . . .	253,840	72,390	3,408	..	..	..
1964 . . . .	228,995	69,073	3,198	..	..	..
1965 . . . .	226,080	72,618	3,311	..	..	..
1966 . . . .	243,759	82,720	3,732	..	..	..
<b>SUPERANNUATION BUSINESS</b>						
1962 . . . .	96,793	172,682	4,930	54	2,014	1,130
1963 . . . .	71,516	237,356	6,240	87	2,986	869
1964 . . . .	68,419	300,734	7,890	994	3,311	910
1965 . . . .	60,143	401,903	8,927	192	9,589	2,454
1966 . . . .	66,716	401,595	9,966	45	3,968	1,125

(a) See footnote (a) to preceding table.

Minus sign (—) denotes an increase in existing business in the registers concerned due to an excess of transfers from overseas registers to Australian registers, or conversions from other classes of business over discontinuances in those registers.

**LIFE INSURANCE: POLICIES DISCONTINUED OR REDUCED IN AUSTRALIA  
BY CAUSE OF DISCONTINUANCE OR REDUCTION, 1962 TO 1966(a)(b)**

Year	<i>Death or maturity</i>	<i>Surrender</i>	<i>Forfeiture</i>	<i>Other</i>	<i>Total</i>
<b>ORDINARY BUSINESS</b>					
<b>NUMBER OF POLICIES</b>					
1962 . . . .	68,027	81,132	71,538	3,022	223,719
1963 . . . .	71,274	90,858	71,070	7,094	240,296
1964 . . . .	76,288	91,291	65,390	1,664	234,633
1965 . . . .	78,611	99,413	62,085	-6,989	233,122
1966 . . . .	83,267	97,514	66,096	3,912	250,789

(a) Excludes annuities.

(b) See footnote (a) on page 693.

**LIFE INSURANCE: POLICIES DISCONTINUED OR REDUCED IN AUSTRALIA  
BY CAUSE OF DISCONTINUANCE OR REDUCTION, 1962 TO 1966(a)(b)—continued**

<i>Year</i>	<i>Death or maturity</i>	<i>Surrender</i>	<i>Forfeiture</i>	<i>Other</i>	<i>Total</i>
<b>ORDINARY BUSINESS—continued</b>					
SUM INSURED (\$'000)					
1962 . . .	51,706	144,680	216,688	75,954	489,028
1963 . . .	56,128	185,152	229,140	60,486	530,906
1964 . . .	63,938	200,775	228,508	43,352	536,573
1965 . . .	69,642	275,498	236,586	—2,066	579,660
1966 . . .	77,334	242,970	277,012	54,049	651,365
<b>INDUSTRIAL BUSINESS</b>					
NUMBER OF POLICIES					
1962 . . .	161,387	75,028	41,205	1,551	279,171
1963 . . .	139,268	74,481	38,930	1,161	253,840
1964 . . .	131,755	65,017	31,531	692	228,995
1965 . . .	129,636	62,650	31,570	2,224	226,080
1966 . . .	147,666	63,121	31,821	1,151	243,759
SUM INSURED (\$'000)					
1962 . . .	18,206	24,452	24,870	290	67,818
1963 . . .	16,472	25,914	29,844	160	72,390
1964 . . .	16,507	23,960	28,454	152	69,073
1965 . . .	16,959	24,222	31,086	353	72,618
1966 . . .	20,090	27,646	34,730	255	82,720
<b>SUPERANNUATION BUSINESS</b>					
NUMBER OF POLICIES					
1962 . . .	9,517	32,848	972	53,456	96,793
1963 . . .	9,624	33,544	3,773	24,575	71,516
1964 . . .	10,241	34,949	1,546	21,683	68,419
1965 . . .	10,677	35,231	1,853	12,382	60,143
1966 . . .	10,395	34,878	1,485	19,958	66,716
SUM INSURED (\$'000)					
1962 . . .	13,166	131,658	6,374	21,484	172,682
1963 . . .	14,718	138,134	13,892	70,612	237,356
1964 . . .	17,258	173,784	11,804	97,888	300,734
1965 . . .	21,514	222,612	16,427	141,349	401,903
1966 . . .	23,752	232,595	14,597	130,651	401,595

(a) Excludes annuities. (b) See footnote (a) on page 693.

Minus sign (—) denotes an increase in existing business due to an excess of transfers from overseas registers to Australian registers, or conversions from other classes of business over discontinuances.

### Australian revenue from premiums

Details of revenue from premiums in respect of all offices transacting business in Australia are shown in the following tables for each State and the Australian Capital Territory for the year 1966 and for Australia for the years 1962 to 1966.

**LIFE INSURANCE: AUSTRALIAN REVENUE FROM PREMIUMS, STATES AND TERRITORIES, 1966**

(\$'000)

	<i>Insurance and endowment premiums</i>		<i>Consideration for annuities</i>		
<i>State or Territory(a)</i>	<i>Single premiums</i>	<i>Other premiums</i>	<i>Single premiums</i>	<i>Other premiums</i>	<i>Total</i>
ORDINARY BUSINESS					
New South Wales . . . . .	336	91,132	147	8	91,623
Victoria . . . . .	579	82,005	188	13	82,784
Queensland(b) . . . . .	121	45,897	35	..	46,053
South Australia(c) . . . . .	102	31,216	9	1	31,328
Western Australia . . . . .	76	22,206	35	1	22,317
Tasmania . . . . .	12	9,235	..	1	9,247
Australian Capital Territory . . . . .	48	15,282	49	..	15,379
Australia(b) . . . . .	1,274	296,972	462	23	298,732
INDUSTRIAL BUSINESS					
New South Wales . . . . .	..	14,205	..	..	14,205
Victoria . . . . .	..	10,978	..	..	10,978
Queensland(b) . . . . .	..	4,719	..	..	4,719
South Australia(c) . . . . .	..	3,518	..	..	3,518
Western Australia . . . . .	..	2,300	..	..	2,300
Tasmania . . . . .	..	775	..	..	775
Australian Capital Territory . . . . .	..	304	..	..	304
Australia(b) . . . . .	..	36,800	..	..	36,800
SUPERANNUATION BUSINESS					
New South Wales . . . . .	642	17,464	15	1,094	19,215
Victoria . . . . .	3,763	34,434	790	3,008	41,995
Queensland(b) . . . . .	349	7,911	..	21	8,281
South Australia(c) . . . . .	180	7,637	1	11	7,828
Western Australia . . . . .	298	5,260	..	106	5,664
Tasmania . . . . .	530	2,889	..	13	3,432
Australian Capital Territory . . . . .	2,321	37,977	1,642	2,858	44,798
Australia(b) . . . . .	8,083	113,571	2,447	7,111	131,213

(a) Location of register of policies. (b) Includes Papua and New Guinea. (c) Includes Northern Territory.

**LIFE INSURANCE: AUSTRALIAN REVENUE FROM PREMIUMS, 1962 TO 1966**

(\$'000)

Year	Ordinary business			Superannuation business		Total, all business combined
	Insurance and endowment premiums	Con- sideration for annuities	Industrial business	Insurance and endowment premiums	Con- sideration for annuities	
1962 . . . . .	209,472	524	32,284	67,290	8,266	317,836
1963 . . . . .	228,978	738	32,860	77,108	8,526	348,210
1964 . . . . .	248,826	647	34,027	88,824	8,515	380,839
1965 . . . . .	273,060	726	35,404	106,964	9,007	425,161
1966 . . . . .	298,246	485	36,800	121,654	9,558	466,745

**Claims, etc., paid in Australia**

Details of the claims, etc., paid on policies in each State and the Australian Capital Territory during the year 1966 and in Australia during the years 1962 to 1966 are shown in the following tables.

**LIFE INSURANCE: PAYMENTS TO POLICY-HOLDERS IN AUSTRALIA, STATES AND TERRITORIES, 1966**

(\$'000)

State or Territory(a)	Claims		Sur- renders	Annuities	Cash bonuses	Total
	Death or disability	Maturity				
ORDINARY BUSINESS						
New South Wales . . .	15,367	18,994	12,880	319	219	47,779
Victoria . . .	14,586	15,094	9,750	317	216	39,964
Queensland(b) . . .	7,523	7,700	5,249	71	91	20,632
South Australia(c) . . .	4,201	4,961	3,778	48	88	13,077
Western Australia . . .	3,270	3,473	2,454	39	57	9,293
Tasmania . . .	1,286	1,333	1,272	24	29	3,943
Australian Capital Territory . . .	3,022	639	993	79	117	4,850
Australia(b) . . .	49,256	52,193	36,375	898	817	139,538
INDUSTRIAL BUSINESS						
New South Wales . . .	1,150	7,327	2,386	..	1	10,864
Victoria . . .	916	7,622	1,604	..	..	10,142
Queensland(b) . . .	371	2,737	701	..	..	3,809
South Australia(c) . . .	301	2,259	559	..	..	3,120
Western Australia . . .	160	1,258	353	..	..	1,772
Tasmania . . .	64	581	149	..	..	794
Australian Capital Territory . . .	12	112	45	..	..	169
Australia(b) . . .	2,975	21,895	5,798	..	1	30,669
SUPERANNUATION BUSINESS						
New South Wales . . .	2,380	2,435	4,462	103	57	9,437
Victoria . . .	4,796	4,885	8,861	629	774	19,945
Queensland(b) . . .	931	1,058	1,413	7	14	3,422
South Australia(c) . . .	773	1,437	987	13	..	3,210
Western Australia . . .	526	649	857	12	1	2,047
Tasmania . . .	350	319	674	8	..	1,350
Australian Capital Territory . . .	4,199	3,228	10,016	1,264	53	18,759
Australia(b) . . .	13,955	14,010	27,269	2,037	899	58,171

(a) Location of register of policies.

(b) Includes Papua and New Guinea.

(c) Includes Northern Territory.

**LIFE INSURANCE: PAYMENTS TO POLICY-HOLDERS IN AUSTRALIA  
1962 TO 1966  
(\$'000)**

<i>Year</i>	<i>Claims</i>	<i>Surrenders</i>	<i>Annuities</i>	<i>Cash bonuses</i>	<i>Total</i>
<b>ORDINARY BUSINESS</b>					
1962 . . .	66,302	24,206	758	390	91,656
1963 . . .	72,692	27,872	786	602	101,952
1964 . . .	82,774	28,921	865	507	113,067
1965 . . .	91,082	33,347	877	650	125,956
1966 . . .	101,449	36,375	898	817	139,538
<b>INDUSTRIAL BUSINESS</b>					
1962 . . .	20,860	5,030	..	..	25,890
1963 . . .	19,236	5,574	..	..	24,810
1964 . . .	19,969	5,146	..	..	25,115
1965 . . .	21,024	5,397	..	..	26,422
1966 . . .	24,870	5,798	..	1	30,669
<b>SUPERANNUATION BUSINESS</b>					
1962 . . .	15,000	14,188	894	488	30,570
1963 . . .	16,450	14,508	1,208	756	32,922
1964 . . .	20,112	20,532	1,281	902	42,827
1965 . . .	24,884	24,218	1,602	857	51,561
1966 . . .	27,965	27,269	2,037	899	58,171

**Total revenue and expenditure**

The following tables show particulars of the total life insurance revenue derived and of the total expenditure by life insurance offices both within and beyond Australia during each of the years 1962 to 1966.

**LIFE INSURANCE: TOTAL REVENUE, 1962 TO 1966  
(\$'000)**

Year	Insurance and endowment premiums	Con- sideration for annuities granted	Net interest, dividends and rents	All other revenue	Total revenue	
					Inside Australia	Outside Australia
ORDINARY BUSINESS						
1962 . . . .	296,582	20,600	125,272	10,582	303,548	149,488
1963 . . . .	323,118	7,126	140,570	15,470	337,968	148,136
1964 . . . .	350,532	10,758	155,022	14,648	367,711	163,249
1965 . . . .	385,424	11,662	172,379	18,095	407,905	179,655
1966 . . . .	421,072	15,110	193,661	20,705	450,285	200,264

LIFE INSURANCE: TOTAL REVENUE, 1962 TO 1966—*continued*

Year	Insurance and endowment premiums	Con- sideration for annuities granted	Net interest, dividends and rents	All other revenue	Total revenue	
					Inside Australia	Outside Australia
INDUSTRIAL BUSINESS						
1962 . . . .	37,196	..	16,232	944	47,078	7,294
1963 . . . .	37,786	..	17,258	1,776	48,334	8,486
1964 . . . .	38,787	..	17,703	257	49,573	7,174
1965 . . . .	40,264	..	18,612	305	51,776	7,404
1966 . . . .	41,789	..	19,818	402	54,436	7,574

## SUPERANNUATION BUSINESS

1962 . . . .	73,486	9,242	26,408	6,378	105,686	9,828
1963 . . . .	83,836	9,806	31,080	4,576	118,614	10,684
1964 . . . .	96,326	9,468	36,249	2,224	132,697	11,570
1965 . . . .	115,352	10,316	41,761	4,405	158,690	13,143
1966 . . . .	131,721	11,033	48,219	4,412	179,483	15,904

LIFE INSURANCE: TOTAL EXPENDITURE, 1962 TO 1966  
(\$'000)

Year	Claims and annuities paid	Surren- ders	Cash bonuses paid to policy- holders	Com- mission	Salaries and directors' fees	All other expendi- ture	Total expenditure			
							Inside Australia	Outside Australia		
ORDINARY BUSINESS										
1962	.	.	107,712	34,780	868	28,618	19,156	27,744	146,904	71,974
1963	.	.	119,830	38,872	1,002	30,920	20,944	29,684	160,960	80,292
1964	.	.	131,522	40,998	1,197	34,160	23,132	25,988	172,341	84,656
1965	.	.	145,087	47,544	1,160	37,649	25,528	35,764	197,348	95,383
1966	.	.	161,708	51,273	1,699	41,134	28,452	38,744	218,721	104,287

## INDUSTRIAL BUSINESS

1962 . . . .	25,688	5,618	..	5,504	4,618	3,650	37,834	7,244
1963 . . . .	23,716	6,174	..	5,358	4,674	4,848	37,882	6,888
1964 . . . .	24,006	5,742	..	5,610	4,769	3,430	37,172	6,385
1965 . . . .	25,078	6,001	..	5,740	4,782	4,673	39,736	6,536
1966 . . . .	29,409	6,376	1	6,001	5,026	3,751	43,598	6,965

## SUPERANNUATION BUSINESS

1962 . . . .	17,436	15,544	528	3,398	3,710	7,154	43,486	4,284
1963 . . . .	19,498	16,042	852	3,980	4,134	7,690	47,220	4,976
1964 . . . .	23,525	22,951	973	4,626	4,723	10,847	61,111	6,534
1965 . . . .	28,945	26,543	932	5,326	5,668	14,288	74,114	7,591
1966 . . . .	33,116	30,456	985	5,383	6,884	17,271	85,629	8,464

**Liabilities and assets**

The liabilities of the Australian offices consist mainly of their insurance funds, but in the case of public companies there is a further liability on account of the shareholders' capital. The assets consist chiefly of government and municipal securities, mortgages, loans on policies, landed and house property, etc. Loans on personal security are granted by very few of the Australian offices. Separate details of liabilities in respect of Australian business are not available.

*Total liabilities and assets.* In the two tables which follow the details of liabilities and assets relate to all business (Australian and overseas) of Australian companies, the life insurance business of the two State Government offices, and the Australian business only of the twelve overseas companies operating in Australia. For various reasons several offices do not attempt the dissection of liabilities and assets according to type of business, and, therefore, the figures in the following tables relate to all types of business combined.

**LIFE INSURANCE: TOTAL LIABILITIES, 1966**  
(\$ million)

	<i>Life insurance business</i>	<i>Other classes of business</i>	<i>Total liabilities</i>
Shareholders' capital—			
Authorised . . . . .	..	59.6	59.6
Less un-issued . . . . .	..	33.4	33.4
Subscribed capital . . . . .	..	26.1	26.1
Paid-up—			
In money . . . . .	..	20.4	20.4
Otherwise than in money . . . . .	..	4.8	4.8
Total, paid-up capital . . . . .	..	25.2	25.2
Life insurance statutory funds—			
Ordinary business . . . . .	3,620.5	..	3,620.5
Industrial business . . . . .	363.0	..	363.0
Superannuation business . . . . .	846.8	..	846.8
Total, statutory funds . . . . .	4,830.3	..	4,830.3
Funds in respect of other classes of business . . . . .	..	14.9	14.9
General reserves . . . . .	57.3	14.4	71.7
Profit and loss account balance . . . . .	..	1.6	1.6
Total, shareholders' capital, insurance funds and reserves . . . . .	4,887.6	56.1	4,943.7
Other liabilities—			
Deposits . . . . .	48.2	13.4	61.6
Staff provident and superannuation funds . . . . .	1.9	0.1	2.0
Claims admitted or intimated but not paid . . . . .	51.0	15.1	66.0
Premiums paid in advance and in suspense . . . . .	4.2	..	4.2
Sundry creditors . . . . .	23.0	2.3	25.4
Bank overdraft . . . . .	24.3	2.0	26.3
Reserves and provisions for taxation . . . . .	31.8	2.2	34.0
All other liabilities . . . . .	2.8	9.4	12.1
Grand total . . . . .	5,074.8	100.5	5,175.3

## LIFE INSURANCE: TOTAL ASSETS, 1966

(\$ million)

	Total assets			Amount of assets held in Australia		
	Life insurance business	Other classes of business	Total	Life insurance business	Other classes of business	Total
<b>Fixed assets—</b>						
Freehold and leasehold property, office premises .	484.1	8.6	492.7	379.6	8.6	388.2
Furniture, etc. . . . .	6.6	0.7	7.3	5.2	0.7	5.9
<i>Total, fixed assets</i> . . . . .	<i>490.6</i>	<i>9.3</i>	<i>499.9</i>	<i>384.8</i>	<i>9.</i>	<i>394.1</i>
<b>Loans—</b>						
On mortgage . . . . .	1,370.0	8.0	1,378.0	968.2	8.0	976.2
On policies of the company . . . . .	183.9	..	183.9	141.8	..	141.8
Other loans . . . . .	41.3	4.0	45.1	40.0	4.0	43.8
<i>Total, loans</i> . . . . .	<i>1,595.0</i>	<i>11.9</i>	<i>1,606.9</i>	<i>1,150.0</i>	<i>11.9</i>	<i>1,161.9</i>
<b>Investments—</b>						
Government securities—						
Australia . . . . .	984.8	6.9	991.7	933.8	6.9	940.7
Other . . . . .	277.7	1.7	279.5	0.5	..	0.5
Securities of local and semi-governmental bodies . . . . .	402.3	2.5	404.7	310.6	1.6	312.2
Other investments . . . . .	1,174.4	51.0	1,225.1	908.2	50.4	958.3
<i>Total, investments</i> . . . . .	<i>2,839.1</i>	<i>61.9</i>	<i>2,901.1</i>	<i>2,153.1</i>	<i>58.7</i>	<i>2,211.8</i>
Cash on deposit, current account and in hand . . . . .	6.5	3.4	9.9	4.2	3.2	7.3
Other assets(a) . . . . .	143.5	14.0	157.5	111.2	13.7	124.7
<b>Grand total</b> . . . . .	<b>5,074.8</b>	<b>100.5</b>	<b>5,175.3</b>	<b>3,803.1</b>	<b>96.8</b>	<b>3,899.9</b>

(a) Includes advances of premiums.

*Assets held in Australia.* Details of assets held in Australia for the years 1962 to 1966 are set out in the following table.

## LIFE INSURANCE(a): ASSETS HELD IN AUSTRALIA, 1962 TO 1966

(\$ million)

	1962	1963	1964	1965	1966
Freehold and leasehold property . . . . .	170.8	215.5	255.4	320.3	388.2
Government and municipal securities . . . . .	870.0	953.2	1,043.3	1,107.8	1,253.4
Other investments . . . . .	534.1	671.6	804.2	898.2	958.3
Loans on mortgage . . . . .	784.1	815.3	848.7	920.2	976.2
Loans on companies' policies . . . . .	97.6	101.5	113.5	127.4	141.8
Other loans . . . . .	49.4	46.6	43.7	44.3	43.8
All other assets . . . . .	90.8	104.5	109.0	121.3	137.9
<b>Total</b> . . . . .	<b>2,596.8</b>	<b>2,908.2</b>	<b>3,217.8</b>	<b>3,539.5</b>	<b>3,899.9</b>

(a) Includes other classes of business.



**Loans**

In the following table details are given of new loans paid over by life insurance companies during each of the years ended 31 December 1963 to 1967. The information has been compiled from monthly returns furnished by each company. New loans paid over by the Government Insurance Office of New South Wales and the Queensland State Government Insurance Office are excluded. Advances of premiums are also excluded.

**LIFE INSURANCE COMPANIES: NEW LOANS PAID OVER, BY CLASS OF SECURITY AND  
STATE OR TERRITORY, 1963 TO 1967**  
(\$'000)

	1963	1964	1965	1966	1967
<b>Class of security—</b>					
Mortgage of real estate . . .	119,746	138,762	159,991	132,638	136,139
Companies' policies . . .	23,494	24,364	30,772	32,168	34,520
Other . . .	1,924	3,248	3,436	3,032	3,390
<b>State or Territory(a)—</b>					
New South Wales . . .	65,840	67,104	84,268	75,309	70,026
Victoria . . .	43,780	59,022	60,914	48,896	56,752
Queensland(b) . . .	11,474	13,890	17,018	13,513	13,816
South Australia(c) . . .	11,112	9,962	12,313	12,096	12,851
Western Australia . . .	8,150	10,544	13,442	11,162	15,380
Tasmania . . .	3,452	4,446	3,965	4,899	3,768
Australian Capital Territory . .	1,356	1,406	2,280	1,962	1,457
<b>Totals(b) . . .</b>	<b>145,164</b>	<b>166,374</b>	<b>194,201</b>	<b>167,838</b>	<b>174,050</b>

(a) State or Territory of location of mortgage, registration of policy, or residence of borrower. (b) Includes Papua and New Guinea. (c) Includes Northern Territory.

**Fire, marine and general insurance**

The following statistics, which are in respect of the Australian business of companies operating in Australia and State Government insurance offices, conform to the following definitions and should be interpreted accordingly.

- Premiums represent the full amount receivable in respect of policies issued and renewed in the year, less returns, rebates and bonuses paid or credited to policy-holders during the year. They are not adjusted to provide for premiums unearned at the end of the year and consequently the amounts differ from 'earned premium income' appropriate to the year. When business is increasing, as in recent years, premiums receivable (as shown in the statistics) are greater than 'earned premium income' appropriate to the year. The converse applies when business is declining.
- Claims or losses include provision for outstanding claims and represent claims or losses incurred in the year. Salvage and other amounts recoverable have been deducted.
- Contributions to fire brigades, commission and agents' charges, and expenses of management represent mainly charges paid during the year.
- Taxation represents mainly payments made during the year, and includes income tax, pay-roll tax, licence fees, stamp duty (where paid by the company), etc. Income tax paid during the year is based on the income of earlier years.

The figures relate to selected items of statistics and are not construable as 'Profit and Loss' statements or 'Revenue Accounts'.

In cases where the business is underwritten in one State and the risk is situated in another, the business is included in the State in which the policy was issued.

During 1966-67 revenue from premiums amounted to \$671.6 million, and that from net interest on investments, etc. to \$41.5 million, a total of \$713.1 million. Expenditure on claims amounted to \$427.1 million, contributions to fire brigades \$16.1 million, commission and agents' charges \$59.8 million, expenses of management \$110.8 million, and taxation \$19.0 million, a total of \$632.7 million.

**Premiums and claims**

The following tables show the aggregate premium income less returns, rebates and bonuses, and claims or losses less amounts recoverable, for each State and for all classes of insurance other than life for the years 1962-63 to 1966-67.

**FIRE, MARINE AND GENERAL INSURANCE: PREMIUMS AND CLAIMS, STATES**  
**1962-63 TO 1966-67**  
 (\$'000)

<i>State</i>	<i>1962-63</i>	<i>1963-64</i>	<i>1964-65</i>	<i>1965-66</i>	<i>1966-67</i>
<b>GROSS PREMIUMS, LESS RETURNS, REBATES AND BONUSES</b>					
New South Wales(a)	185,492	202,817	230,787	249,616	271,514
Victoria	135,487	145,832	163,408	186,402	209,519
Queensland	54,580	60,962	65,768	71,917	75,852
South Australia	36,951	41,201	44,772	49,433	55,413
Western Australia	27,319	30,025	33,079	37,570	43,363
Tasmania	11,427	12,248	13,567	14,703	15,915
<b>Total</b>	<b>451,256</b>	<b>493,086</b>	<b>551,380</b>	<b>609,641</b>	<b>671,576</b>
<b>GROSS CLAIMS OR LOSSES, LESS AMOUNTS RECOVERABLE</b>					
New South Wales(a)	119,254	141,481	159,152	163,976	181,881
Victoria	82,251	88,977	102,444	117,228	127,833
Queensland	35,208	44,189	40,210	43,911	45,710
South Australia	19,324	20,988	24,745	27,843	30,250
Western Australia	17,828	19,301	20,529	22,812	25,286
Tasmania	5,949	6,664	7,854	9,153	16,158
<b>Total</b>	<b>279,814</b>	<b>321,599</b>	<b>354,933</b>	<b>384,924</b>	<b>427,118</b>

(a) Excludes workers' compensation insurance in coal-mining industry in New South Wales.

**FIRE, MARINE AND GENERAL INSURANCE: PREMIUMS AND CLAIMS, BY PRINCIPAL**  
**CLASS OF RISK, AUSTRALIA, 1962-63 TO 1966-67**  
 (\$'000)

<i>Class of risk</i>	<i>1962-63</i>	<i>1963-64</i>	<i>1964-65</i>	<i>1965-66</i>	<i>1966-67</i>
<b>GROSS PREMIUMS, LESS RETURNS, REBATES AND BONUSES</b>					
Fire	73,846	78,881	81,664	85,167	91,144
Householders' comprehensive	26,761	29,827	33,357	37,233	41,747
Employers' liability and workers' compensation(a)	88,014	95,783	114,506	138,412	144,444
Motor vehicle—					
Compulsory third party	61,398	68,388	74,974	81,324	90,005
Other	120,436	134,241	151,478	166,106	183,367
Marine	19,153	21,203	23,373	24,317	26,473
Personal accident	15,900	15,736	18,071	19,576	22,908
All other	45,747	49,027	53,958	57,509	71,491
<b>Total</b>	<b>451,256</b>	<b>493,086</b>	<b>551,380</b>	<b>609,641</b>	<b>671,576</b>
<b>GROSS CLAIMS OR LOSSES, LESS AMOUNTS RECOVERABLE</b>					
Fire	26,405	32,973	30,563	32,650	36,623
Householders' comprehensive	6,724	7,302	8,332	10,286	13,629
Employers' liability and workers' compensation(a)	70,009	76,006	83,203	90,544	95,839
Motor vehicle—					
Compulsory third party	54,649	64,879	71,013	77,153	91,539
Other	82,630	97,752	113,356	118,292	124,581
Marine	8,904	10,509	12,604	14,775	14,715
Personal accident	7,475	7,225	8,158	9,445	10,343
All other	23,016	24,954	27,706	31,781	39,850
<b>Total</b>	<b>279,814</b>	<b>321,599</b>	<b>354,933</b>	<b>384,924</b>	<b>427,118</b>

(a) Excludes workers' compensation insurance in coal-mining industry in New South Wales.

### Export Payments Insurance Corporation

The Export Payments Insurance Corporation was established under the *Export Payments Insurance Corporation Act 1956* to provide exporters with insurance against risks associated with overseas trade which are not usually acceptable to commercial insurers, and to give certain guarantees in connection with that trade. The Corporation commenced business in 1957. Where the Corporation is not in a position to accept business on its commercial account it may be authorised under its statute to provide insurance facilities on the Commonwealth Government's account in the national interest. See also the chapter Overseas Transactions, pages 335-6.

#### EXPORT PAYMENTS INSURANCE CORPORATION: BUSINESS, 1962-63 TO 1966-67

	1962-63	1963-64	1964-65	1965-66	1966-67
<b>Commercial business—</b>					
Number of policy holders . . . . .	373	436	509	558	610
	\$'000	\$'000	\$'000	\$'000	\$'000
Face value of policies current . . . . .	88,956	127,492	160,424	180,700	238,271
Maximum contingent liability . . . . .	46,192	66,672	83,164	93,801	123,589
Premium income . . . . .	238	330	387	463	598
Operating costs . . . . .	166	200	233	259	348
Claims paid (gross) . . . . .	76	90	321	325	446
Recoveries . . . . .	26	24	72	83	111
Underwriting reserve . . . . .	560	152	785	955	1,126
<b>National interest business—</b>					
Number of policy holders . . . . .	1	1	1	1	1
	\$'000	\$'000	\$'000	\$'000	\$'000
Face value of policies current . . . . .	2,594	2,594	2,594	2,594	1,869
Maximum contingent liability . . . . .	2,142	2,142	2,142	2,142	1,682
<b>Trade Promotion—Overseas stocks (warehousing)—</b>					
Number of policy holders . . . . .	3	3	3	3	3
	\$'000	\$'000	\$'000	\$'000	\$'000
Face value of policies current . . . . .	66	66	66	66	63
Maximum contingent liability . . . . .	63	63	63	63	60
<b>Unconditional guarantees to banks—</b>					
Number of guarantees . . . . .	1	1	1	1	3
	\$'000	\$'000	\$'000	\$'000	\$'000
Face values of guarantees . . . . .	269	269	269	269	377
Maximum contingent liability . . . . .	269	269	269	269	377
<b>Overseas investment insurance—</b>					
Number of policies . . . . .	15	15	15	15	15
	\$'000	\$'000	\$'000	\$'000	\$'000
Face value of policies . . . . .	4,699	4,699	4,699	4,699	4,699
Maximum contingent liability . . . . .	4,299	4,299	4,299	4,299	4,299

### INSTALMENT CREDIT FOR RETAIL SALES

Information relating to instalment credit for retail sales in Australia is given in the following tables. Information in more detail may be found in the annual bulletin *Insurance and Other Private Finance* and in the monthly and quarterly statements relating to instalment credit for retail sales issued by this Bureau (see beginning of chapter).

The statistics cover operations of all types of instalment credit schemes which relate primarily to the financing of retail sales of goods, whether the credit is advanced by a retail business or by a non-retail finance business. In general, the term 'instalment credit' is defined as relating to schemes in which repayment is made by regular pre-determined instalments. Types of schemes covered include hire purchase, time payment, budget account, and personal loan schemes which relate

primarily to the financing of retail sales of goods. In these statistics the term 'retail sales' relates not only to retail sales by retail establishments coming within the scope of the Censuses of Retail Establishments conducted periodically by this Bureau, but includes also other sales of goods to final purchasers (e.g. plant and machinery).

Figures for amounts financed *exclude* interest, hiring charges, insurance, etc. Figures for balances outstanding and collections *include* interest, hiring charges, insurance, etc. Details are not available of these charges or of other items (e.g. rebates allowed for early payments, late payment charges, bad debts written off) which affect the reconciliation of the three main instalment credit series—amount financed, collections, and balances outstanding.

Statistics of amounts financed are classified by type of goods, defined as follows: *motor vehicles* (new and used separately)—motor cars and motor cycles, commercial vehicles, tractors, caravans, trailers, motor parts and accessories, etc.; *plant and machinery*—farm machinery and implements, earth-moving equipment, aircraft, industrial plant and machinery, business machines and equipment (including commercial refrigeration equipment), etc.; *household and personal goods*—furniture, furnishings and floor coverings, domestic refrigerators, electrical goods, radios, television, musical instruments, bicycles, motor mowers, clothing, etc.

Further explanatory detail on these series may be found in the bulletin and statements referred to on page 704.

#### Total instalment credit, by type of business

The following table gives separate particulars of the instalment credit transactions of retail businesses and non-retail finance businesses for the years 1962–63 to 1966–67.

INSTALMENT CREDIT FOR RETAIL SALES, BY TYPE OF BUSINESS: AMOUNT FINANCED, BY COMMODITY GROUP, COLLECTIONS, AND BALANCES OUTSTANDING, AUSTRALIA, 1962–63 TO 1966–67  
(\$ million)

Year	Amount financed during year					Collections during year	Balances outstanding at end of year
	Motor vehicles, etc.		Plant and machinery	Household and personal goods	Total		
	New	Used					
Retail businesses—							
1962-63 . .	9.5	11.5	3.6	281.7	306.4	355.3	425.3
1963-64 . .	10.9	11.7	3.1	297.9	323.7	380.0	416.7
1964-65 . .	11.1	10.8	2.6	287.9	312.5	379.8	395.6
1965-66 . .	9.9	9.4	3.1	259.3	281.7	355.5	359.9
1966-67 . .	11.2	8.7	3.8	254.7	278.4	338.9	339.5
Non-retail finance businesses—							
1962-63 . .	214.2	229.1	47.1	85.9	576.3	654.9	832.5
1963-64 . .	252.7	254.3	52.9	84.0	644.0	703.1	939.2
1964-65 . .	288.7	272.2	65.4	86.4	712.7	766.4	1,054.9
1965-66 . .	271.5	252.5	69.5	78.4	671.9	818.4	1,071.1
1966-67 . .	276.1	269.1	83.6	81.8	710.5	850.4	1,101.8
All businesses—							
1962-63 . .	223.6	240.7	50.7	367.6	882.6	1,010.2	1,257.7
1963-64 . .	263.6	266.0	56.1	382.0	967.6	1,083.1	1,355.9
1964-65 . .	299.9	283.0	68.0	374.3	1,025.2	1,146.2	1,450.5
1965-66 . .	281.4	262.0	72.6	337.6	953.6	1,173.9	1,431.1
1966-67 . .	287.2	277.8	87.4	336.5	988.9	1,189.3	1,441.3

#### Total instalment credit, by type of credit

In the following table particulars are given for retail businesses and non-retail finance businesses combined, classified by type of instalment credit, for the years 1962–63 to 1966–67.

**INSTALMENT CREDIT FOR RETAIL SALES, BY TYPE OF CREDIT: AMOUNT FINANCED,  
BY COMMODITY GROUP, AND BALANCES OUTSTANDING  
AUSTRALIA, 1962-63 TO 1966-67**  
(\$ million)

Year	Amount financed during year			Total	Balances outstanding at end of year
	Motor vehicles, etc.	Plant and machinery	Household and personal goods		
Hire purchase—					
1962-63	429.2	50.0	177.0	656.2	1,004.4
1963-64	461.0	55.0	173.0	689.0	1,061.6
1964-65	459.7	64.6	163.8	688.1	1,079.2
1965-66	411.0	67.2	134.8	613.0	1,029.0
1966-67	407.4	80.1	129.3	616.9	997.8
Other instalment credit—					
1962-63	35.1	0.7	190.6	226.4	253.4
1963-64	68.6	1.1	208.9	278.6	294.3
1964-65	123.3	3.4	210.5	337.1	371.3
1965-66	132.3	5.5	202.8	340.6	402.1
1966-67	157.6	7.3	207.1	372.1	443.5
Total instalment credit—					
1962-63	464.3	50.7	367.6	882.6	1,257.7
1963-64	529.6	56.1	382.0	967.6	1,355.9
1964-65	582.9	68.0	374.3	1,025.2	1,450.5
1965-66	543.3	72.6	337.6	953.6	1,431.1
1966-67	565.0	87.4	336.5	988.9	1,441.3

**Amount financed, by type of credit**

Classifications of amount financed on new retail agreements, by type of instalment credit and by State, are given in the following tables.

**INSTALMENT CREDIT FOR RETAIL SALES: AMOUNT FINANCED  
BY TYPE OF CREDIT, STATES, 1962-63 TO 1966-67**  
(\$ million)

Year	N.S.W. (a)	Vic.	Qld	S.A. (b)	W.A.	Tas.	Aust.
<b>Hire purchase—</b>							
1962-63 . . . . .	260.0	164.3	98.8	52.1	58.6	22.4	656.2
1963-64 . . . . .	282.5	151.3	115.1	56.0	60.8	23.3	689.0
1964-65 . . . . .	299.0	136.5	110.8	57.4	60.3	24.1	688.1
1965-66 . . . . .	264.6	113.2	94.9	48.1	67.4	24.8	613.0
1966-67 . . . . .	273.4	107.8	96.9	41.6	71.5	25.6	616.9
<b>Other instalment credit—</b>							
1962-63 . . . . .	99.6	58.3	25.6	23.1	14.0	5.8	226.4
1963-64 . . . . .	117.5	82.6	33.5	25.8	14.1	5.1	278.6
1964-65 . . . . .	110.4	118.7	51.5	36.2	15.1	5.2	337.1
1965-66 . . . . .	109.2	121.5	54.0	35.2	15.9	4.8	340.6
1966-67 . . . . .	113.0	130.0	59.8	38.1	26.3	4.9	372.1
<b>Total instalment credit—</b>							
1962-63 . . . . .	359.6	222.6	124.3	75.2	72.7	28.2	882.6
1963-64 . . . . .	400.0	233.9	148.6	81.8	74.9	28.4	967.6
1964-65 . . . . .	409.5	255.2	162.3	93.6	75.3	29.3	1,025.2
1965-66 . . . . .	373.8	234.7	148.9	83.3	83.3	29.5	953.6
1966-67 . . . . .	386.4	237.8	156.7	79.7	97.8	30.5	988.9

(a) Includes Australian Capital Territory.

(b) Includes Northern Territory.

**Amount financed, by type of credit and commodity group**

The details shown for 1966-67 in the preceding table are classified by commodity groups below.

**INSTALMENT CREDIT FOR RETAIL SALES: AMOUNT FINANCED  
BY TYPE OF CREDIT AND COMMODITY GROUP, STATES, 1966-67**  
(\$ million)

<i>Commodity group</i>	<i>N.S.W. (a)</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A. (b)</i>	<i>W.A.</i>	<i>Tas.</i>	<i>Aust.</i>
<b>Hire purchase—</b>							
Motor vehicles, tractors, etc. . . . .	202.4	53.7	56.9	27.4	48.7	18.4	407.4
Plant and machinery . . . . .	33.1	16.5	12.3	4.3	11.4	2.6	80.1
Household and personal goods. . . . .	37.9	37.6	27.7	9.9	11.5	4.7	129.3
<i>Total hire purchase . . . . .</i>	<i>273.4</i>	<i>107.8</i>	<i>96.9</i>	<i>41.6</i>	<i>71.5</i>	<i>25.6</i>	<i>616.9</i>
<b>Other instalment credit—</b>							
Motor vehicles, tractors, etc. . . . .	6.4	82.5	35.4	20.7	11.6	1.0	157.6
Plant and machinery . . . . .	0.7	1.5	1.8	0.4	2.8	0.1	7.3
Household and personal goods. . . . .	106.0	45.9	22.6	17.0	11.9	3.8	207.1
<i>Total other instalment credit . . . . .</i>	<i>113.0</i>	<i>130.0</i>	<i>59.8</i>	<i>38.1</i>	<i>26.3</i>	<i>4.9</i>	<i>372.1</i>
<b>Total instalment credit—</b>							
Motor vehicles, tractors, etc. . . . .	208.8	136.2	92.2	48.1	60.3	19.4	565.0
Plant and machinery . . . . .	33.7	18.0	14.1	4.7	14.2	2.7	87.4
Household and personal goods. . . . .	143.9	83.6	50.3	26.9	23.3	8.5	336.5
<i>Total instalment credit . . . . .</i>	<i>386.4</i>	<i>237.8</i>	<i>156.7</i>	<i>79.7</i>	<i>97.8</i>	<i>30.5</i>	<i>988.9</i>

(a) Includes Australian Capital Territory.

(b) Includes Northern Territory.

**New hire purchase agreements—averages**

The following are some additional particulars relating to new hire purchase agreements made during 1966-67.

**NEW HIRE PURCHASE AGREEMENTS: AVERAGE VALUE AND  
AMOUNT AND PROPORTION FINANCED, BY COMMODITY  
GROUP, AUSTRALIA, 1966-67**

<i>Commodity group</i>	<i>Average value of goods purchased per agreement</i>	<i>Average amount financed per agreement</i>	<i>Average proportion financed</i>
	\$	\$	Per cent
Motor vehicles, tractors, etc. . . . .	1,655	1,093	66
Plant and machinery . . . . .	2,735	1,833	67
Household and personal goods . . . . .	183	149	82
<i>All groups . . . . .</i>	<i>697</i>	<i>480</i>	<i>69</i>

**Balances outstanding, by type of credit**

Details of the balances outstanding on retail agreements at 30 June 1963 to 1967 are given in the following table.

**INSTALMENT CREDIT FOR RETAIL SALES: BALANCES OUTSTANDING  
BY TYPE OF CREDIT, STATES, 30 JUNE 1963 TO 1967**

(\$ million)

30 June—	N.S.W. (a)	Vic.	Qld	S.A. (b)	W.A.	Tas.	Aust.
<b>Hire purchase—</b>							
1963 . . . . .	410.2	248.8	142.1	84.6	86.8	31.8	1,004.4
1964 . . . . .	441.0	240.6	166.7	87.4	91.5	34.4	1,061.6
1965 . . . . .	469.1	215.2	173.5	91.7	93.2	36.5	1,079.2
1966 . . . . .	452.3	189.9	166.1	84.2	98.7	37.9	1,029.0
1967 . . . . .	446.4	175.1	160.7	75.3	101.1	39.2	997.8
<b>Other instalment credit—</b>							
1963 . . . . .	100.5	69.5	26.3	30.8	17.6	8.7	253.4
1964 . . . . .	106.3	94.0	34.6	34.4	17.3	7.9	294.3
1965 . . . . .	104.0	139.5	57.2	46.0	16.8	7.7	371.3
1966 . . . . .	107.5	154.7	66.3	49.3	17.0	7.2	402.1
1967 . . . . .	115.9	165.5	76.1	53.5	25.8	6.7	443.5
<b>Total instalment credit—</b>							
1963 . . . . .	510.7	318.3	168.5	115.3	104.4	40.5	1,257.7
1964 . . . . .	547.4	334.6	201.3	121.7	108.9	42.3	1,355.9
1965 . . . . .	573.1	354.7	230.8	137.7	110.0	44.3	1,450.5
1966 . . . . .	559.8	344.6	232.4	133.5	115.7	45.2	1,431.1
1967 . . . . .	562.4	340.6	236.8	128.7	126.9	45.9	1,441.3

(a) Includes Australian Capital Territory.

(b) Includes Northern Territory.

### NEW CAPITAL RAISINGS BY COMPANIES IN AUSTRALIA

Information relating to capital raised by companies in Australia is given in the following tables. More detailed information may be found in the annual bulletin *Insurance and Other Private Finance* and in quarterly bulletins dealing with capital raisings (see beginning of chapter).

The statistics (the collection of which commenced in July 1954) relate to capital raised by companies through issues of shares, and in case of companies listed on stock exchanges, through the issue of debentures, notes and similar securities and the acceptance of deposits, and in the case of unlisted companies, by way of loans secured over the entire assets of the company. Capital obtained by way of bank overdraft or bank loans, trade credit, temporary advances, and loans secured over part only of the assets of the company is not included. Totally unsecured loans are included in the case of listed companies, but are excluded in the case of unlisted companies.

Separate statistics are given for listed and unlisted companies. Listed companies are companies incorporated in Australia or the Australian territories and listed on one or more of the Australian stock exchanges. All other companies incorporated in Australia, including subsidiaries of listed companies, are classified as unlisted companies. Companies incorporated overseas, whether listed on an Australian stock exchange or not, are excluded from the statistics of share issues. However, subsidiaries of overseas companies, if incorporated in Australia, are included in the statistics of share issues. The statistics of new capital raised through issues of debentures, notes, etc., and the acceptance of deposits, include, in addition to capital raised by companies incorporated in Australia (including subsidiaries of overseas companies), capital raised in this way from Australian sources by overseas public companies through their Australian offices.

The following are explanatory notes relating to some of the items shown in the tables.

**New money.** This is the net amount of cash transferred from the investing public to the companies. For this purpose the 'investing public' includes banks and life insurance companies (except when subscribing to issues by associated companies) and government and private superannuation funds, but excludes other government agencies. Subscriptions by associated companies, whether local or overseas, are excluded. In the tables which follow the amount of new money is obtained by deducting from the total cash raised the 'amount not involving new money'.

**Amounts not involving new money.** These amounts include cash subscriptions received by issuing companies from associated companies. Such subscriptions represent inter-company transfers only, and do not involve a receipt of funds from the 'investing public'. Also included are amounts which,

although subscribed by the 'investing public' (i.e. subscribers other than 'associated companies'), are not retained by the issuing company or its associates, but are used to redeem shares, debentures or unsecured notes, etc., or are used to purchase from individuals existing shares, debentures, etc., in other companies, including existing shares, etc., in associated and subsidiary companies. The funds used in this way are thus returned to another section of the 'investing public' and do not represent a *net* transfer of cash from the 'investing public' to the companies. (Besides these purchases of existing shares, etc., from individuals, purchases of existing shares, etc., from companies other than associates of the issuing company might also be included in this item, but the amounts involved are small and separate details have not been collected.)

### Companies listed on stock exchanges

Details of new capital raised through issues of shares, debentures, or registered notes, or through accepting deposits are given in the following table for each of the years 1962-63 to 1966-67. Figures are subject to revision in some instances.

**LISTED AUSTRALIAN COMPANIES(a): NEW CAPITAL RAISED THROUGH ISSUES OF SHARES, DEBENTURES, OR REGISTERED NOTES, ETC.(b), OR ACCEPTING DEPOSITS(c), 1962-63 TO 1966-67**  
(\$ million)

Year	Share capital					Debentures, registered notes and deposits			
	Value of issues commenced	Non-cash issues commenced (d)	Cash issues commenced	Cash raised during period (e)	Amounts not involving new money	New money	Total amount raised (f)	Amounts not involving new money (f)	New money
1962-63	276.5	144.2	132.2	150.2	45.5	104.7	839.2	609.3	229.9
1963-64	260.8	119.3	141.4	169.2	42.8	126.4	907.7	746.8	160.9
1964-65	394.4	136.6	257.9	209.2	62.3	146.9	1,074.7	906.1	168.6
1965-66	292.1	85.6	206.3	232.6	61.5	171.3	991.5	841.1	150.4
1966-67	313.6	147.9	165.7	151.2	39.2	112.0	1,094.9	896.9	198.0

(a) Includes companies incorporated in the Australian Territories. (b) Includes convertible notes. (c) Deposits accepted by banks, life insurance companies, pastoral companies and building societies, and loans to authorised dealers in the short-term money market are not included. (d) Includes bonus issues, conversion issues, issues in exchange for existing shares, etc. (e) Amounts paid up on issues commenced during the year plus calls on issues commenced in earlier years. (f) Includes conversions, renewals, etc.

### Companies not listed on stock exchanges

Details of new capital raised by unlisted companies through issues of shares and loans secured by charges over the companies' entire assets are given in the following table for each of the years 1962-63 to 1966-67.

**UNLISTED COMPANIES(a): NEW CAPITAL RAISED THROUGH ISSUES OF SHARES AND LOANS SECURED BY CHARGES OVER THE COMPANIES' ENTIRE ASSETS, 1962-63 TO 1966-67**  
(\$ million)

Year	Share capital					Loans secured by charges over the companies' entire assets			
	Value of issues commenced	Non-cash issues commenced (b)	Cash issues commenced	Cash raised during period (c)	Amounts not involving new money	New money	Total amount raised (d)	Amounts not involving new money (d)	New money
1962-63	412.6	218.7	193.9	204.8	159.1	45.7	58.7	45.4	13.3
1963-64	432.3	222.5	209.9	211.6	163.2	48.4	68.7	46.1	22.6
1964-65	563.5	303.1	260.5	233.9	182.2	51.7	65.3	40.1	25.2
1965-66	455.3	260.1	195.4	216.3	165.5	50.8	63.8	40.7	23.1
1966-67	391.5	178.8	212.8	149.4	109.4	40.1	74.2	37.9	36.4

(a) Excludes companies incorporated in the Northern Territory and Australian External Territories for 1962-63 and previous years, but includes Northern Territory incorporations for 1963-64 and subsequent years. (b) Includes bonus issues, conversion issues, issues in exchange for existing shares, etc. (c) Amounts paid up on issues commenced during year plus calls on issues commenced in previous years. (d) Includes conversions, renewals, etc.



**Listed and unlisted companies—new money raised, classified by industry group**

A summary of new money raised by listed and unlisted companies during each of the years 1962-63 to 1966-67, as shown in the preceding tables, is given below, together with a classification by industry groups of the amounts raised. Figures are subject to revision in some instances.

**LISTED AND UNLISTED COMPANIES: NEW MONEY RAISED, BY INDUSTRY GROUP, 1962-63 TO 1966-67**

(\$ million)

Year	Companies listed on stock exchanges			Companies not listed on stock exchanges			Grand total
	Share capital (a)	Debentures, registered notes and deposits (b)	Total	Share capital (a)	Secured loans (c)	Total	
<b>Manufacturing—</b>							
1962-63 . . . . .	40.4	28.0	68.4	10.5	3.5	14.0	82.4
1963-64 . . . . .	31.9	12.9	44.8	10.0	18.3	28.3	73.1
1964-65 . . . . .	78.3	27.6	105.9	12.4	19.8	32.2	138.1
1965-66 . . . . .	94.5	80.1	174.6	13.6	12.8	26.4	201.0
1966-67 . . . . .	27.9	98.6	126.5	8.6	15.7	24.3	150.8
<b>Finance and property(b)—</b>							
1962-63 . . . . .	11.9	153.0	164.9	12.8	3.8	16.6	181.5
1963-64 . . . . .	21.8	89.9	111.7	15.5	2.7	18.2	129.9
1964-65 . . . . .	12.8	119.8	132.6	11.4	1.8	13.2	145.8
1965-66 . . . . .	25.3	63.1	88.4	9.4	4.6	14.0	102.4
1966-67 . . . . .	4.7	94.9	99.6	6.4	7.4	13.8	113.4
<b>Commerce—</b>							
1962-63 . . . . .	23.0	34.2	57.2	8.2	2.3	10.5	67.7
1963-64 . . . . .	44.3	47.7	92.0	7.8	0.6	8.4	100.4
1964-65 . . . . .	23.0	4.8	27.8	9.6	0.6	10.2	38.0
1965-66 . . . . .	25.0	(d) -3.7	21.3	10.1	1.6	11.7	33.0
1966-67 . . . . .	32.1	(d) -0.8	31.3	8.5	0.7	9.2	40.5
<b>Other industries—</b>							
1962-63 . . . . .	29.5	14.9	44.4	11.4	3.9	15.3	59.7
1963-64 . . . . .	28.3	10.1	38.4	11.6	1.3	12.9	51.3
1964-65 . . . . .	32.7	16.5	49.2	15.1	3.1	18.2	67.4
1965-66 . . . . .	26.5	11.0	37.5	14.5	4.1	18.6	56.1
1966-67 . . . . .	47.2	5.3	52.5	13.7	12.7	26.4	78.9
<b>All industries—</b>							
1962-63 . . . . .	104.7	229.9	334.6	(e) 45.7	13.3	(e) 59.0	(e) 393.6
1963-64 . . . . .	126.4	160.9	287.3	48.4	22.6	71.0	358.3
1964-65 . . . . .	146.9	168.6	315.5	51.7	25.2	76.9	392.4
1965-66 . . . . .	171.3	150.4	321.7	50.8	23.1	73.9	395.6
1966-67 . . . . .	112.0	198.0	310.0	40.1	36.4	76.5	386.5

(a) Includes preference shares. (b) Excludes deposits accepted by banks, insurance companies, pastoral companies and building societies, and loans to authorised dealers in the short-term money market. (c) Includes only loans which are secured by charges over the companies' entire assets. (d) Excess of repayments over receipts of new money. (e) Small share issues of less than \$2,000 for which returns have not been collected have not been included in the industrial classification but are included in All industries.

## UNIT TRUSTS, LAND TRUSTS AND MUTUAL FUNDS

Statistics relating to operations in Australia of unit trusts, land trusts and mutual funds have been collected quarterly since March 1961 and are shown in the following tables. The figures do not include details of superannuation funds conducted by unit trust management companies.

## Transactions of trusts and funds

**TRUSTS AND FUNDS: TRANSACTIONS, YEARS 1962-63 TO 1966-67  
AND QUARTERS SEPTEMBER 1966 TO DECEMBER 1967**  
(\$ million)

Period	Cash transactions— trust units and fund shares		Purchases and sales of investments(a)	
	Total amount received (b)	Total amount paid (c)	Purchases (d)	Sales (e)
<b>Year—</b>				
1962-63 . . . .	31.7	14.0	27.4	9.7
1963-64 . . . .	44.9	20.4	35.2	10.6
1964-65 . . . .	36.0	22.6	31.3	18.8
1965-66 . . . .	25.2	19.7	23.9	20.0
1966-67 . . . .	20.2	21.1	20.5	17.7
<b>Quarter—</b>				
September 1966 .	5.6	5.4	5.6	4.0
December 1966 .	5.5	5.4	5.5	4.8
March 1967 . . .	3.8	4.9	5.3	4.6
June 1967 . . . .	5.4	5.3	4.1	4.2
September 1967 .	5.2	5.7	5.8	5.5
December 1967 .	9.5	8.0	9.3	11.4

(a) Commonwealth Government, local and semi-governmental authority securities, shares, debentures, unsecured notes, loans, deposits on term or notice of three months or longer, land and buildings, etc. (b) For trust units and fund shares issued. Includes re-issues and new issues. Includes fees and expenses. (c) For trust units and fund shares repurchased. Includes those units and fund shares intended for re-issue. (d) Payments for assets acquired during period. Includes brokerage and stamp duty. (e) Receipts for assets sold or redeemed during period. Excludes brokerage and stamp duty.

## Analysis of purchases and sales of investments

**TRUSTS AND FUNDS: ANALYSIS OF PURCHASES AND SALES OF  
INVESTMENTS, 1962-63 TO 1966-67**  
(\$ million)

Year	Shares (incl. preference shares)	Debentures, unsecured notes, deposits (a)	Cwlth Govt local and semi-govt authority securities	Other (b)	Total
<b>Purchases—</b>					
1962-63 . . . .	19.1	5.2	0.1	3.0	27.4
1963-64 . . . .	25.0	6.8	0.1	3.2	35.2
1964-65 . . . .	19.3	6.1	0.1	6.0	31.3
1965-66 . . . .	12.7	3.8	..	7.4	23.9
1966-67 . . . .	7.6	5.3	..	7.6	20.5
<b>Sales—</b>					
1962-63 . . . .	6.4	0.7	0.7	1.9	9.7
1963-64 . . . .	7.7	1.9	0.1	0.9	10.6
1964-65 . . . .	13.7	2.7	0.1	2.3	18.8
1965-66 . . . .	14.1	2.7	0.1	3.1	20.0
1966-67 . . . .	13.7	3.0	0.1	0.8	17.7

(a) Excludes cash on hand and at bank, loans to authorised dealers in the short-term money market, and other deposits under three months' term or notice. (b) Includes land and buildings, mortgages on land and buildings, and other investments.

## Market value of trusts and funds, and cash and short-term deposits of trusts and funds

**TRUSTS AND FUNDS: TOTAL MARKET VALUE AND CASH  
AND SHORT-TERM DEPOSITS, JUNE 1962 TO DECEMBER 1967**  
(\$ million)

At—	Total market value of trusts and funds (a)	Cash and short-term deposits		Total
		Cash (b)	Short-term deposits (c)	
30 June—				
1962 . . . . .	183.6	1.1	7.2	8.3
1963 . . . . .	207.7	2.1	5.7	7.8
1964 . . . . .	249.8	1.6	6.4	8.0
1965 . . . . .	222.2	2.0	5.6	7.6
1966 . . . . .	225.2	1.9	5.5	7.4
30 September 1966 . . . . .	219.0	1.7	4.3	6.0
31 December 1966 . . . . .	226.5	1.6	3.8	5.4
31 March 1967 . . . . .	221.5	1.7	2.7	4.4
30 June 1967 . . . . .	224.4	1.6	2.8	4.4
31 September 1967 . . . . .	239.9	1.5	3.0	4.5
31 December 1967 . . . . .	240.3	1.6	3.3	4.9

(a) Includes value of land trusts at valuation. (b) Includes cash on hand and at bank.  
(c) Includes loans to authorised dealers in the short-term money market and other deposits under three months' term or notice.

### PASTORAL FINANCE COMPANIES

#### Rural advances

The following table is derived from returns supplied to the Reserve Bank by major pastoral finance companies and shows the total rural advances outstanding at the end of June 1962 to 1966 and of subsequent quarters to December 1967.

**PASTORAL FINANCE COMPANIES: RURAL ADVANCES(a), STATES**  
**JUNE 1962 TO DECEMBER 1967**  
(Source: Reserve Bank of Australia)  
(\$ million)

End of—	N.S.W.	Vic.	Qld	S.A.	W.A. and Tas.	Total
June—						
1962 . . . . .	58.8	32.9	48.6	34.8	33.0	208.0
1963 . . . . .	61.4	35.6	49.9	33.1	33.8	213.7
1964 . . . . .	64.1	39.0	51.9	36.3	37.1	228.3
1965 . . . . .	66.6	43.9	58.5	42.8	47.1	258.9
1966 . . . . .	62.4	40.9	55.6	44.3	46.6	249.9
September 1966 . . . . .	63.6	46.4	55.0	43.3	49.9	258.2
December 1966 . . . . .	67.3	51.8	56.6	46.3	51.3	273.2
March 1967 . . . . .	69.4	53.4	56.7	44.0	52.8	276.3
June 1967 . . . . .	68.4	50.2	58.8	50.1	57.9	285.5
September 1967 . . . . .	73.2	58.1	59.3	52.6	59.2	302.5
December 1967 . . . . .	72.2	55.0	59.8	53.4	59.9	300.4

(a) Compiled from returns supplied by major pastoral finance companies. Advances are classified according to the location of the branch holding the advance, which in some cases may differ from the State of residence of the borrower. The statistics refer to the total advances outstanding at the end of the month shown.

## Liabilities and assets

PASTORAL FINANCE COMPANIES: LIABILITIES AND ASSETS(a)  
JUNE 1962 TO DECEMBER 1967

(Source: Reserve Bank of Australia)

(\$ million)

## LIABILITIES

End of—	Balances due to banks	Clients' credit balances	Debentures, notes and deposits		Other outside liabilities	Share- holders' funds	Overseas liabilities	Total liabili- ties/ assets
			Maturing within twelve months	Other				
June—								
1962 . . .	50.9	38.8	26.9	13.0	77.6	107.1	108.7	423.0
1963 . . .	48.1	46.3	18.9	15.7	88.5	112.1	104.9	434.6
1964 . . .	49.6	51.6	18.9	20.0	98.1	130.3	107.2	475.8
1965 . . .	74.5	42.9	19.9	22.5	86.6	138.0	114.1	498.6
1966 . . .	57.3	39.1	27.3	24.1	95.6	145.7	128.4	517.5
September 1966	67.5	42.7	33.4	26.3	101.6	145.7	129.4	546.6
December 1966	73.4	43.0	42.4	26.5	95.7	151.0	131.4	563.4
March 1967 . .	83.8	45.8	50.9	28.0	81.8	153.6	132.2	576.2
June 1967 . . .	68.5	41.8	39.3	29.8	94.8	154.2	131.9	560.2
September 1967	81.1	42.0	51.6	32.2	105.7	154.0	130.9	597.5
December 1967	86.0	40.2	52.0	34.3	95.9	158.4	134.9	601.2

## ASSETS

End of—	Cash and deposits with banks	Loans to author- ised money market dealers	Other short- term assets (b)	Cwlth Govt securi- ties	Advances and sundry debtors		Stocks	Fixed assets	Other assets
					Rural	Other			
June—									
1962 . . .	5.3	0.1	8.6	13.9	208.0	20.5	28.1	116.0	22.6
1963 . . .	5.6	2.1	10.2	14.6	213.7	22.7	29.2	117.3	19.1
1964 . . .	10.7	1.9	8.8	20.0	228.3	23.6	32.1	124.5	25.8
1965 . . .	5.4	1.1	1.0	14.0	258.9	24.3	35.2	133.5	25.3
1966 . . .	6.3	0.9	4.5	29.0	249.9	28.0	34.9	140.2	23.8
September 1966	8.7	1.3	3.4	40.4	257.2	34.1	35.7	144.9	19.9
December 1966	8.8	0.6	3.0	45.0	273.2	31.4	36.3	145.4	19.7
March 1967 . .	8.7	2.0	2.5	52.6	276.3	30.5	36.9	145.5	21.1
June 1967 . . .	7.6	0.4	1.9	33.3	285.5	25.7	37.8	145.8	22.3
September 1967	10.1	1.2	3.0	39.8	302.5	31.2	38.2	148.6	22.9
December 1967	9.6	2.0	3.0	44.1	300.4	30.4	38.0	151.1	22.7

(a) Compiled from returns supplied by major pastoral finance companies.  
ment securities.

(b) Excludes Commonwealth Govern-

## RURAL DEBT

Major sources of credit for rural purposes include banks, Commonwealth and State government financial agencies, pastoral finance companies, and life insurance companies. The following table shows the estimated rural debt to these lenders.

## ESTIMATED RURAL DEBT TO SPECIFIED LENDERS, 30 JUNE 1963 TO 1967

(Source: Reserve Bank of Australia)

(\$ million)

Lender	30 June—				
	1963	1964	1965	1966	1967
Major trading banks . . . . .	495	514	584	650	751
Ex-service settlement . . . . .	113	108	104	99	92
Other government, including State banks and State savings banks . . . . .	169	191	216	245	274
Pastoral finance companies . . . . .	214	228	258	250	285
Commonwealth Development Bank . . . . .	45	55	72	92	120
Life insurance companies . . . . .	52	56	66	75	81
<b>Total . . . . .</b>	<b>1,088</b>	<b>1,152</b>	<b>1,300</b>	<b>1,411</b>	<b>1,603</b>

In addition, credit is supplied to the rural sector by finance companies, merchants, co-operative producer organisations, and by private lenders and investors, the most noteworthy of these last-mentioned sources involving family arrangements and property vendors. No data are currently available on the extent of the outstanding debt by the rural sector to these sources.

## SHORT-TERM MONEY MARKET

For some years prior to 1959 leading stockbrokers had been actively engaged in the acceptance of short-term funds against the security of government securities, but their operations were limited by the absence of suitable short-term securities and their liquidity requirements. In February 1959 the Commonwealth Bank (now the Reserve Bank) gave official status to the market by announcing that under certain conditions it would act as lender of last resort to authorised dealers in the short-term money market.

The form of organisation consists of nine companies whose functions are:

- (i) to accept loans overnight, at call or for fixed periods, in minimum amounts of \$50,000 and to invest these funds in Commonwealth Government securities with currencies not exceeding three years and, since March 1965, in commercial bills that had been accepted or endorsed by a trading bank; and
- (ii) to engage as traders in the buying and selling of these specific classes of securities.

Dealers are required to have a minimum paid-up capital of \$400,000 and a level of shareholders' funds sufficient to permit the lodgment of 'margins' with the Reserve Bank, in the form of Commonwealth Government securities, as general backing for their operations. These securities lodged as margins are required to be, on market values, equivalent to at least:

- (a) one-half per cent of the dealer's holding of Treasury Notes;
- (b) one per cent of the dealer's holding of Commonwealth Government securities and commercial bills maturing within one year;
- (c) two per cent of the dealer's holding of Commonwealth Government securities maturing within one to two years; and
- (d) four per cent of the dealer's holding of Commonwealth Government securities maturing within two to three years.

The total amount of loans a dealer may accept is determined by the Reserve Bank in relation to the level of the dealer's shareholders' funds. Under the lender of last resort arrangements the dealer may borrow from the Reserve Bank against the lodgment of securities.

Selected assets and liabilities of authorised dealers and rates of interest on loans accepted

**SHORT-TERM MONEY MARKET: SELECTED LIABILITIES AND ASSETS AND INTEREST RATES OF AUTHORISED DEALERS, JUNE 1962 TO DECEMBER 1967**

(Source: Reserve Bank of Australia)

Month	Liabilities to clients			Holdings of Cwlth Govt securities (at face value)	Com- mercial bills	Interest rates on loans accepted during month				Weighted average interest rate on loans out- standing (a) per cent per annum	
	All cheque- paying banks	Other clients	Total			At call	For fixed periods		Mini- mum per cent per annum		Maxi- mum per cent per annum
							Mini- mum per cent per annum	Maxi- mum per cent per annum			
Average of weekly figures— (\$ million)					per cent per annum	per cent per annum	per cent per annum	per cent per annum	per cent per annum		
June—											
1962 . . .	55.8	177.1	232.9	242.3	..	2.00	4.00	3.00	3.88	3.45	
1963 . . .	58.0	209.1	267.1	286.8	..	2.00	4.25	3.13	4.25	3.75	
1964 . . .	67.3	253.6	320.8	341.2	..	1.50	4.50	3.38	4.50	3.71	
1965 . . .	93.7	219.0	312.7	343.4	7.6	1.50	6.00	2.00	5.53	4.16	
1966 . . .	74.8	275.4	350.2	373.3	25.2	3.00	6.10	4.25	5.80	4.73	
1967—											
January . . .	103.9	343.5	447.4	455.3	8.8	2.00	6.00	3.00	5.00	3.92	
February . . .	95.1	358.8	453.9	466.2	10.4	2.00	6.00	3.00	5.75	4.25	
March . . .	101.3	370.3	471.6	484.7	13.8	1.00	6.00	3.75	5.10	4.12	
April . . .	104.2	372.4	476.6	488.8	17.3	2.00	5.75	3.25	5.50	4.21	
May . . .	94.8	374.0	468.8	471.8	24.0	2.00	6.75	3.75	6.00	4.23	
June . . .	88.8	367.6	456.4	467.7	32.8	2.00	6.50	3.00	5.50	4.46	
July . . .	99.1	360.9	460.0	453.2	33.8	2.50	6.50	3.80	5.50	4.26	
August . . .	96.1	357.5	453.6	447.6	29.6	2.75	6.75	3.25	6.00	4.17	
September . . .	92.4	373.7	466.1	466.9	23.8	2.00	6.75	3.75	6.10	4.22	
October . . .	89.2	393.5	482.7	483.2	23.2	2.00	6.60	3.00	5.80	4.08	
November . . .	105.2	397.3	502.5	501.0	22.5	0.50	6.50	3.00	5.25	3.66	
December . . .	92.3	372.0	464.3	474.8	22.8	2.00	6.50	3.30	5.75	4.16	

(a) Average of weekly figures commencing October 1963; previously as at last Wednesday.

**Authorised dealers' liabilities classified by type of client****SHORT-TERM MONEY MARKET: AUTHORISED DEALERS' LIABILITIES BY TYPE OF CLIENT(a), 30 JUNE 1966 AND 1967 AND 31 DECEMBER 1967**

(Source: Reserve Bank of Australia)

(\$ million)

Client	30 June 1966	30 June 1967	31 December 1967
All cheque-paying banks . . . . .	91.1	121.5	132.6
Savings banks . . . . .	35.6	56.2	37.1
Insurance offices . . . . .	12.5	10.8	20.5
Superannuation, pension and provident funds . . . . .	6.2	11.7	6.9
Hire purchase and other instalment credit companies . . . . .	6.3	5.9	3.9
Companies, n.e.i. . . . .	95.1	120.2	128.9
Commonwealth and State Governments . . . . .	30.4	57.4	48.5
Local government and semi-governmental authorities, n.e.i. . . . .	51.0	56.5	63.4
All other lenders(b) . . . . .	18.4	33.6	17.9
<b>Total . . . . .</b>	<b>346.5</b>	<b>473.7</b>	<b>459.7</b>

(a) Compiled from returns supplied by authorised dealers in the short-term money market. Liabilities to Reserve Bank as lender of last resort are excluded. (b) Includes marketing boards and trustee companies.

## FRIENDLY SOCIETIES, REGISTERED BUILDING SOCIETIES AND CO-OPERATIVE SOCIETIES

### Friendly societies

The total membership of friendly societies in Australia is about 420,000, but as certain benefits such as medical attendance and free medicines, and in many cases funeral expenses, are granted to members' families as well as to members themselves, this figure must be more than doubled to arrive at an estimate of the number of persons who receive some direct benefit from these societies, even when due allowances is made for young and unmarried members. Legislation has conferred certain privileges on friendly societies, but, on the other hand, it insists on their registration, and it is the duty of the Registrars in the various States, prior to registering a new society, to see that its proposed rules conform to the law, and that the scale of contribution is sufficient to provide the promised benefits. Societies are obliged to forward to the Registrar annual returns about their membership and their finances, and reports dealing with the returns received are published in most of the States.

### Societies, members and revenue

The following table sets out the number of societies, members, etc., revenue and expenditure, and funds of registered societies for the year. More detailed information is available in the bulletin *Insurance and Other Private Finance*, and issue No. 5, 1966-67 contains particulars for the year 1965-66.

**FRIENDLY SOCIETIES(a): SUMMARY, STATES, 1965-66**

	N.S.W. (b)	Vic. (c)	Qld	S.A.	W.A.	Tas. (c)	Total
Registered societies	43	130	19	14	11	8	225
Branches	1,720	1,131	422	552	253	113	4,191
Benefit members at end of year	134,105	152,943	61,460	51,109	16,316	5,181	421,114
Average benefit members during year	136,516	153,778	60,736	51,184	16,530	5,381	424,125
Members who received sick pay	n.a.	26,009	6,859	8,194	2,550	976	n.a.
Total weeks sick pay granted	n.a.	427,048	117,538	152,875	57,370	20,019	n.a.
Average weeks per member sick	n.a.	17.2	17.1	18.7	22.5	20.5	n.a.
Deaths of benefit members	n.a.	2,536	1,178	1,083	328	220	n.a.
Proportion of deaths per 1,000 members (average)	n.a.	16.5	19.1	21.0	20.1	40.9	n.a.
	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
<b>Revenue—</b>							
Entrance fees, levies and members' contributions	12,158	10,412	2,579	5,836	1,637	41	32,664
Interest, dividends and rents	1,097	1,680	438	698	136	96	4,145
All other revenue	651	270	2	475	56	27	1,481
<b>Total revenue</b>	<b>13,906</b>	<b>12,362</b>	<b>3,019</b>	<b>7,009</b>	<b>1,829</b>	<b>164</b>	<b>38,290</b>
<b>Expenditure—</b>							
Sick pay	398	559	144	179	45	19	1,344
Medical attendance and medicine	8,891	6,525	1,770	2,094	1,428	4	20,712
Sums payable at death	577	235	175	125	42	40	1,194
Administration	2,273	1,950	685	910	137	27	5,981
All other expenditure	359	703	..	2,536	156	39	3,793
<b>Total expenditure</b>	<b>12,497</b>	<b>9,972</b>	<b>2,774</b>	<b>5,843</b>	<b>1,807</b>	<b>129</b>	<b>33,024</b>
<b>Funds—Total</b>	<b>24,642</b>	<b>31,912</b>	<b>9,457</b>	<b>14,862</b>	<b>4,209</b>	<b>1,409</b>	<b>86,491</b>

(a) Excludes juvenile branches, dispensaries, medical institutes, and certain miscellaneous societies. Receipts and payments of subsidy under the Commonwealth medical and hospital benefit schemes are excluded. (b) Includes the Australian Capital Territory. (c) Year 1966.

### Registered building societies

#### Summary

In the following table general information is given relating to the societies in each State for the year 1965-66 and to the combined States for 1964-65. The information is not exhaustive, as particulars regarding a number of organisations are not included. More detailed information is available in the mimeographed bulletin *Registered Building Societies*. Issue No. 4 contains information for the year 1965-66.

## REGISTERED BUILDING SOCIETIES: SUMMARY, STATES, 1965-66 AND TOTAL, 1964-65

	1965-66(a)							1964-65 (a)
	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	Total	Total
Societies making returns—								
Permanent . . . . .	60	37	13	5	13	4	132	122
Starr-Bowkett . . . . .	92	2	2	21	1	..	118	121
Terminating(b) . . . . .	2,105	896	346	..	126	53	3,526	3,200
<i>Total</i> . . . . .	2,257	935	361	26	140	57	3,776	3,443
Shareholders . . . . .	202,867	59,166	15,681	23,611	36,897	n.a.	n.a.	328,357
Borrowers . . . . .	n.a.	59,810	24,390	6,583	12,280	5,764	n.a.	n.a.
Working expenses \$'000 . . . . .	6,394	4,143	2,629	822	1,501	180	15,669	13,497
Loans granted \$'000 . . . . .	90,635	34,357	18,559	3,521	12,611	5,314	164,997	159,524

(a) At various balance dates within the financial year shown. (b) Co-operative housing and other terminating societies.

## Liabilities and assets

REGISTERED BUILDING SOCIETIES: LIABILITIES, STATES, 1965-66 AND TOTAL, 1964-65  
(\$'000)

State	1965-66(a)					1964-65 (a)	
	Investing members' funds	Borrow- ing members' funds	Deposits	Loans due to govern- ment	Bank overdrafts and other liabilities	Total liabilities	Total liabilities
New South Wales . . . . .	149,905	105,406	5,872	84,831	228,381	574,394	512,510
Victoria . . . . .	14,828	49,606	21,443	65,675	130,693	282,246	266,764
Queensland . . . . .	31,554	5,866	1,182	18,635	26,622	83,858	72,470
South Australia . . . . .	9,473	..	2,010	6,712	123	18,317	16,801
Western Australia . . . . .	19,063	1,289	10,533	16,386	9,346	56,618	47,590
Tasmania . . . . .	8,591	591	10,168	3,856	2,699	25,904	23,274
<i>Total</i> . . . . .	233,414	162,758	51,208	196,095	397,864	1,041,337	939,409

(a) At various balance dates within the financial year shown.

REGISTERED BUILDING SOCIETIES: ASSETS  
STATES, 1965-66 AND TOTAL, 1964-65  
(\$'000)

State	1965-66(a)			1964-65 (a)
	Advances on mortgage (b)	Other assets	Total assets	Total assets
New South Wales . . . . .	547,083	27,311	574,394	512,510
Victoria . . . . .	275,384	6,862	282,246	266,764
Queensland . . . . .	80,525	3,333	83,858	72,470
South Australia . . . . .	17,238	1,079	18,317	16,801
Western Australia . . . . .	53,472	3,146	56,618	47,590
Tasmania . . . . .	24,353	1,546	25,904	23,274
<i>Total</i> . . . . .	998,060	43,277	1,041,337	939,409

(a) See footnote (a) to table above. (b) Includes advances on mortgage of terminating societies which are on a gross basis. Net advances may be derived by subtracting borrowing members' funds. See table above.



## Co-operative societies

Co-operative societies are divided into three classes: (i) those engaged in the manufacture and marketing of primary products and trade requirements; (ii) those engaged in retailing general household requirements; and (iii) those engaged in activities covered by both classes (i) and (ii). The first class may be described briefly as producers' co-operative societies and the second as consumers' co-operative societies. The particulars given for New South Wales relate to societies registered under the Co-operation Act, 1923-1967. A summary of the business of all co-operative societies for the year 1965-66 for all States except Western Australia is given in the following tables. Separate particulars for each of the three types of co-operative societies are given in the annual bulletin *Insurance and Other Private Finance*, and issue No. 5, 1966-67 contains details for 1965-66. Particulars are not collected in Western Australia.

## CO-OPERATIVE SOCIETIES: STATES, 1965-66

	N.S.W.	Vic.	Qld	S.A.	Tas.
SUMMARY					
Societies . . . . .	364	155	445	73	14
Branches . . . . .	n.a.	n.a.	133	n.a.	n.a.
Members . . . . .	308,853	112,394	150,572	120,042	4,399
	\$'000	\$'000	\$'000	\$'000	\$'000
Gross turnover (sales) . . . . .	295,140	132,103	146,568	49,732	6,980
Other income . . . . .	2,011	5,337	8,623	4,482	907
<i>Total income</i> . . . . .	<i>297,151</i>	<i>137,440</i>	<i>155,191</i>	<i>54,214</i>	<i>7,887</i>
Total purchases . . . . .	288,381 {	108,000	115,414	37,511	5,928
Other expenditure . . . . .		25,526	34,351	14,107	1,773
<i>Total expenditure</i> . . . . .	<i>288,381</i>	<i>133,526</i>	<i>149,765</i>	<i>51,618</i>	<i>7,701</i>
Rebates and bonuses . . . . .	6,409	866	2,328	3,443	46
Dividends on share capital . . . . .	1,563	863	634	367	47
LIABILITIES (\$'000)					
Paid-up capital . . . . .	33,627	17,005	20,854	7,151	1,119
Loan capital . . . . .	..	5,194	16,571	11,714	1,158
Bank overdrafts . . . . .	32,584	9,793	23,623	3,744	769
Accumulated profits . . . . .	22,597 {	2,245	5,893	1,724	465
Reserve funds . . . . .		15,949	23,450	5,931	352
Sundry creditors . . . . .	41,952 {	16,223	22,693	4,330	925
Other liabilities . . . . .		3,905	6,010	7,994	136
<i>Total</i> . . . . .	<i>130,760</i>	<i>70,315</i>	<i>119,094</i>	<i>42,587</i>	<i>4,924</i>
ASSETS (\$'000)					
Land and buildings . . . . .	55,530 {	34,081 {	22,497	9,894	1,125
Machinery, plant and other fixed assets . . . . .			39,124	5,918	416
Stocks . . . . .	39,177	11,032	10,194	10,391	831
Sundry debtors . . . . .	26,564	17,515	37,620	5,796	2,073
Cash in hand and on deposit . . . . .	9,488 {	2,099 {	3,123	1,041	63
Profit and loss account . . . . .			1,016	75	8
Other assets . . . . .			4,571	9,473	410
<i>Total</i> . . . . .	<i>130,760</i>	<i>70,315</i>	<i>119,094</i>	<i>42,587</i>	<i>4,924</i>

# LOTTERIES AND BETTING

## Lotteries

State Governments operate lotteries in New South Wales, Queensland, South Australia, and Western Australia. The lotteries Commission of South Australia commenced operations on 15 May 1967. By 30 June 1967 ten 50c lotteries had been drawn. Proceeds of ticket sales were \$500,000, and \$300,000 was paid out in prize money. An amount of \$50,000 was transferred to the State Hospitals Fund. Tattersall Lotteries are operated under government licence in Victoria and also sell tickets under government licence in Tasmania and New Zealand. The statistics of sales of tickets and prizes for Victoria include sales and allotments of prizes in Tasmania and New Zealand by Tattersall of Victoria. Tasmanian Lotteries were operated under government licence until 30 September 1961, when they surrendered their licence. In general, revenue derived by the State Governments from these lotteries is used directly or indirectly to provide funds for expenditure on hospitals, charities, etc. For information as to the origin, purpose and method of payment of proceeds or taxes to State revenues *see* Year Book No. 46, page 808 and earlier issues.

Details of ticket sales, prizes allotted, and taxes paid and other net contributions to State Government revenues, relating to lotteries drawn during each of the years 1962-63 to 1966-67, are given in the following table.

**LOTTERIES: VALUE OF TICKET SALES, PRIZES ALLOTTED, TAXES PAID  
AND OTHER NET CONTRIBUTIONS TO STATE GOVERNMENT REVENUES  
1962-63 TO 1966-67  
(\$'000)**

<i>Year</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>W.A.</i>	<i>Total</i>
<b>TICKET SALES</b>					
1962-63 . .	44,430	20,684	13,600	3,900	82,614
1963-64 . .	47,126	21,340	14,180	3,924	86,570
1964-65 . .	48,836	21,675	14,460	3,725	88,690
1965-66 . .	48,095	20,396	14,360	4,025	86,876
1966-67 . .	50,171	20,580	14,620	4,775	90,146
<b>PRIZES ALLOTTED</b>					
1962-63 . .	28,434	12,410	8,666	2,236	51,746
1963-64 . .	30,252	12,804	9,040	2,258	54,354
1964-65 . .	31,280	13,005	9,218	2,150	55,653
1965-66 . .	30,815	12,238	9,163	2,339	54,555
1966-67 . .	30,904	12,348	9,332	2,803	55,387
<b>TAXES PAID AND OTHER NET CONTRIBUTIONS TO STATE GOVERNMENT REVENUES(a)</b>					
1962-63 . .	14,734	6,404	3,680	1,146	25,964
1963-64 . .	15,550	6,608	3,818	1,138	27,114
1964-65 . .	15,079	6,719	3,854	1,151	26,803
1965-66 . .	11,217	6,294	3,588	1,146	22,245
1966-67 . .	11,892	6,380	3,710	1,317	23,299

(a) Includes grants to Tasmanian and New Zealand governments by Tattersall Lotteries in Victoria.

**Betting****TOTALIZATOR INVESTMENTS AND INVESTMENTS WITH LICENSED BOOKMAKERS  
STATES AND AUSTRALIAN CAPITAL TERRITORY, 1962-63 TO 1966-67**

(\$'000)

<i>Year</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>A.C.T. (a)</i>	<i>Total</i>
<b>TOTALIZATOR INVESTMENTS</b>								
1962-63	28,145	80,257	14,043	4,582	27,055	1,282	n.a.	155,363
1963-64	28,600	109,245	24,585	4,748	32,069	1,260	n.a.	200,507
1964-65	41,999	142,492	33,696	4,899	38,951	1,274	1,011	264,321
1965-66	94,317	163,006	39,978	4,702	42,568	1,149	1,974	347,695
1966-67	146,084	179,490	47,339	4,749	43,077	1,174	2,567	424,480
<b>INVESTMENTS WITH LICENSED BOOKMAKERS(b)</b>								
1962-63	237,338	151,083	106,339	56,011	22,667	26,604	n.a.	600,043
1963-64	238,937	154,445	107,970	57,442	20,989	28,439	n.a.	608,223
1964-65	279,389	159,723	116,797	61,045	20,434	32,612	n.a.	670,000
1965-66	267,987	160,453	118,560	55,022	20,691	32,137	n.a.	654,850
1966-67	283,346	168,381	123,506	55,740	24,817	35,091	n.a.	690,881

(a) Off-course investments only. Totalisator Agency Board commenced operating from 1 September 1964.  
 (b) Estimated from taxes on betting with licensed bookmakers.

**PENSION AND SUPERANNUATION SCHEMES****Government, local government and semi-governmental pension and  
superannuation schemes**

The Commonwealth and all State Governments have established pension and superannuation schemes for their employees. These schemes are operated through funds to which both the Governments and their employees make contributions. Employees of local government and semi-governmental authorities are covered either by the Commonwealth and State Government schemes or by a separate scheme of the authority which is operated either through a separately constituted fund or through a life insurance office.

## Schemes operated through separately constituted funds

## GOVERNMENT, LOCAL GOVERNMENT AND SEMI-GOVERNMENTAL PENSION AND SUPERANNUATION SCHEMES OPERATED THROUGH SEPARATELY CONSTITUTED FUNDS, 1965-66

	<i>Cwlth</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>Total</i>
<b>Income—</b>	<b>\$'000</b>	<b>\$'000</b>	<b>\$'000</b>	<b>\$'000</b>	<b>\$'000</b>	<b>\$'000</b>	<b>\$'000</b>	<b>\$'000</b>
Contributions—								
Employees	35,630	18,988	13,593	3,631	3,244	2,640	1,481	79,208
Employing authorities	29,499	35,800	18,438	4,377	3,560	3,134	1,597	96,406
Interest, dividends and rent	18,755	19,124	12,554	2,473	2,564	1,522	1,074	58,067
Other income	40	829	5,132	14	24	108	21	6,168
<i>Total income</i>	<i>83,924</i>	<i>74,741</i>	<i>49,717</i>	<i>10,495</i>	<i>9,393</i>	<i>7,404</i>	<i>4,174</i>	<i>239,848</i>
<b>Expenditure—</b>								
Pensions	33,011	30,447	17,674	2,402	4,670	3,330	1,946	93,480
Lump sum payments—								
On retirement	3,081	2,641	2,461	208	323	645	125	37,689
On resignation(a)	18,946	5,532	2,343	533	467		385	
Gratuities	1,625	567	24					2,216
Other expenditure	12	1,670	5,208	30	1,367	33	16	8,338
<i>Total expenditure</i>	<i>56,673</i>	<i>40,859</i>	<i>27,711</i>	<i>3,173</i>	<i>6,827</i>	<i>4,007</i>	<i>2,473</i>	<i>141,723</i>
<b>Assets at end of year—</b>								
Cash—								
Deposits with Treasury	431	547	870	30,835	829	411		33,923
Other deposits and cash	48	1,986	1,232	220	875	384	163	4,908
Commonwealth Government securities	84,232	3,931	15,198		11,408	127	4,618	119,514
Local and semi-governmental securities	217,500	247,877	165,571	23,540	17,057	26,961	10,297	708,803
Mortgages—								
Housing			360		22,028	36	4,828	27,251
Other	50,279	12,622	443			122	142	63,608
Loans to building societies	262	20,866	1,529	715		145	23	23,540
Company shares, debentures and notes	368	76,617	5,724		2	356	35	83,102
Other assets	5,978	7,203	50,769	35	495	1,634	279	66,393
<i>Total assets</i>	<i>359,098</i>	<i>371,649</i>	<i>241,695</i>	<i>55,346</i>	<i>52,694</i>	<i>30,175</i>	<i>20,384</i>	<i>1,131,040</i>
<i>Less Sundry creditors, etc.</i>	<i>342</i>	<i>13,507</i>	<i>793</i>	<i>107</i>	<i>16</i>	<i>115</i>	<i>213</i>	<i>15,092</i>
<i>Accumulated funds</i>	<i>358,756</i>	<i>358,143</i>	<i>240,902</i>	<i>55,238</i>	<i>52,679</i>	<i>30,060</i>	<i>20,172</i>	<i>1,115,949</i>
<b>Contributors at end of year—</b>	<b>No.</b>	<b>No.</b>	<b>No.</b>	<b>No.</b>	<b>No.</b>	<b>No.</b>	<b>No.</b>	<b>No.</b>
Males				19,179	20,600		8,674	
Females	195,284	135,769	87,140	6,474	2,760	16,954	2,719	495,553
<b>Pensioners at end of year—</b>								
Ex-employees—								
Males	15,954	23,992	10,535	1,642	3,218	2,917	1,129	64,240
Females	1,311		1,689	527	658	377	289	
Widows	9,510	4,001	8,164	578	2,709	2,120	848	27,930
Children	2,822	535	1,137	178	307	210	136	5,325

(a) Includes refunds of contributions to continuing members and to members withdrawing from the scheme.

## Schemes operated through life insurance offices

LOCAL GOVERNMENT AND SEMI-GOVERNMENTAL PENSION AND SUPERANNUATION SCHEMES OPERATED THROUGH LIFE INSURANCE OFFICES  
1961-62 TO 1965-66

		1961-62	1962-63	1963-64	1964-65	1965-66
<hr/>						
Income—						
Contributions—						
Employees	\$'000	3,576	4,164	4,892	5,275	6,046
Employing authorities	\$'000	4,260	4,952	5,856	6,462	7,477
Contributors at end of year	No.	49,754	51,119	56,619	58,708	61,354

### Parliamentary pension and superannuation schemes

Pension and superannuation schemes have been established for members of the Commonwealth and State Parliaments. All the schemes are operated through funds to which the members of Parliament and the Commonwealth or State Governments contribute.

#### PARLIAMENTARY PENSION AND SUPERANNUATION SCHEMES, 1965-66

	<i>Cwlth</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>Total</i>
	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
<b>Income—</b>								
Contributions—								
Members . . . . .	160	74	65	40	25	51	35	449
Government . . . . .	181	72	104	40	52	50	..	499
Interest . . . . .	67	28	16	54	24	21	6	217
<i>Total income</i> . . . . .	<i>408</i>	<i>174</i>	<i>185</i>	<i>134</i>	<i>101</i>	<i>122</i>	<i>41</i>	<i>1,165</i>
<b>Expenditure—</b>								
Pension payments(a) . . . . .	254	110	138	36	48	53	45	684
Other . . . . .	3	..	..	..	..	..	..	3
<i>Total expenditure</i> . . . . .	<i>257</i>	<i>110</i>	<i>138</i>	<i>36</i>	<i>48</i>	<i>53</i>	<i>45</i>	<i>687</i>
<b>Assets at end of year—</b>								
Cash—								
Deposits with Treasury . . . . .	33	12	30	42	12	2	..	130
Other deposits and cash . . . . .	..	..	36	..	..	..	4	40
Commonwealth Government securities . . . . .	431	92	70	..	209	45	54	902
Local government and semi-governmental securities . . . . .	917	461	250	883	259	383	4	3,157
Other assets . . . . .	..	78	..	161	6	6	1	252
<i>Total assets</i> . . . . .	<i>1,381</i>	<i>643</i>	<i>386</i>	<i>1,086</i>	<i>486</i>	<i>436</i>	<i>63</i>	<i>4,481</i>
<i>Less Sundry creditors, etc.</i> . . . .	<i>..</i>	<i>19</i>	<i>..</i>	<i>3</i>	<i>..</i>	<i>..</i>	<i>1</i>	<i>24</i>
<i>Accumulated funds.</i> . . . .	<i>1,381</i>	<i>623</i>	<i>386</i>	<i>1,083</i>	<i>486</i>	<i>436</i>	<i>62</i>	<i>4,456</i>
	No.	No.	No.	No.	No.	No.	No.	No.
<b>Contributors at end of year—</b>								
Males . . . . .	180	94	100	76	56	79	53	638
Females . . . . .	4	..	..	1	3	1	1	10
<b>Pensioners at end of year—</b>								
Ex-members . . . . .	87	40	36	23	14	19	15	234
Widows . . . . .	44	28	38	18	16	27	6	177

(a) Includes lump sum payments.

**Coal and oil-shale mine workers' superannuation schemes**

In all States except South Australia superannuation schemes have been established for coal and oil-shale mine workers. These schemes are operated through funds to which mine workers, mine owners and the State Governments contribute.

**COAL AND OIL-SHALE MINE WORKERS' SUPERANNUATION SCHEMES(a)**  
**1961-62 TO 1965-66**

	1961-62	1962-63	1963-64	1964-65	1965-66
	\$'000	\$'000	\$'000	\$'000	\$'000
<b>Income—</b>					
Contributions—					
Mine workers . . . . .	746	766	777	864	918
Mine owners . . . . .	3,216	3,364	3,412	3,780	4,024
State Governments . . . . .	358	356	344	330	506
Interest, dividends, rent . . . . .	822	874	920	976	1,011
<i>Total income . . . . .</i>	<i>5,142</i>	<i>5,360</i>	<i>5,453</i>	<i>5,950</i>	<i>6,458</i>
<b>Expenditure—</b>					
Pension payments . . . . .	4,262	4,432	4,633	5,213	5,248
Lump sum payments . . . . .	66	6	23	8	9
Refunds of contributions . . . . .	2	6	..	9	3
Administration . . . . .	114	114	118	122	123
<i>Total expenditure . . . . .</i>	<i>4,444</i>	<i>4,558</i>	<i>4,773</i>	<i>5,352</i>	<i>5,383</i>
<b>Assets at end of year—</b>					
Deposits with Treasury . . . . .	160	208	272	357	397
Other deposits and cash . . . . .	1,044	108	37	14	81
Commonwealth Government securities . . . . .	128	118	118	118	118
Local government and semi-governmental securities . . . . .	15,216	16,890	17,602	18,146	19,064
Other assets . . . . .	352	380	485	499	534
<i>Total assets . . . . .</i>	<i>16,900</i>	<i>17,704</i>	<i>18,514</i>	<i>19,133</i>	<i>20,195</i>
<i>Less Sundry creditors, statutory reserve funds, etc. . . . .</i>	<i>n.a.</i>	<i>n.a.</i>	<i>6,850</i>	<i>164</i>	<i>152</i>
<i>Accumulated funds . . . . .</i>	<i>n.a.</i>	<i>n.a.</i>	<i>11,664</i>	<i>18,969</i>	<i>20,043</i>
	No.	No.	No.	No.	No.
<b>Contributors at end of year—</b>					
Males . . . . .	16,182	15,700	15,325	15,329	15,756
Females . . . . .	15	15	19	15	15
<b>Pensioners at end of year—</b>					
Ex-employees—					
Males . . . . .	6,598	6,693	6,643	6,677	7,334
Females . . . . .	2	2	2	2	2
Widows . . . . .	4,186	4,216	4,375	4,424	4,435
Children . . . . .	34	34	56	53	108

(a) Operating in all States except South Australia.

**Private superannuation, pension and retiring allowance schemes**

Details of the results of a survey of private superannuation, pension and retiring allowance schemes conducted by private businesses for the benefit of their employees during the year ended June 1963 or the accounting period nearest that year and of similar surveys conducted in 1960-61 and 1961-62 are published in Year Book No. 51 (pages 898-900).

In 1955-56, 1960-61, 1961-62, and 1962-63 sample surveys were conducted of pension and retiring allowance schemes in private businesses subject to pay-roll tax, other than in rural industries, private domestic service, and certain businesses such as accountants, trade associations, consultant engineers, etc. Commonwealth Government airlines and banks were included where they had

established their own funds separately from the Commonwealth superannuation funds, but statutory coal miners' pension funds were excluded. Details were asked for three types of pension and retiring allowance schemes. They were (a) schemes operated through life insurance offices, (b) schemes operated through separately constituted funds, and (c) direct payments of pensions and retiring allowances.

The results of the 1955-56 survey are available in *Finance Bulletin* No. 47, Part I—*Public and Private Finance*, and the 1960-61, 1961-62 and 1962-63 survey results were published in *Insurance and Other Private Finance*, Bulletin No. 2 and Year Book No. 51 (pages 898-900). Details of the operations of government and semi-governmental superannuation schemes were published in *Insurance and Other Private Finance*, Bulletins No. 1 and No. 2 for 1961-62 and 1962-63 respectively, and in Parts I of the *Finance Bulletin* for years prior to 1961-62. The results of the 1965-66 survey of government and semi-governmental superannuation schemes were published in November 1967 in a mimeographed bulletin. The monthly bulletin *Life Insurance Statistics* contains some information on the superannuation business of life insurance offices.

In the years 1956-57 to 1958-59, 1963-64 and 1964-65 information was collected from a small number of selected larger funds, and for the years 1955-56 and 1960-61 to 1962-63 the returns for the selected pension schemes were extracted from the sample surveys and tabulated in respect only of the business of their separately constituted funds. In order to improve the coverage of the surveys of selected pension funds, a larger number of funds were surveyed in 1964-65 than in previous surveys of selected funds. The results of the 1964-65 survey were published in September 1966 in a mimeographed bulletin.

Further surveys, relating to the same funds that were included in the 1964-65 survey of selected private pension funds, were made in respect of 1965-66 and 1966-67. The results of the 1966-67 survey are shown below, together with details of the 1964-65 and 1965-66 surveys for comparison. The separately constituted private pension funds included in these surveys accounted for about 72 per cent of the total contributions, 71 per cent of the income, 68 per cent of the expenditure, and 77 per cent of the assets of the funds covered by the 1962-63 sample survey.

Since the *Survey of Selected Private Pension Funds* for 1966-67 was not a representative sample, it is not known to what extent their share of the whole field has changed since the 1962-63 survey; nor is the pattern of income, expenditure and asset distribution of the large funds included in this survey necessarily representative of the whole field.

#### SELECTED SEPARATELY CONSTITUTED PRIVATE PENSION FUNDS: INCOME AND EXPENDITURE, 1964-65 TO 1966-67(a)

(\$ million)

INCOME							
Year	Employees' contributions	Employers' contributions	Interest on Cwlth local and semi-governmental securities	Other interest, dividends and rent	Profit from sale or revaluation of assets	Other income (b)	Total income
1964-65	21.8	40.7	15.1	21.6	2.8	2.4	104.4
1965-66	23.3	42.6	15.8	25.2	1.4	4.1	112.4
1966-67	26.6	47.7	19.0	27.0	7.6	5.1	133.0

EXPENDITURE									
Year	Pensions paid			Lump sum payments			Loss on sale or revaluation of assets	Other expenditure (c)	Total expenditure
	Ex-employees	Widows or children	Total	To former employees					
				On retirement	On resignation or dismissal	To widows or children			
1964-65	10.6	2.0	12.6	7.6	8.4	2.3	4.2	2.3	37.5
1965-66	12.0	2.1	14.1	8.4	9.4	2.3	2.2	4.1	40.5
1966-67	13.6	2.2	15.8	10.3	9.7	2.6	0.9	7.6	46.9

(a) Years ended 30 June or substituted accounting period. (b) Includes receipts from life insurance offices, sub-underwriting commissions, etc. (c) Includes administrative expenses payable from funds, payments to life insurance offices, etc.

SELECTED SEPARATELY CONSTITUTED PRIVATE PENSION FUNDS: ASSETS  
1964-65 TO 1966-67(a)  
(\$ million)

Year	Cash in hand or in bank	Cw/lt Govt securi- ties	Local and semi- govern- mental securi- ties	Loans on mortgage		Com- pany deben- tures, notes, and other loans to com- panies	Shares in com- panies	Land and build- ings	All other assets (b)	Total assets	Less sundry credi- tors, etc.	Amount of funds in Aus- tralia
				To com- panies	Other							
AMOUNT												
1964-65 .	16.7	116.2	176.5	24.3	19.5	167.4	177.5	4.4	9.3	711.8	4.3	707.5
1965-66 .	17.5	126.0	185.3	30.3	20.8	188.6	198.1	5.0	11.9	783.4	4.1	779.4
1966-67 .	19.4	137.3	188.9	42.1	22.0	209.4	228.7	6.8	14.9	869.5	4.3	865.1
PERCENTAGE DISTRIBUTION												
1964-65 .	2.3	16.3	24.8	3.4	2.7	23.5	24.9	0.6	1.3	100.0	0.6	99.4
1965-66 .	2.2	16.1	23.7	3.9	2.7	24.1	25.3	0.6	1.5	100.0	0.5	99.5
1966-67 .	2.2	15.8	21.7	4.8	2.5	24.1	26.3	0.8	1.7	100.0	0.5	99.5

(a) Book values at balance dates.  
to building societies.

(b) Includes loans to authorised dealers in the short-term money market and loans

PROBATES AND LETTERS OF ADMINISTRATION

The following table gives some particulars of the number and value of estates of deceased persons in each State for the latest year for which information is available. Owing to differences in legislation in the various States the figures are not entirely comparable.

PROBATES AND LETTERS OF ADMINISTRATION: STATES

		N.S.W. 1966-67 (a)		Vic. 1966	Qld 1966-67 (b)	S.A. 1966	W.A. 1966	Tas. 1966 (c)
Estates . . . . .	No.	30,002	18,278	10,246	4,635	2,821	1,920	
Gross value . . . . .	\$'000	n.a.	278,335	136,138	69,601	48,271	26,635	
Net value . . . . .	\$'000	446,202	252,746	124,595	64,539	44,131	21,265	

(a) Total estates of deceased persons assessed for death duty. (b) Data advanced two years, 1965-66: estates, 8,399; gross value, \$109,976,000; net value, \$101,436,000. (c) Estates dealt with by the Taxation Departmen





## CHAPTER 19

### PUBLIC FINANCE

The subject of public finance is dealt with in this chapter under the two major divisions of Commonwealth Finance and State Finance. The close financial relations between the Commonwealth and States, however, particularly since the Financial Agreement has been in operation, demand also a combination of these two divisions under the heading of Commonwealth and State Finance. Under the Financial Agreement the Commonwealth assumed the liability to bondholders for the States' securities existing at the date of the Agreement and now arranges for all borrowings for and on behalf of the Commonwealth or any State and for all conversions, renewals, redemptions and consolidations of such securities. In view of this it is convenient to deal with the Commonwealth and State Government securities on issue in a separate division of this chapter (page 781). The subject of income taxes is also dealt with in a separate division at the end of this chapter (page 797).

For further detailed information on the subjects covered by this chapter see the annual bulletins published by this Bureau: *Australian National Accounts*, *National Income and Expenditure*; *Commonwealth Finance*; *State, Territory and Local Government Authorities' Finance and Government Securities*; and *Commonwealth Taxation Assessments*. Current information in summarised form is contained in the *Quarterly Summary of Australian Statistics*, the *Monthly Review of Business Statistics*, and the *Digest of Current Economic Statistics*. A mimeographed statement *Commonwealth, State and Territory Taxation Collections* is issued annually as soon as possible after the relevant information has been assembled.

### COMMONWEALTH FINANCE

#### Financial provisions of the Constitution

The main provisions of the Constitution relating to the initiation and development of the financial system of the Commonwealth are contained in Sections 81 to 105A of the Commonwealth Constitution (see pages 16–19 of this Year Book). Two other sections which have a most important bearing on questions of Commonwealth finance are Sections 69 and 51.

Section 69 provides for the transfer from the States to the Commonwealth of certain specified departments, and Section 51, in outlining the powers of the Commonwealth Parliament, implies the transfer or creation of other departments. Sections 87 and 96 deal with the financial relations between the Commonwealth and the States. These matters have been treated in previous issues of the Year Book, and on pages 737–46 of this issue a summary is given of the present provisions for Commonwealth financial assistance to the States.

The *Audit Act* 1901–1966 lays down the procedure which must be followed in accounting for the receipt and disbursement of public funds. The general administration of Commonwealth finances is the responsibility of the Treasurer of the Commonwealth.

### Commonwealth Public Account

#### Nature of account

The Commonwealth Public Account includes the Consolidated Revenue Fund, the Trust Fund and the Loan Fund. Ordinary revenues from taxation and other sources are paid into the Consolidated Revenue Fund, from which the main expenditures are for defence, war and repatriation services, social services, payments to the States, Commonwealth business undertakings (mostly postal, telephone and telegraph), and administration. The Trust Fund covers special transactions outside the ordinary operations of departmental expenditures, such as pension funds and moneys held for expenditure by the Commonwealth at some future time. The Loan Fund receives its funds from the sale of Commonwealth securities, and expenditures from the Fund are made in accordance with the purpose of issue of each loan. The main disbursements from the Loan Fund are to the States, either by way of distribution of the proceeds of loans raised by the Commonwealth on their behalf or in accordance with the provisions of the Commonwealth and State Housing Agreements, and the remaining disbursements are for Commonwealth purposes such as defence or war service land settlement.

## Summary of receipts and expenditure

A summary of transactions on the Commonwealth Public Account for 1966-67 and the four preceding years is given in the table which follows. The transactions are recorded on a cash basis.

**COMMONWEALTH PUBLIC ACCOUNT: SUMMARY OF TRANSACTIONS**  
1962-63 TO 1966-67

(\$ million)

	1962-63	1963-64	1964-65	1965-66	1966-67
Expenditure(a)(b) . . . . .	3,987.7	4,389.1	4,784.6	5,379.7	5,922.5
Receipts(b) . . . . .	3,565.3	3,993.3	4,627.9	5,128.6	5,387.8
<i>Excess of expenditure over receipts— borrowing requirement.</i> . . . .	422.4	395.8	156.8	251.1	534.6
<b>Borrowings—</b>					
Overseas loan proceeds(c) . . . . .	139.3	73.3	43.1	37.6	52.8
Less redemptions, etc. . . . .	38.5	47.3	80.1	77.4	134.7
Net proceeds . . . . .	100.9	26.0	-37.0	-39.8	-81.9
Australian loan proceeds(d) . . . . .	518.7	578.4	501.7	546.2	646.3
Less redemptions, etc. . . . .	165.1	153.4	270.2	254.5	258.5
Net proceeds . . . . .	353.6	425.1	231.5	291.6	387.8
Total net loan proceeds . . . . .	454.5	451.1	194.5	251.8	305.9
Credit arrangements for defence purchases in the United States of America . . . . .	..	..	..	..	90.6
Less repayments . . . . .	..	..	..	..	..
Net credit arrangements, etc.; U.S.A. . . . .	..	..	..	..	90.6
<b>Residual financing—</b>					
Borrowings from Reserve Bank . . . . .	-170.0	-68.0	+38.0	-36.0	+165.0
Treasury Notes (Issue +, Redemption -) . . . . .	+139.0	+13.6	-72.1	+35.7	-25.9
Cash balances (Increase -, Decrease +) . . . . .	-1.1	-0.9	-3.6	-0.4	-0.9
Total residual financing . . . . .	-32.1	-55.3	-37.7	-0.7	+138.2
<b>Total borrowings.</b> . . . .	422.4	395.8	156.8	251.1	534.6

(a) Excludes payments to Loan Consolidation and Investment Reserve: 1962-63, \$52.8 million; 1963-64, \$29.8 million; 1964-65, \$222.7 million; 1965-66, \$210.5 million; and 1966-67, \$227.7 million. (b) Comparisons between these figures are affected by accounting changes. (c) Overseas refinancing operations are treated as adding to both loan proceeds and redemptions where they involve receipts into and expenditures from Loan Fund. (d) Excludes State domestic raisings and loans raised on behalf of Qantas Empire Airways and Australian National Airlines Commission.

Minus sign (-) denotes decrease.

**All Commonwealth funds: summary of receipts and expenditure**

The following table represents a reclassification of Commonwealth Government receipts and expenditure in a national accounts form. It includes the Commonwealth Government components (with slight re-arrangement) of Tables 57 and 60 in *Australian National Accounts, National Income and Expenditure 1953-54 to 1966-67*. Advances to semi-governmental business undertakings are included in 'Other advances', but grants to other semi-governmental bodies (National Capital Development Commission, Australian National University, Stevedoring Industry Authority, etc.) are classified according to the final expenditure of the authority concerned.

**ALL COMMONWEALTH FUNDS: RECEIPTS AND EXPENDITURE, 1962-63 TO 1966-67**  
(\$ million)

	1962-63	1963-64	1964-65	1965-66	1966-67
<b>EXPENDITURE</b>					
Current expenditure on goods and services . . . . .	753	841	1,003	1,236	1,421
Capital expenditure on new assets and stocks . . . . .	209	224	280	312	354
Purchases of existing assets . . . . .	4	4	4	5	5
Subsidies . . . . .	71	101	86	127	146
Interest . . . . .	66	75	81	74	46
Cash benefits to persons . . . . .	937	1,029	1,080	1,156	1,246
Grants towards private capital expenditure . . . . .	9	9	26	47	45
Overseas grants and contributions . . . . .	73	86	106	128	150
Grants to States . . . . .	852	895	958	1,076	1,183
Advances to States . . . . .	130	136	142	173	166
Other advances . . . . .	161	192	209	159	216
<b>Total expenditure . . . . .</b>	<b>3,264</b>	<b>3,592</b>	<b>3,974</b>	<b>4,492</b>	<b>4,978</b>
<b>RECEIPTS</b>					
Taxation . . . . .	2,882	3,220	3,788	4,188	4,455
Interest, rent and dividends . . . . .	90	92	103	116	99
Net revenue and business undertakings . . . . .	111	123	147	153	150
Fees and charges for goods and services . . . . .	40	52	55	63	64
Sales of existing assets . . . . .	8	12	17	13	8
Repayments of advances to States . . . . .	21	21	22	28	30
Repayments of other advances . . . . .	32	34	37	36	40
Other net receipts(a) . . . . .	80	38	—196	—106	132
<b>Total receipts . . . . .</b>	<b>3,264</b>	<b>3,592</b>	<b>3,974</b>	<b>4,492</b>	<b>4,978</b>

(a) Includes borrowing on treasury bills and Commonwealth bonds and net decrease in cash balances.

Minus sign (—) denotes decrease.

**All Commonwealth funds: expenditure, economic type and function**

In the following two tables particulars of expenditure for 1966-67 shown in the previous table have been reclassified to a 'net' basis by taking account of the relevant items shown as receipts in that table, e.g. fees and charges for goods and services, sales of existing assets, etc., and the resulting totals have been classified by economic type and by function.

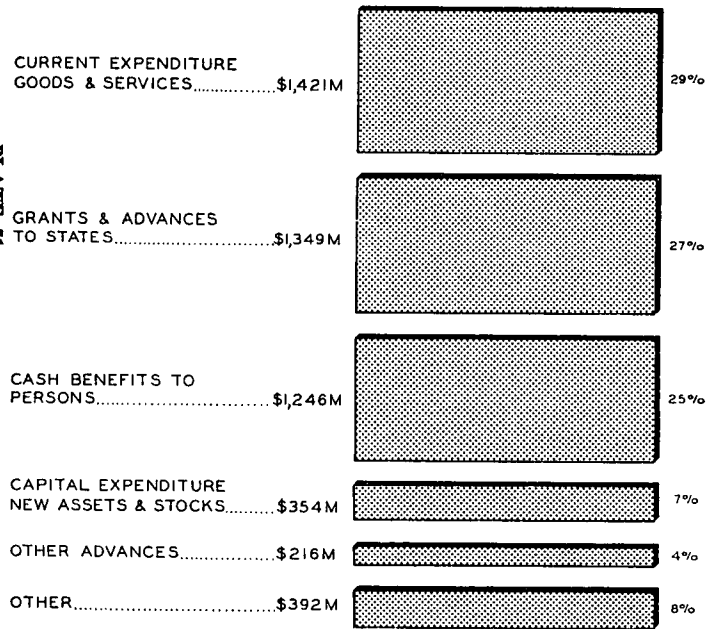
# ALL COMMONWEALTH FUNDS

1966-67

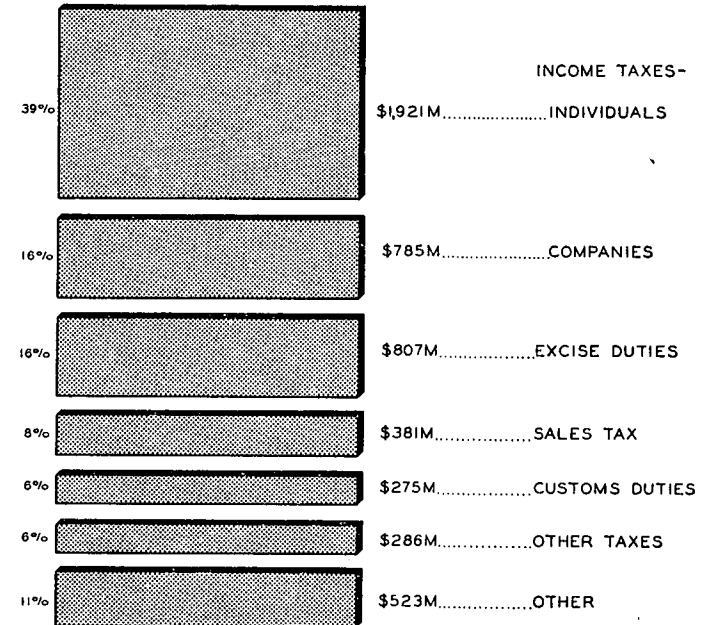
## EXPENDITURE

## RECEIPTS

PLATE 51



TOTAL EXPENDITURE: \$4,978 MILLION



TOTAL RECEIPTS: \$4,978 MILLION

## ALL COMMONWEALTH FUNDS: TOTAL NET EXPENDITURE, BY ECONOMIC TYPE AND FUNCTION, 1966-67

(\$ million)

## NET CURRENT EXPENDITURE

	<i>Expenditure on goods and services</i>	<i>Cash benefits</i>	<i>Sub- sidies</i>	<i>Over- seas grants</i>	<i>Grants to States</i>	<i>Interest</i>	<i>Grants towards private capital expen- diture</i>	<i>Total</i>
Law, order and public safety . . . . .	9	..	..	..	..	..	..	9
Education . . . . .	24	27	..	..	39	..	..	91
Cultural and recreational facilities . . . . .	7	..	..	1	..	..	..	7
Public health . . . . .	24	247	..	1	..	..	..	272
Welfare . . . . .	17	770	..	..	..	..	10	797
War and defence . . . . .	840	..	..	37	..	..	..	878
Repatriation . . . . .	68	193	..	..	..	..	6	267
Development of resources and assistance to industry . . . . .	115	..	121	2	26	..	..	263
Transport and communication . . . . .	30	..	2	5	..	..	..	37
Legislature and general administration . . . . .	140	..	..	1	..	..	..	142
External affairs . . . . .	19	..	..	32	..	..	..	51
Immigration . . . . .	35	5	..	1	..	..	..	41
Regulation of trade and industry . . . . .	9	4	22	..	..	..	..	35
Housing . . . . .	4	..	..	..	..	..	12	16
Other . . . . .	3	..	..	70	..	..	16	90
Not allocated to function	12	..	..	..	901	..	..	912
<b>Total net current expenditure . . . . .</b>	<b>1,357</b>	<b>1,246</b>	<b>146</b>	<b>150</b>	<b>966</b>	<b>..</b>	<b>45</b>	<b>3,909</b>

## NET CAPITAL EXPENDITURE

	<i>Expenditure on new assets and stocks</i>	<i>Net purchases of existing assets</i>	<i>Grants to States</i>	<i>Net advances to States</i>	<i>Other net advances</i>	<i>Total</i>
Education . . . . .	11	..	40	..	..	51
Cultural and recreational facilities . . . . .	9	..	..	..	2	11
Public health . . . . .	2	..	6	..	..	8
War and defence . . . . .	..	2	..	..	32	34
Development of resources and assistance to industry . . . . .	21	..	3	6	..	30
Transport and communication—						
Post office . . . . .	205	1	..	..	..	206
Civil aviation . . . . .	29	..	..	..	19	48
Roads . . . . .	14	..	155	2	..	172
Other . . . . .	13	..	12	11	3	39
Power, fuel and light . . . . .	..	..	..	..	47	47
Housing . . . . .	14	—8	..	117	36	158
Other . . . . .	32	1	2	1	4	39
Not allocated to function	5	..	..	—1	33	37
<b>Total net capital outlay . . . . .</b>	<b>354</b>	<b>—3</b>	<b>218</b>	<b>136</b>	<b>176</b>	<b>880</b>

The following table shows net expenditure from all Commonwealth funds for the years 1962-63 to 1966-67, classified according to function.

**ALL COMMONWEALTH FUNDS: TOTAL NET EXPENDITURE, BY FUNCTION**  
**1962-63 TO 1966-67**

(\$ million)

	1962-63	1963-64	1964-65	1965-66	1966-67
<b>NET CURRENT EXPENDITURE</b>					
Law, order and public safety . . . . .	4	5	6	7	9
Education . . . . .	40	46	64	75	91
Cultural and recreational facilities . . . . .	3	4	5	5	7
Public health . . . . .	188	202	220	250	272
Welfare . . . . .	603	665	696	721	797
War and defence . . . . .	421	451	551	748	878
Repatriation . . . . .	216	235	240	268	267
Development of resources and assistance to industry . . . . .	126	162	166	217	263
Transport and communication . . . . .	30	33	37	40	37
Legislature and general administration . . . . .	74	88	102	116	142
External affairs . . . . .	27	31	41	46	51
Immigration . . . . .	24	29	36	38	41
Regulation of trade and industry . . . . .	14	16	18	28	35
Housing . . . . .	3	3	15	18	16
Other . . . . .	46	60	69	89	90
Not allocated to function . . . . .	720	760	781	855	912
<b>Total net current expenditure . . . . .</b>	<b>2,539</b>	<b>2,790</b>	<b>3,047</b>	<b>3,521</b>	<b>3,909</b>
<b>NET CAPITAL EXPENDITURE</b>					
Education . . . . .	19	21	42	43	51
Cultural and recreational facilities . . . . .	12	9	12	11	11
Public health . . . . .	6	5	7	9	8
War and defence . . . . .	—3	45	17	—38	34
Development of resources and assistance to industry . . . . .	7	12	18	28	30
Transport and communication—					
Post office . . . . .	123	128	165	185	206
Civil aviation . . . . .	4	3	42	42	48
Roads . . . . .	122	131	147	162	172
Other . . . . .	34	35	31	43	39
Power, fuel and light . . . . .	45	48	45	42	47
Housing . . . . .	155	146	154	165	158
Other . . . . .	2	28	19	27	39
Not allocated to function . . . . .	51	19	39	52	37
<b>Total net capital expenditure . . . . .</b>	<b>577</b>	<b>631</b>	<b>738</b>	<b>771</b>	<b>880</b>

This table classifies by function the expenditure on goods and services (reclassified to a net basis) shown in the table on page 731.

**ALL COMMONWEALTH FUNDS: NET EXPENDITURE ON GOODS AND SERVICES  
BY FUNCTION(a), 1962-63 TO 1966-67**

(\$ million)

	1962-63	1963-64	1964-65	1965-66	1966-67
<b>NET CURRENT EXPENDITURE</b>					
Law, order and public safety . . . . .	5	5	6	7	9
Education . . . . .	12	15	19	21	24
Cultural and recreational facilities . . . . .	3	4	5	5	7
Public health . . . . .	15	14	16	20	24
Welfare . . . . .	13	14	15	14	17
War and defence . . . . .	413	447	540	722	840
Repatriation . . . . .	49	53	56	62	68
Development of resources and assistance to industry . . . . .	65	74	95	106	115
Transport and communication . . . . .	21	24	27	25	30
Legislature and general administration . . . . .	73	84	100	114	140
External affairs . . . . .	10	14	15	17	19
Immigration . . . . .	21	26	33	33	35
Regulation of trade and industry . . . . .	7	8	9	9	9
Housing . . . . .	3	3	4	4	4
Other . . . . .	1	1	4	3	3
Not allocated to function . . . . .	3	2	5	10	12
<b>Total net current expenditure . . . . .</b>	<b>713</b>	<b>789</b>	<b>948</b>	<b>1,173</b>	<b>1,357</b>

**NET CAPITAL EXPENDITURE—NEW ASSETS AND STOCKS**

Education . . . . .	6	8	9	9	11
Cultural and recreational facilities . . . . .	12	9	12	10	9
Public health . . . . .	2	3	3	3	2
Development of resources and assistance to industry . . . . .	7	8	13	12	21
Transport and communication—					
Post office . . . . .	122	128	164	184	205
Civil aviation . . . . .	8	11	16	22	29
Roads . . . . .	10	9	9	14	14
Other . . . . .	6	9	8	12	13
Housing . . . . .	11	9	11	15	14
Other . . . . .	13	20	21	22	32
Not allocated to function . . . . .	12	9	14	10	5
<b>Total net capital expenditure . . . . .</b>	<b>209</b>	<b>224</b>	<b>280</b>	<b>312</b>	<b>354</b>

(a) This table includes the Commonwealth Government component of Tables 66 and 75 in *Australian National Accounts, National Income and Expenditure 1953-54 to 1966-67* together with net expenditure on stocks.



### Main components of Commonwealth expenditure

The tables on pages 734-44 supply details of some of the main components of total expenditure of the Commonwealth Government.

#### Subsidies

The following table shows details of Commonwealth expenditure from all funds on assistance to primary producers, subsidies and bounties for the years 1962-63 to 1966-67. Expenditure on special relief such as drought, frost, flood, and bush fire, etc., is not included here (included as cash benefits to persons in tables, pages 735-6) nor is expenditure from the proceeds of certain taxes on primary products and profits from marketing schemes, which have been paid to trust funds for the purpose of price or other stabilisation schemes or for distribution to producers (*see* pages 759-60). Payments to the States for cattle tick control, dairy industry extension and agricultural advisory services are not included under this heading, but included under the heading Grants to the States (*see* pages 737-41). Further information relating to assistance to primary producers is given in the chapter Rural Industry. Details of price stabilisation subsidies and of various forms of assistance to primary producers for earlier years are given on pages 414 and 1014-15, respectively, of Year Book No. 38.

#### ALL COMMONWEALTH FUNDS: EXPENDITURE ON SUBSIDIES, 1962-63 TO 1966-67 (\$'000)

Type of subsidy	1962-63	1963-64	1964-65	1965-66	1966-67
Development of resources and assistance to industry—					
Dairy industry . . . . .	27,000	27,000	27,000	27,000	27,000
Wheat prices stabilisation . . . . .	14,576	22,634	1,892	18,069	16,154
Phosphate fertilisers . . . . .	..	18,806	22,880	24,983	26,319
Oil search . . . . .	10,000	9,434	8,838	11,382	9,931
Nitrogenous fertilisers . . . . .	..	..	..	..	6,665
Copper . . . . .	1,398	1,390	300	1	..
Gold mining industry . . . . .	1,582	1,496	1,860	2,462	3,848
Pyrites . . . . .	796	1,228	924	854	103
Cotton . . . . .	574	946	1,916	3,686	2,813
Processed milk products . . . . .	568	800	864	614	899
Sulphate of ammonia . . . . .	360	318	526	427	830
Vinyl resin . . . . .	..	228	364	1,938	1,592
Copper and brass strip . . . . .	36	124	154	43	..
Northern Territory—					
Railway freight . . . . .	80	92	90	140	110
Transport of stud stock . . . . .	30	48	40	59	83
Superphosphate sea subsidy . . . . .	..	..	..	..	5
Ship construction . . . . .	3,600	4,436	5,538	7,465	11,264
Sulphuric acid . . . . .	2,188	2,316	1,822	1,906	1,556
Tractor . . . . .	1,926	2,014	2,754	1,902	2,221
Cellulose acetate flake . . . . .	202	218	134	228	218
Rayon yarns . . . . .	270	..	..	..	..
Flax fibre . . . . .	36	4	..	..	..
Poultry industry assistance . . . . .	..	..	..	5,536	9,213
Urea . . . . .	..	..	..	..	9
Transport and communication—					
Air services . . . . .	1,000	1,000	1,000	1,200	1,306
Coastal shipping service—					
King Island and Bass Strait Islands . . . . .	..	24	66	161	160
Northern Territory . . . . .	8	8	14	43	44
Northern Territory air mail service . . . . .	74	116	118	118	..
South American shipping service . . . . .	222	304	278	335	351
Regulation of trade and industry—					
Stevedoring industry . . . . .	4,200	5,742	6,094	6,149	6,525
Petrol prices stabilisation . . . . .	..	..	..	9,920	15,218
Northern Territory petrol prices . . . . .	..	..	..	345	750
Other . . . . .	304	300	326	400	399
<b>Total . . . . .</b>	<b>71,030</b>	<b>101,026</b>	<b>85,792</b>	<b>127,366</b>	<b>145,586</b>

## Cash benefits to persons

Particulars of cash benefits paid to persons in each State and Territory during 1966-67 are shown in the next table and the total payments during the years 1962-63 to 1966-67 are shown in the table following.

ALL COMMONWEALTH FUNDS: CASH BENEFITS TO PERSONS  
STATES AND TERRITORIES, 1966-67

(\$'000)

Type of benefit	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Abroad	Total
Education—	(a)			(b)			(c)	(d)		
Commonwealth Scholarship Scheme—										
Post-graduate . . . . .	1,176	506	281	298	113	58	..	..	..	2,432
University . . . . .	5,675	4,281	1,800	960	885	289	..	..	..	13,890
Advanced education . . . . .	161	341	67	24	53	15	..	..	..	660
Secondary . . . . .	2,253	1,844	967	545	448	184	..	..	2	6,243
Technical . . . . .	246	332	95	78	53	12	..	..	..	816
Soldiers' Children Education Scheme . . . . .	821	681	450	236	166	97	(e)	(e)	12	2,462
Other . . . . .	(e)	(e)	(e)	(e)	(e)	(e)	(e)	(e)	(e)	816
Total, education . . . . .	10,332	7,985	3,660	2,141	1,718	655	(e)	(e)	14	(f)27,319
Health—										
Hospital benefits . . . . .	18,269	10,324	6,748	3,911	3,848	1,289	116	126	..	44,631
Nursing home benefits . . . . .	9,531	4,884	3,548	2,009	2,033	761	..	..	..	22,767
Medical benefits . . . . .	17,520	11,776	4,269	5,156	3,925	1,195	..	..	..	43,841
Medical benefits for pensioners . . . . .	5,667	3,746	2,064	1,407	1,020	406	..	42	..	14,351
Milk for school children . . . . .	3,067	2,391	1,396	857	698	442	77	93	..	9,021
Pharmaceutical benefits . . . . .	27,759	21,138	9,839	6,256	4,730	2,071	..	208	..	72,001
Pharmaceutical benefits for pensioners . . . . .	12,306	6,933	4,546	2,705	1,989	802	..	..	..	29,280
Tuberculosis campaign . . . . .	3,956	3,293	2,189	652	547	338	..	9	..	10,983
Total, health . . . . .	98,075	64,485	34,599	22,953	18,790	7,304	193	478	..	246,877
Welfare—										
Age and invalid pensions . . . . .	189,043	120,930	77,097	43,720	33,794	14,574	1,239	937	506	481,840
Child endowment . . . . .	68,816	56,232	29,685	19,063	15,498	6,912	1,225	1,783	67	199,282
Commonwealth rehabilitation service . . . . .	604	461	273	249	196	60	..	..	..	1,844
Funeral benefits . . . . .	524	358	209	114	88	39	..	3	..	1,334
Maternity allowances . . . . .	2,514	2,104	1,077	654	559	243	62	72	8	7,294
Tuberculosis campaign—allowances . . . . .	372	263	340	98	53	44	21	2	..	1,193
Unemployment benefits . . . . .	3,948	1,882	3,068	1,653	374	228	14	19	..	11,186
Sickness benefits . . . . .	2,655	1,753	964	554	445	190	20	30	..	6,611
Special benefits . . . . .	338	603	159	63	36	47	1	1	..	1,247
Widows' pensions . . . . .	21,188	14,387	8,962	5,448	4,011	1,983	191	197	71	56,438
Other . . . . .	(e)	(e)	(e)	(e)	(e)	(e)	(e)	(e)	(e)	1,795
Total, welfare . . . . .	290,002	198,973	121,834	71,616	55,053	24,320	2,773	3,044	652	(f)770,064
Development of resources and assistance to industry—										
Wool research studentships and fellowships . . . . .	(e)	(e)	(e)	(e)	(e)	(e)	(e)	(e)	(e)	94
Repatriation—										
War and service pensions and allowances . . . . .	(a)66,030	53,674	29,751	(b)16,776	15,502	7,588	(c)	(d)	1,521	190,842
Other . . . . .	(e)	(e)	(e)	(e)	(e)	(e)	(e)	(e)	(e)	1,938
Total, repatriation . . . . .	66,030	53,674	29,751	16,776	15,502	7,588	(e)	(e)	1,521	(f)192,780
Immigration—										
Maintenance of migrant families . . . . .	(e)	(e)	(e)	(e)	(e)	(e)	(e)	(e)	..	5,240
Regulation of trade and industry—										
Coal mining industry—long service leave . . . . .	723	1	157	..	37	2	..	..	..	919
Stevedoring industry . . . . .	(e)	(e)	(e)	(e)	(e)	(e)	(e)	..	..	2,824
Total, regulation of trade and industry . . . . .	723	1	157	..	37	2	(e)	..	..	(f)3,743
Housing—										
Commonwealth-State Housing Agreement—contribution to rental losses . . . . .	..	..	142	..	..	..	..	..	..	142
Grand total . . . . .	465,162	325,118	190,143	113,486	91,100	39,869	2,966	3,522	2,187	(f)1,246,259

(a) Includes Australian Capital Territory. (b) Includes Northern Territory. (c) Included in South Australia. (d) Included in New South Wales. (e) Not allocable. (f) Includes items not allocable. See footnote (e).

**ALL COMMONWEALTH FUNDS: CASH BENEFITS TO PERSONS**  
**1962-63 TO 1966-67**  
**(\$'000)**

<i>Type of benefit</i>	<i>1962-63</i>	<i>1963-64</i>	<i>1964-65</i>	<i>1965-66</i>	<i>1966-67</i>
<b>Education—</b>					
Commonwealth scholarship scheme—					
Post graduate . . . . .	602	834	1,236	1,733	2,432
University . . . . .	6,468	6,897	7,903	10,064	13,890
Advanced education . . . . .	..	..	..	198	660
Secondary . . . . .	..	..	3,382	5,197	6,243
Technical . . . . .	..	..	212	600	816
Soldiers' Children Education Scheme . . . . .	1,967	2,302	2,311	2,534	2,462
Other . . . . .	387	433	573	812	816
<i>Total, education . . . . .</i>	<i>9,424</i>	<i>10,464</i>	<i>15,614</i>	<i>21,140</i>	<i>27,319</i>
<b>Health—</b>					
Hospital benefits . . . . .	40,681	38,336	38,995	39,520	44,631
Nursing home benefits . . . . .	6,645	17,880	19,796	21,223	22,767
Medical benefits . . . . .	23,474	24,848	35,277	41,282	43,841
Medical benefits for pensioners . . . . .	9,146	9,531	9,320	13,365	14,351
Milk for school children . . . . .	7,454	7,775	8,059	8,493	9,021
Pharmaceutical benefits . . . . .	57,044	58,237	60,638	67,713	72,001
Pharmaceutical benefits for pensioners . . . . .	19,867	20,602	21,564	24,071	29,280
Tuberculosis campaign . . . . .	9,728	10,453	10,128	13,370	10,983
<i>Total, health . . . . .</i>	<i>174,039</i>	<i>187,665</i>	<i>203,779</i>	<i>229,037</i>	<i>246,877</i>
<b>Welfare—</b>					
Age and invalid pensions . . . . .	375,507	399,880	426,597	442,355	481,840
Child endowment . . . . .	135,421	168,758	172,830	176,432	199,282
Commonwealth Rehabilitation Service . . . . .	1,395	1,489	1,604	1,660	1,844
Funeral benefits . . . . .	802	812	866	1,050	1,334
Maternity allowances . . . . .	7,563	7,457	7,294	7,159	7,294
Tuberculosis campaign—allowances . . . . .	1,607	1,593	1,458	1,286	1,193
Unemployment benefits, sickness and special benefits . . . . .	29,315	21,625	14,540	15,557	19,044
Widows' pensions . . . . .	31,353	41,569	47,044	50,017	56,438
Other . . . . .	430	470	1,025	2,066	1,795
<i>Total, welfare . . . . .</i>	<i>583,394</i>	<i>643,654</i>	<i>673,258</i>	<i>697,580</i>	<i>770,064</i>
<b>Development of resources and assistance to industry—</b>					
Wool Research Studentships and Fellowships . . . . .	43	62	58	85	94
<b>Repatriation—</b>					
War and service pensions and allowances . . . . .	162,693	179,051	179,313	198,662	190,842
Other . . . . .	1,146	1,845	1,694	1,849	1,938
<i>Total, repatriation . . . . .</i>	<i>163,839</i>	<i>180,896</i>	<i>181,007</i>	<i>200,511</i>	<i>192,780</i>
<b>Immigration—</b>					
Maintenance of migrant families . . . . .	3,159	3,472	3,752	4,380	5,240
<b>Regulation of trade and industry—</b>					
Coal mining industry—long service leave . . . . .	954	910	1,021	893	919
Stevedoring industry . . . . .	1,868	1,674	1,614	1,726	2,824
<i>Total, regulation of trade and industry . . . . .</i>	<i>2,822</i>	<i>2,584</i>	<i>2,635</i>	<i>2,619</i>	<i>3,743</i>
<b>Housing—</b>					
Commonwealth-State Housing Agreement—					
Contribution to rental losses . . . . .	37	45	130	213	142
<b>Grand total . . . . .</b>	<b>936,757</b>	<b>1,028,842</b>	<b>1,080,233</b>	<b>1,155,565</b>	<b>1,246,259</b>

Further information concerning items in the two preceding tables is given in the appropriate chapters of this Year Book.

**Payments to or for the States**

An outline of the provisions of the Constitution providing for the Commonwealth to make payments to the States, and of the systems which followed, is given in earlier issues of the Year Book (see No. 37, pages 633 to 638). A distinction is made in this Year Book between (a) direct Commonwealth financial assistance to the States in the form of grants to provide revenue for general and specific purposes and (b) those forms of assistance for developmental and other specific purposes which include, in part or in total, payments made in the form of repayable advances. Some information about the more important or most recent of these forms of financial assistance is given on pages 743-6, but for greater detail on these and other forms of financial assistance see Year Book No. 51, pages 921-4, and earlier issues. Further information is available also in the chapters of this issue dealing with the respective subjects.

*Grants.* The following three tables show particulars of the amounts paid to the States as grants for the purposes referred to in (a) above.

**ALL COMMONWEALTH FUNDS: GRANTS TO THE STATES, BY FUNCTION, 1966-67**  
(£'000)

<i>Function</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>Total</i>
<b>CURRENT</b>							
Education—							
Research grants . . . . .	656	607	205	352	155	63	2,038
Universities . . . . .	13,773	9,211	4,276	3,668	2,306	1,028	34,262
Colleges of advanced education	276	1,302	197	275	363	59	2,472
<i>Total, education . . . . .</i>	<i>14,705</i>	<i>11,120</i>	<i>4,678</i>	<i>4,295</i>	<i>2,824</i>	<i>1,150</i>	<i>38,772</i>
Welfare—							
Housekeeper services . . . . .	12	8	..	..	2	..	23
Development of resources and assistance to industry—							
Natural disaster payments . . . . .	15,621	..	6,503	..	..	1,350	23,474
Cattle tick control . . . . .	252	..	..	..	..	..	252
Agricultural extension services	535	508	545	217	213	158	2,176
<i>Total, development, etc. . . . .</i>	<i>16,408</i>	<i>508</i>	<i>7,048</i>	<i>217</i>	<i>213</i>	<i>1,508</i>	<i>25,902</i>
Not allocated to function—							
Financial assistance grants . . . . .	276,794	208,790	125,514	94,346	86,396	34,773	826,613
Special grants . . . . .	..	..	..	..	19,406	20,666	40,072
Interest and exchange . . . . .	5,834	4,254	2,192	1,408	948	534	15,170
Sinking fund and redemption . . . . .	6,368	4,524	2,439	2,482	1,844	1,293	18,951
<i>Total, not allocated . . . . .</i>	<i>288,996</i>	<i>217,568</i>	<i>130,145</i>	<i>98,236</i>	<i>108,594</i>	<i>57,266</i>	<i>900,806</i>
<i>Total, current . . . . .</i>	<i>320,121</i>	<i>229,204</i>	<i>141,871</i>	<i>102,748</i>	<i>111,633</i>	<i>59,924</i>	<i>965,503</i>

ALL COMMONWEALTH FUNDS: GRANTS TO THE STATES, BY FUNCTION  
1966-67—continued

<i>Function</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>Total</i>
<b>CAPITAL</b>							
Education—							
Colleges of advanced education	560	911	1,137	616	457	..	3,681
Secondary . . . . .	3,709	2,799	1,435	990	899	331	10,163
Technical . . . . .	3,760	3,050	1,449	750	551	334	9,894
Universities . . . . .	6,502	5,250	1,641	1,407	1,160	394	16,354
<i>Total, education</i> . . . .	<i>14,531</i>	<i>12,010</i>	<i>5,662</i>	<i>3,763</i>	<i>3,067</i>	<i>1,059</i>	<i>40,091</i>
Public health—							
Mental institutions . . . .	2,217	1,192	288	193	260	823	4,973
Tuberculosis hospitals—capital.	356	110	28	5	..	..	499
Disposal of ships' garbage . .	..	..	..	..	..	29	29
<i>Total, public health</i> . . . .	<i>2,573</i>	<i>1,302</i>	<i>316</i>	<i>198</i>	<i>260</i>	<i>852</i>	<i>5,501</i>
Development of resources and assistance to industry—							
Natural disaster payments . .	..	..	..	..	..	650	650
Flood mitigation . . . . .	970	..	..	..	..	..	970
Investigation of water resources . . . . .	212	77	366	63	235	18	971
Encouragement of meat production . . . . .	..	..	..	..	8	..	8
<i>Total, development, etc.</i> . .	<i>1,182</i>	<i>77</i>	<i>366</i>	<i>63</i>	<i>243</i>	<i>668</i>	<i>2,599</i>
Transport and communication—							
Commonwealth aid roads . .	41,744	29,443	27,415	17,222	26,676	7,500	150,000
Railway projects . . . . .	..	..	..	4,868	7,410	..	12,278
Cattle roads . . . . .	..	..	2,253	..	1,500	..	3,753
Gordon River road . . . . .	..	..	..	..	..	1,596	1,596
<i>Total, transport, etc.</i> . . .	<i>41,744</i>	<i>29,443</i>	<i>29,668</i>	<i>22,090</i>	<i>35,586</i>	<i>9,096</i>	<i>167,627</i>
Other—							
Exmouth township . . . . .	..	..	..	..	1,952	..	1,952
Migrant centres . . . . .	..	..	..	2	..	..	2
<i>Total, other</i> . . . . .	<i>..</i>	<i>..</i>	<i>..</i>	<i>2</i>	<i>1,952</i>	<i>..</i>	<i>1,954</i>
<b>Total, capital</b> . . . . .	<b>60,030</b>	<b>42,832</b>	<b>36,012</b>	<b>26,116</b>	<b>41,108</b>	<b>11,675</b>	<b>217,772</b>
<b>TOTAL GRANTS</b>							
<b>Grand total</b> . . . . .	<b>380,151</b>	<b>272,036</b>	<b>177,883</b>	<b>128,864</b>	<b>152,741</b>	<b>71,599</b>	<b>1,183,275</b>

**ALL COMMONWEALTH FUNDS: TOTAL GRANTS TO THE STATES, BY FUNCTION**  
**1962-63 TO 1966-67**  
**(\$'000)**

<i>Function</i>	<i>1962-63</i>	<i>1963-64</i>	<i>1964-65</i>	<i>1965-66</i>	<i>1966-67</i>
<b>CURRENT</b>					
Education—					
Research grants . . . . .	..	..	..	1,378	2,038
Universities . . . . .	18,546	21,080	28,942	31,551	34,262
Colleges of advanced education . . . . .	..	..	..	..	2,472
<i>Total, education . . . . .</i>	<i>18,546</i>	<i>21,080</i>	<i>28,942</i>	<i>32,929</i>	<i>38,772</i>
Welfare—housekeeper services . . . . .	28	28	24	22	23
Development of resources and assistance to industry—					
Natural disaster payments . . . . .	..	..	..	9,706	23,474
Cattle tick control . . . . .	536	518	414	348	252
Agricultural extension services . . . . .	1,066	1,262	1,212	1,202	2,176
Tobacco industry extension services . . . . .	48	48	..	..	..
<i>Total, development, etc. . . . .</i>	<i>1,650</i>	<i>1,828</i>	<i>1,626</i>	<i>11,256</i>	<i>25,902</i>
Not allocated to function—					
Financial assistance grants . . . . .	608,640	635,968	681,348	757,351	826,613
Special grants . . . . .	22,502	22,900	31,720	41,770	40,072
Interest and exchange . . . . .	15,170	15,170	15,170	15,170	15,170
Sinking fund and redemption . . . . .	14,496	15,690	16,646	17,761	18,951
Additional assistance grants . . . . .	35,000	40,000	..	..	..
<i>Total, not allocated . . . . .</i>	<i>695,808</i>	<i>729,728</i>	<i>744,882</i>	<i>832,052</i>	<i>900,806</i>
<i>Total, current . . . . .</i>	<i>716,032</i>	<i>752,664</i>	<i>775,474</i>	<i>876,259</i>	<i>965,503</i>

**ALL COMMONWEALTH FUNDS: TOTAL GRANTS TO THE STATES, BY FUNCTION**  
**1962-63 TO 1966-67—continued**  
 (\$'000)

<i>Function</i>	<i>1962-63</i>	<i>1963-64</i>	<i>1964-65</i>	<i>1965-66</i>	<i>1966-67</i>
<b>CAPITAL</b>					
Education—					
Colleges of advanced education . . . . .	..	..	..	982	3,681
Secondary . . . . .	..	..	9,906	9,635	10,163
Technical . . . . .	..	..	10,000	6,230	9,894
Universities . . . . .	12,872	12,780	12,332	15,227	16,354
<i>Total, education . . . . .</i>	<i>12,872</i>	<i>12,780</i>	<i>32,238</i>	<i>32,074</i>	<i>40,091</i>
Public health—					
Mental institutions . . . . .	1,590	1,594	2,504	4,539	4,973
Tuberculosis hospitals—capital . . . . .	984	598	696	696	499
Disposals of ships' garbage . . . . .	..	..	..	..	29
<i>Total, public health . . . . .</i>	<i>2,574</i>	<i>2,192</i>	<i>3,200</i>	<i>5,235</i>	<i>5,501</i>
Development of resources and assistance to industry—					
Western Australia northern development . . . . .	2,864	1,816	2,018	1,112	..
Flood mitigation . . . . .	..	400	1,300	1,540	970
Cattle dip chemicals . . . . .	106	..	..	..	..
Natural disaster payments . . . . .	..	..	..	..	650
Encouragement of meat production . . . . .	2	..	..	..	8
Investigation of water resources . . . . .	..	..	687	860	971
<i>Total, development, etc. . . . .</i>	<i>2,972</i>	<i>2,216</i>	<i>4,007</i>	<i>3,512</i>	<i>2,599</i>
Transport and communication—					
Commonwealth aid roads . . . . .	108,000	116,000	130,000	140,000	150,000
Railway projects . . . . .	5,678	5,182	7,386	11,849	12,278
Cattle roads . . . . .	3,400	3,596	3,800	3,500	3,753
Western Australia—northern development . . . . .	..	..	..	577	..
Replacement of Derby jetty . . . . .	300	350	150	..	..
Gordon River road . . . . .	..	270	1,094	1,840	1,596
Coal loading works . . . . .	..	80	120	..	..
<i>Total, transport, etc. . . . .</i>	<i>117,378</i>	<i>125,478</i>	<i>142,550</i>	<i>157,766</i>	<i>167,627</i>
Other—					
Exmouth township . . . . .	..	..	380	750	1,952
Migrant centres . . . . .	..	..	..	..	2
<i>Total, other . . . . .</i>	<i>..</i>	<i>..</i>	<i>380</i>	<i>750</i>	<i>1,954</i>
<b>Total, capital . . . . .</b>	<b>135,796</b>	<b>142,666</b>	<b>182,376</b>	<b>199,338</b>	<b>217,772</b>
<b>TOTAL GRANTS</b>					
<b>Grand total . . . . .</b>	<b>851,828</b>	<b>895,330</b>	<b>957,850</b>	<b>1,075,596</b>	<b>1,183,275</b>

**ALL COMMONWEALTH FUNDS: GRANTS TO THE STATES TO 30 JUNE 1967(a)**  
(\$ million)

	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>Total</i>
Section 87 of Constitution, 1900–01 to 1909–10 . . . . .	55.5	40.0	17.8	12.4	17.5	5.2	148.4
Surplus Revenue Acts, 1910–11 to 1926–27 . . . . .	83.0	62.3	30.3	19.8	19.5	8.7	223.7
Financial Agreements, 1927–28 to 1966–67 . . . . .	326.5	227.2	120.7	89.3	63.9	35.6	863.2
Special grants(b) . . . . .	..	..	..	156.2	317.3	174.1	647.6
Income tax reimbursement grants, 1942–43 to 1945–46(c) . . . . .	110.8	48.7	44.4	18.1	19.0	6.8	247.8
Income tax reimbursement special grants, 1945–46 to 1946–47(c) . . . . .	..	..	..	3.3	1.8	0.2	5.4
Entertainments tax reimbursement grants, 1942–43 to 1945–46(d) . . . . .	1.2	2.8	..	0.7	0.7	0.3	5.7
Tax reimbursement grants, 1947–48 to 1958–59(e) . . . . .	1,051.3	672.1	431.9	240.1	216.9	91.3	2,703.7
Additional tax reimbursement grants(f) . . . . .	4.1	2.3	1.6	0.9	0.8	0.3	10.0
Special financial assistance(g) . . . . .	160.8	110.6	62.8	34.7	31.2	13.6	413.7
Additional assistance(h) . . . . .	4.0	2.1	2.3	0.7	0.6	0.3	10.0
Non-recurring grants from excess receipts, 1934–35 to 1936–37 . . . . .	2.4	1.7	0.9	0.5	0.4	0.2	6.0
Financial assistance grants(i) . . . . .	1,734.1	1,286.2	766.0	584.5	530.5	221.9	5,123.2
Additional financial assistance(j) . . . . .	26.6	21.3	20.0	11.5	7.8	7.8	95.0
Special assistance(k) . . . . .	56.3	15.6	40.0	7.6	46.3	9.0	174.8
Grants for road construction, 1922–23 to 1966–67(l) . . . . .	419.1	285.8	279.8	170.5	276.1	75.3	1,506.8
Payments to Commonwealth Aid Roads (Supplementary) Trust Account(m) . . . . .	..	..	..	..	..	..	10.0
Tuberculosis Act 1948—reimbursement of capital expenditure . . . . .	11.4	4.1	11.2	1.5	4.6	0.7	33.5
Mental institutions—contribution to capital expenditure . . . . .	12.0	9.0	2.1	2.1	2.0	2.2	29.4
Grants to universities . . . . .	122.6	81.6	36.2	34.1	23.0	11.7	309.1
Other education . . . . .	24.9	17.8	10.3	6.3	5.0	2.2	66.4
Railway projects(n) . . . . .	0.2	22.1	..	23.7	23.8	..	69.9
<b>Total . . . . .</b>	<b>4,206.8</b>	<b>2,913.2</b>	<b>1,878.4</b>	<b>1,418.5</b>	<b>1,608.6</b>	<b>667.4</b>	<b>12,702.9</b>

(a) Includes non-recurring grants from excess receipts, but excludes payments on account of the Morgan-Whyalla Waterworks, amounts provided for relief of wheat-growers and other primary producers, and other payments for medical research, social services, etc. (b) Under various States Grants Acts. (c) Under *States Grants (Income Tax Reimbursement) Act 1942*. (d) Under *States Grants (Entertainments Tax Reimbursement) Act 1942*. (e) Under *States Grants (Tax Reimbursement) Act 1946–1948*. (f) Under *States Grants (Additional Tax Reimbursement) Act 1950*. (g) Under *States Grants (Special Financial Assistance) Acts 1951 and 1952*. (h) Under *States Grants (Additional Assistance) Act 1958*. (i) Under *States Grants Acts 1959, 1962 and 1965*. (j) Under *States Grants (Additional Assistance) Act 1962*. (k) Includes payments for unemployment relief, metalliferous mining, forestry, local public works, grants for price control reimbursement, coal strike emergency grant, grants for imported houses, Port Augusta–Port Pirie railway, Western Australia waterworks, cattle tick control, dairy industry extension, agricultural advisory services, cattle roads, coal-loading works, eradication of house borers, brigalow lands, cattle dip chemicals, tobacco industry extension services, Exmouth township, drought assistance, flood mitigation, Gordon River road, investigation of water resources, encouragement of meat production, etc. (l) Under Main Roads Development, Federal Aid Roads, Federal Aid Roads and Works, and Commonwealth Aid Roads Acts. (m) Expenditure not allocable between States. (n) Under the *Railway Standardization (South Australia) Agreement Act 1949*, the *Railway Standardization (New South Wales and Victoria) Agreement Act 1958*, the *Railway Agreement (Queensland) Act 1961*, the *Railway Equipment Agreement (South Australia) Act 1961*, and the *Railway Agreement (Western Australia) Act 1961*.

**Repayable advances.** The next three tables show particulars of the amounts paid to the States as repayable advances for the several purposes referred to in (b) on page 737.



**ALL COMMONWEALTH FUNDS: ADVANCES TO THE STATES, BY FUNCTION, 1966-67**  
(\$'000)

	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>Total</i>
<b>Development of resources and assistance to industry—</b>							
Natural disaster payments . . . . .	5,460	..	1,760	..	..	500	7,720
<i>Less Repayments</i> . . . . .	..	..	..	..	..	..	..
	5,460	..	1,760	..	..	500	7,720
War service land settlement . . . . .	..	..	..	2,127	2,522	1,287	5,936
<i>Less Repayments</i> . . . . .	113	122	5	3,194	6,947	6,549	16,930
	-113	-122	-5	-1,067	-4,425	-5,262	-10,994
Other . . . . .	6,761	..	2,401	90	1,250	..	10,502
<i>Less Repayments</i> . . . . .	65	20	2	19	49	14	169
	6,696	-20	2,399	71	1,201	-14	10,333
<b>Transport and communication—</b>							
Railway projects . . . . .	..	..	..	2,061	10,586	..	12,647
<i>Less Repayments</i> . . . . .	96	96	1,065	142	141	..	1,540
	-96	-96	-1,065	1,919	10,445	..	11,107
Other . . . . .	..	..	2,805	..	..	..	2,805
<i>Less Repayments</i> . . . . .	330	..	13	..	151	..	494
	-330	..	2,792	..	-151	..	2,311
<b>Housing . . . . .</b>	43,325	32,960	13,740	20,750	9,478	7,500	127,753
<i>Less Repayments</i> . . . . .	3,953	3,646	1,072	1,214	1,011	345	11,240
	39,372	29,314	12,668	19,536	8,467	7,155	116,513
<b>Not allocated to function . . . . .</b>	..	..	..	..	..	..	..
<i>Less Repayments</i> . . . . .	61	449	144	195	-51	189	990
	-61	-449	-144	-195	51	-189	-990
<b>Total gross advances . . . . .</b>	55,546	32,960	20,706	25,028	23,836	9,287	167,363
<i>Less Repayments</i> . . . . .	4,618	4,333	2,301	4,764	8,248	7,097	31,363
<b>Total net advances . . . . .</b>	50,928	28,627	18,405	20,264	15,588	2,190	136,000

Minus sign (-) denotes excess of repayment.

**ALL COMMONWEALTH FUNDS: TOTAL ADVANCES TO THE STATES  
BY FUNCTION, 1962-63 TO 1966-67**  
(\$'000)

	1962-63	1963-64	1964-65	1965-66	1966-67
<b>Development of Resources and Assistance to Industry—</b>					
Natural disaster payments . . . . .	..	..	..	11,994	7,720
<i>Less Repayments</i> . . . . .	..	..	..	..	..
	..	..	..	11,994	7,720
War service land settlement . . . . .	10,948	8,524	7,234	6,358	5,936
<i>Less Repayments</i> . . . . .	10,206	11,118	11,362	16,210	16,930
	742	-2,594	-4,128	-9,852	-10,994
Other . . . . .	1,200	2,890	5,598	8,903	10,502
<i>Less Repayments</i> . . . . .	300	248	228	195	169
	900	2,642	5,370	8,708	10,333
<b>Transport and Communication—</b>					
Railway projects . . . . .	16,142	17,420	10,388	12,410	12,647
<i>Less Repayments</i> . . . . .	228	276	824	1,387	1,540
	15,914	17,144	9,564	11,023	11,107
Other . . . . .	1,296	2,544	3,376	6,107	2,805
<i>Less Repayments</i> . . . . .	56	156	230	315	494
	1,240	2,388	3,146	5,792	2,311
<b>Housing . . . . .</b>	100,124	104,264	115,116	124,242	127,753
<i>Less Repayments</i> . . . . .	7,466	8,298	9,248	10,237	11,240
	92,658	95,966	105,868	114,005	116,513
<b>Not allocated to function . . . . .</b>	..	..	762	2,600	..
<i>Less Repayments</i> . . . . .	2,594	880	..	..	990
	-2,594	-880	762	2,600	-990
<b>Total gross advances . . . . .</b>	129,710	135,642	142,474	172,615	167,363
<i>Less Repayments</i> . . . . .	20,850	20,976	21,892	28,344	31,363
<b>Total net advances . . . . .</b>	108,860	114,666	120,582	144,271	136,000

Minus sign (-) denotes excess of repayments.

**ALL COMMONWEALTH FUNDS: GROSS ADVANCES TO THE STATES TO 30 JUNE 1967**  
 (\$'000)

	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>Total</i>
Development of resources and assistance to industry—							
Brigalow lands development	..	..	8,000	..	..	..	8,000
Blowering Reservoir . . .	16,146	..	..	..	..	..	16,146
Natural disaster . . .	14,128	..	5,086	..	..	500	19,714
Comprehensive water supply	..	..	..	..	2,500	..	2,500
Softwood forestry . . .	..	..	201	90	..	..	291
Western Australia—northern development . . .	..	..	..	..	900	..	900
Chowilla Reservoir . . .	1,256	..	..	..	..	..	1,256
Agricultural re-establishment loans . . .	5,320	2,080	1,220	928	2,222	600	12,370
War service land settlement	13,542	14,398	..	66,362	100,026	52,107	246,434
Transport and communication—							
Railway projects . . .	104	9,480	34,534	9,964	34,081	..	88,163
Cattle roads . . .	..	..	8,550	..	..	..	8,550
Western Australia—northern development . . .	..	..	..	..	577	..	577
Replacement of Derby jetty . . .	..	..	..	..	800	..	800
Coal loading works . . .	3,299	..	200	..	..	..	3,499
Harbours . . .	..	..	3,270	..	..	..	3,270
Housing . . .	529,420	460,237	140,531	190,179	132,086	64,551	1,517,002
Not allocated to function . . .	2,187	1,985	1,050	980	679	501	7,383
<b>Total . . . . .</b>	<b>585,402</b>	<b>488,179</b>	<b>202,642</b>	<b>268,503</b>	<b>273,871</b>	<b>118,258</b>	<b>1,936,855</b>

The figures in the table above represent gross advances, and take no account of repayments made by the States.

*Contributions under Financial Agreement.* Details of the Financial Agreement between the Commonwealth and the States are given in Year Book No. 37, pages 685–90. Under this Agreement the Commonwealth undertook to contribute \$15,169,824 per annum towards interest payable on the State loan securities for a period of 58 years from 1 July 1927. This amount is distributed among the States as follows: New South Wales, \$5,834,822; Victoria, \$4,254,318; Queensland, \$2,192,470; South Australia, \$1,407,632; Western Australia, \$946,864; Tasmania, \$533,718. These amounts are equal to the sums paid by the Commonwealth to each State in the year 1926–27 at the rate of \$2.50 per head of population, the rate at which the Commonwealth had contributed annually to the States since 1 July 1910 as compensation for the States relinquishing, after federation, the right to levy customs and excise duties.

In addition, under the Financial Agreement the Commonwealth agreed to make certain contributions to the National Debt Sinking Fund for redemption of State loan securities. Details of these are given on pages 795–7 of this chapter.

*Special grants to the States.* The Constitution provides in Section 96 for the granting of special financial assistance to the States. The Commonwealth Grants Commission inquires into and reports upon claims made by any State for a grant of financial assistance and any matters relevant thereto. The recommendations of the Commission in respect of the years 1963–64 to 1967–68 are shown in their two parts in the following table. One part is the Commission's estimate of the indispensable need of the claimant State for the year in which the payment is to be made after allowing a sufficient margin for safety. The other part is an adjustment of this estimate for an earlier year after an examination of the audited accounts for that year. Thus the grants for 1967–68 include an estimate of the indispensable need of the claimant State for 1967–68 and an adjustment to the estimated grant for 1965–66.

Under the provisions of the *States Grants Act* 1965–1967, the financial assistance grant paid to each State is determined by increasing the grant paid to that State for previous financial year (with the addition of \$2,000,000 to the grant paid to Queensland in each year up to 1969–70) in accordance with a formula using the percentage change of the population of the State during the year ending 31 December of the year of payment, the percentage increase in average wages for Australia as a whole for the year ended 31 March of the year of payment, and a betterment factor of 1.2 per cent.

**COMMONWEALTH GRANTS COMMISSION: GRANTS RECOMMENDED, 1963-64 TO 1967-68**  
**(\$'000)**

	1963-64	1964-65	1965-66	1966-67	1967-68
<b>Western Australia—</b>					
Advance grant . . . .	11,800	15,800	21,000	14,700	15,500
Completion grant(a) . . . .	344	1,320	3,038	4,706	18
<i>Net grant recommended . . . .</i>	<i>12,144</i>	<i>17,120</i>	<i>24,038</i>	<i>19,406</i>	<i>15,518</i>
<b>Tasmania—</b>					
Advance grant . . . .	10,200	13,618	16,400	19,500	19,000
Completion grant(a) . . . .	556	982	1,332	1,166	889
<i>Net grant recommended . . . .</i>	<i>10,756</i>	<i>14,600</i>	<i>17,732</i>	<i>20,666</i>	<i>19,889</i>
<b>Grand total . . . .</b>	<b>22,900</b>	<b>31,720</b>	<b>41,770</b>	<b>40,072</b>	<b>35,407</b>

(a) Adjustment to estimated grant paid two years previously.

*Natural disasters.* Under the States Grants (Drought Assistance) Acts, New South Wales, Victoria, Queensland and South Australia have been given Commonwealth financial assistance to relieve the effects of drought. In addition, the Commonwealth is assisting those States to meet budgetary problems arising from the effects of drought on their revenues.

Under the *Tasmania Grant (Fire Relief) Act 1967*, the Commonwealth provided for a maximum grant of \$14,500,000 as well as for loans where the State makes loans to assist in the rehabilitation and restoration for damage caused by bushfires in February 1967.

*Grants for road construction.* Details of the *Main Roads Development Act 1923-1925*, *Federal Aid Roads Acts 1926, 1931 and 1936*, *Federal Aid Roads and Works Act 1937*, *Commonwealth Aid Roads and Works Act 1947-1949*, *Commonwealth Aid Roads Act 1950*, *Commonwealth Aid Roads Act 1954*, *Commonwealth Aid Roads (Special Assistance) Act 1957*, and *Commonwealth Aid Roads Act 1959* are given in earlier issues of the Year Book (see No. 38, pages 787-8, No. 41, page 621, No. 46, page 838, and No. 51, page 922) and in the annual bulletin *Commonwealth Finance*. The present scheme of Commonwealth assistance to the States for roads was established by the *Commonwealth Aid Roads Act 1964*. Under this Act, which is to operate for a period of five years from 1 July 1964, the Commonwealth has undertaken to make available up to \$750,000,000 to the States for the construction, reconstruction, maintenance and repair of roads. Of this amount, a total of \$660,000,000 will be paid over five years to the States as basic grants for roads. The basic grants are fixed annual amounts which rise progressively by \$4,000,000 a year from \$124,000,000 in 1964-65 to \$140,000,000 in 1968-69. In each year the grants will be distributed between the States on the basis of 5 per cent of the total to Tasmania and the balance shared between the other five States, one-third in proportion to their respective populations at the date of the last preceding Census, one-third in proportion to their respective areas, and one-third in proportion to the respective number of motor vehicles registered in these States at 31 December preceding the year of payment. The balance of up to \$90,000,000 over the five years will be made available to the States as matching assistance for roads. The total amount of matching assistance increases by \$6,000,000 a year from \$6,000,000 in 1964-65 to \$30,000,000 in 1968-69.

*Beef cattle roads.* The *States Grants (Beef Cattle Roads) Act 1968* provides for grants of \$39,500,000, \$9,500,000, and \$1,000,000 for Queensland, Western Australia, and South Australia respectively for a further programme of beef cattle road construction over a period of seven years commencing from 1 July 1967.

*Health reimbursement under Tuberculosis Act 1948.* The *Tuberculosis Act 1948* provided for the reimbursement by the Commonwealth of capital and maintenance expenditure incurred by the States in the provision of facilities for the diagnosis, treatment and control of tuberculosis. Re-imbursements from the National Welfare Fund of maintenance expenditure on tuberculosis hospitals are classified as cash benefits under Health and Welfare expenditure, and they equal the amounts by which such expenditures of the States in any financial year exceed those for the year 1947-48. As from 1 July 1948 the States have also been reimbursed from annual appropriations of the Department of Health for all their capital expenditure on buildings, furnishings, equipment, and plant.

The *States Grants (Mental Health Institutions) Act 1964-1967* authorised assistance to the States amounting to one-third of their total expenditure on building and equipping approved mental health institutions during the six years ending 30 June 1970.

*Education.* Payments to the States for universities were first introduced in 1951–52, and details of the States Grants (Universities) Acts under which they were continued are given in earlier issues of the Year Book (see No. 51 page 923 and No. 52 page 770). The *Universities (Financial Assistance) Act 1967* authorised grants totalling approximately \$175,600,000 for the Commonwealth share of the agreed programme of development of State Universities for the years 1967 to 1969. (See also the chapter Education, Cultural Activities, and Research, pages 538–43.)

*Colleges of Advanced Education.* Under the States Grants (Advanced Education) Acts, the Commonwealth is providing financial assistance to the States for recurrent and capital expenditures of Colleges of Advanced Education.

The *States Grants (Science Laboratories and Technical Training) Act 1964* and the *States Grants (Science Laboratories) Act 1965–1967* provide for grants during 1964–65 to 1967–68 inclusive for improving science teaching in both government and non-government secondary schools.

Grants for buildings and equipment for use in technical training in schools and colleges conducted by States only are provided for under the *States Grants (Science Laboratories and Technical Training) Act 1964* and the *States Grants (Technical Training) Act 1965–1966*.

Under the *States Grants (Research) Act 1966* the Commonwealth is making available during the 1967–1969 triennium \$9,000,000 to support selected research projects.

Under the *States Grants (Teachers Colleges) Act 1967* the Commonwealth is providing a maximum amount of \$24,000,000 over the three years ending 30 June 1970 for the construction and equipping of teachers colleges.

*Railway projects.* Under the *Railway Standardization (South Australia) Agreement Act 1949* the Commonwealth provided funds for the conversion of lines in the south-eastern division of the State as an initial step towards eventual standardisation to 4' 8½" gauge. The State is to repay three-tenths of the cost of this work over a period of fifty years and is to bear the full cost of subsequent conversion from broad to standard gauge. Similar conditions apply to expenditures under the *Railway Equipment Agreement (South Australia) Act 1961*. Under the *Railway Standardization (New South Wales and Victoria) Agreement Act 1958* the Commonwealth provided funds for the construction of the standard gauge rail link between Albury and Melbourne on the basis that the States of Victoria and New South Wales will each bear fifteen per cent of the cost by instalments over a period of fifty years.

The total expenditure on railway standardisation (the thirty per cent advances to the States and the seventy per cent grants to the States) is charged to the capital works and services vote of the Department of Shipping and Transport. Under the *Railway Agreement (Western Australia) Act 1961* the Commonwealth is providing financial assistance for the construction of a standard gauge railway from Kwinana to iron ore deposits at Koolyanobbing and to Kalgoorlie.

#### *Water resources*

*Investigation and measurement of water resources.* The *States Grants (Water Resources Measurement) Act 1967* authorised payments to the States of up to \$4,500,000 during the three years ending 30 June 1970 to assist State programmes of water measurement and investigation of underground water resources.

*Chowilla Reservoir.* As further work on this project was suspended in August 1967 pending a reassessment by the River Murray Commission of the relationship between costs and benefits of the scheme, Commonwealth assistance has been confined to meeting contractual commitments already entered into by the constructing authority.

*Maraboon Dam.* The *Queensland Grant (Maraboon Dam) Act 1968* provides for grants to Queensland of up to \$20,000,000 for the construction of a dam on the Nogoa River near Emerald.

*Ord River Irrigation Project.* The *Western Australia (Ord River Irrigation) Act 1968* provides for financial assistance to Western Australia on the basis of grants for dam construction and interest-bearing loans in respect of the irrigation works.

*River Murray salinity reduction.* The *Victoria Grant (River Murray Salinity) Act 1968* provides for grants to Victoria of up to \$3,600,000 for two salinity reduction projects on the River Murray.

*Flood mitigation, New South Wales.* Commonwealth payments under the *New South Wales Grant (Flood Mitigation) Act 1964–1968* are limited to \$8,800,000 in respect of flood mitigation works on the Macleay, Clarence, Richmond, Tweed, Shoalhaven, and Hunter Rivers. The Commonwealth grants will match State expenditure which, in turn, will be in a prescribed ratio to local authority expenditure on flood mitigation works.

*Blowering Reservoir, New South Wales.* The Blowering Reservoir is to be constructed at the expense of the State of New South Wales mainly by the Snowy Mountains Hydro-electric Authority, and the Commonwealth will finance half the cost in the form of repayable interest-bearing loans to that State.

*Other specific purpose payments*

**Brigalow lands.** Under the Brigalow Lands Agreement Acts Commonwealth advances to the State of Queensland for specified works associated with the production of beef cattle and other primary products in the Fitzroy River Basin and the supply of beef for export are fixed at an overall limit of \$23,000,000. Repayments over a twenty-year period are to commence in 1968 in respect of advances made prior to 1 July 1967 and in 1971 in respect of advances made from 1 July 1967.

**Development of Exmouth township, Western Australia.** In 1966-67 the Commonwealth contributed an amount of \$1,952,000 to the Western Australian Government towards the cost of developing a township at Exmouth in connection with the United States Communications Base being established at North West Cape.

**Weipa development, Queensland.** Under the *Weipa Development Agreement Act* 1965 the Commonwealth provided financial assistance of \$3,390,000 to Queensland by way of interest-bearing advances to finance harbour works carried out at Weipa on Cape York Peninsula.

**Natural gas pipeline, South Australia.** Under the *Natural Gas Pipeline (South Australia) Agreement Act* 1967 the Commonwealth is providing a maximum of \$15,000,000 by way of interest-bearing loans to help finance the construction of a pipeline to transport gas from natural gas fields at Gidgealpa and Moomba.

**Softwood forestry.** The *Softwood Forestry Agreement Act* 1967 authorises the Commonwealth to provide assistance during the five years ending 30 June 1971 for increased planting of softwood forests. Total assistance of the order of \$20,000,000 is in the form of interest-bearing loans repayable over twenty-five years.

**War service land settlement**

The following section deals with the financial operations of the War Service Land Settlement Division of the Department of Primary Industry. This information was formerly included in the chapter Land Settlement and Tenure (*see* Year Book No. 52, page 80). Additional information concerning the operations of the Division appears in Chapter 21, Rural Industry.

**WAR SERVICE LAND SETTLEMENT: COMMONWEALTH EXPENDITURE, STATES  
TO 30 JUNE 1967  
(\$'000)**

<i>Advances to States</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>Total</i>
For acquisition of land . . . . .	..	..	..	6,836	7,092	5,063	18,992
For development and improvement of land . . . . .	..	..	..	30,120	39,434	34,980	104,535
Special loans . . . . .	13,542	14,398	..	..	..	..	27,939
Commonwealth contributions to excess cost over valuation . . . . .	1,289	12,981	232	5,067	6,506	9,115	35,190
To provide credit facilities to settlers . . . . .	..	..	..	31,401	53,420	12,923	97,745
For remission of settlers' rent and interest . . . . .	874	378	72	693	1,062	487	3,566
For payment of living allowances to settlers . . . . .	2,020	2,434	326	850	960	404	6,994
For operation and maintenance of irrigation projects . . . . .	..	..	..	2,719	32	10	2,761
Loss on advances . . . . .	613	14	644	175	475	159	2,080
Cost of administration of credit facilities . . . . .	..	..	..	1,433	2,096	620	4,149
Concessions and rebates for King Island . . . . .	..	..	..	..	..	370	370
<b>Total . . . . .</b>	<b>18,339</b>	<b>30,204</b>	<b>1,275</b>	<b>79,295</b>	<b>111,078</b>	<b>64,131</b>	<b>304,321</b>

*Loans and Allowances (Agricultural Occupations) Scheme*

Full details of the measures taken for the re-establishment of ex-servicemen in rural occupations were given in earlier Year Books (*see* List of Special Articles, etc., preceding General Index to this volume). These measures provide for a scheme of loans and allowances to assist ex-servicemen in establishing themselves in agricultural occupations. The loans are made to eligible ex-servicemen for the purchase of land, effecting improvements on land, the acquisition of tools of trade, livestock, plant or equipment, the establishment of a co-operative business with other persons, reduction or

discharge of a mortgage, bill of sale, etc. At 30 June 1967, 14,307 loans had been approved, and advances amounting to \$20,357,000 had been made. The allowances are payable only in respect of the period during which the income derived from the occupation by the ex-serviceman concerned is considered inadequate. At 30 June 1967, 16,114 applications for allowances had been made, and the total amount paid in allowances was \$4,553,000.

Year Book No. 48 (page 98) contains details of the applications received and approved and the amounts involved for the individual States and Territories to 30 June 1961. There has been little subsequent change.

*War Service Land Settlement Branch—total expenditure*

The following table shows the total expenditure on various projects by the War Service Land Settlement Branch to 30 June 1967.

**COMMONWEALTH WAR SERVICE LAND SETTLEMENT BRANCH: EXPENDITURE  
STATES AND TERRITORIES TO 30 JUNE 1967  
(\$'000)**

<i>Project</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>Total expenditure</i>	<i>Receipts and repayments</i>	<i>Net expenditure</i>
War service land settlement expenditure from revenue or loan funds	18,339	30,204	1,275	79,295	111,078	64,131	304,321	(a) 110,941	193,380
Agricultural loans(b)	8,568	3,594	1,748	1,654	3,947	812	(c) 20,357	(d) 19,396	961
Agricultural allowances	1,160	592	956	650	962	232	(e) 4,553	..	4,553
Administration expenses	1,644	347	141	202	818	98	3,251	..	3,251
Rural training	660	1,008	212	380	454	216	2,930	298	2,632
<b>Total</b>	<b>30,371</b>	<b>35,745</b>	<b>4,332</b>	<b>82,181</b>	<b>117,259</b>	<b>65,489</b>	<b>(f) 335,412</b>	<b>(g) 130,635</b>	<b>204,777</b>

(a) Excludes interest, rent, and rates, \$29,856,000. (b) Includes expenditure on new loans of money repaid by borrowers. (c) Includes Northern Territory, \$20,000 and New Guinea, \$14,000. (d) Excludes interest, \$3,041,000. (e) Includes New Guinea, \$2,000. (f) Includes Northern Territory, \$20,000 and New Guinea, \$16,000. (g) Excludes interest, rent, and rates, \$32,907,000.

**All Commonwealth funds: receipts**

**Commonwealth taxation**

Taxation constitutes the main sources of Commonwealth revenue, accounting for almost 90 per cent in 1966–67. The following tables show details of taxation receipts from each source during the years 1962–63 to 1966–67 and their proportions of the totals.

**ALL COMMONWEALTH FUNDS: TAXATION RECEIPTS, 1962–63 TO 1966–67  
(\$'000)**

<i>Source of receipts</i>	<i>1962–63</i>	<i>1963–64</i>	<i>1964–65</i>	<i>1965–66</i>	<i>1966–67</i>
<b>Income tax—</b>					
Individuals	1,082,622	1,271,063	1,569,483	1,729,439	1,920,603
Companies	519,828	586,260	709,044	801,105	784,544
Dividend (withholding)	17,929	15,936	16,039	17,247	22,708
<b>Customs</b>	<b>210,136</b>	<b>232,497</b>	<b>268,400</b>	<b>270,871</b>	<b>274,873</b>
<b>Excise</b>	<b>548,803</b>	<b>582,464</b>	<b>631,242</b>	<b>751,960</b>	<b>806,509</b>
<b>Sales tax</b>	<b>313,062</b>	<b>325,189</b>	<b>362,857</b>	<b>370,044</b>	<b>380,673</b>
<b>Pay-roll tax</b>	<b>126,510</b>	<b>136,443</b>	<b>150,078</b>	<b>161,943</b>	<b>172,232</b>
<b>Estate duty</b>	<b>35,699</b>	<b>39,871</b>	<b>41,531</b>	<b>36,124</b>	<b>41,534</b>
<b>Gift duty</b>	<b>6,328</b>	<b>6,488</b>	<b>7,308</b>	<b>6,195</b>	<b>7,658</b>
<b>Primary production and other charges</b>	<b>3,643</b>	<b>4,007</b>	<b>4,808</b>	<b>13,041</b>	<b>14,575</b>
<b>Stevedoring industry charge</b>	<b>8,985</b>	<b>10,321</b>	<b>10,411</b>	<b>9,531</b>	<b>9,758</b>
<b>Wheat tax</b>	<b>595</b>	<b>638</b>	<b>720</b>	<b>591</b>	<b>1,081</b>
<b>Wool tax</b>	<b>5,911</b>	<b>6,359</b>	<b>13,987</b>	<b>15,201</b>	<b>14,869</b>
<b>Broadcasting stations' licence fees</b>	<b>214</b>	<b>235</b>	<b>226</b>	<b>218</b>	<b>209</b>
<b>Television stations' licence fees</b>	<b>181</b>	<b>232</b>	<b>28</b>	<b>1,620</b>	<b>963</b>
<b>Territories—</b>					
Australian Capital Territory	758	898	1,122	973	1,012
Northern Territory	212	440	482	537	612
Other	924	800	658	1,708	617
<b>Total</b>	<b>2,882,342</b>	<b>3,220,140</b>	<b>3,788,423</b>	<b>4,188,348</b>	<b>4,455,030</b>

**COMMONWEALTH TAXATION: PROPORTION OF EACH CLASS TO  
TOTAL NET COLLECTIONS, 1962-63 TO 1966-67**

(Per cent)

<i>Type of tax</i>	<i>1962-63</i>	<i>1963-64</i>	<i>1964-65</i>	<i>1965-66</i>	<i>1966-67</i>
Income taxes . . . . .	56.2	58.2	60.5	60.8	61.2
Customs . . . . .	7.3	7.2	7.1	6.5	6.2
Excise . . . . .	19.0	18.1	16.6	18.0	18.1
Sales tax . . . . .	10.9	10.1	9.6	8.8	8.5
Pay-roll tax . . . . .	4.4	4.2	4.0	3.9	3.9
Estate duty . . . . .	1.2	1.2	1.1	0.9	0.9
Gift duty . . . . .	0.2	0.2	0.2	0.1	0.2
Primary production and other charges	0.1	0.1	0.1	0.3	0.3
Stevedoring industry charge . . . . .	0.3	0.3	0.3	0.2	0.2
Wool tax . . . . .	0.2	0.2	0.4	0.4	0.3
Other . . . . .	0.2	0.2	0.1	0.1	0.1
<b>Total taxation . . . . .</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

**Customs and excise receipts**

**COMMONWEALTH CUSTOMS REVENUE: CLASSIFICATION OF  
NET RECEIPTS, 1962-63 TO 1964-65**

(\$'000)

<i>Class</i>	<i>1962-63</i>	<i>1963-64</i>	<i>1964-65</i>
Foodstuffs of animal origin . . . . .	1,198	1,464	1,564
Foodstuffs of vegetable origin . . . . .	4,159	4,909	3,210
Spirituous and alcoholic liquors . . . . .	10,956	12,670	14,709
Tobacco, cigars and cigarettes . . . . .	25,517	26,401	27,596
Animal substances (not foodstuffs) . . . . .	10	12	13
Vegetable substances and fibres . . . . .	641	599	630
Yarns, textiles and apparel . . . . .	29,888	33,582	39,400
Oils, fats and waxes . . . . .	22,733	21,696	20,718
Pigments, paints and varnishes . . . . .	810	765	759
Rocks and minerals . . . . .	226	236	17
Metals, metal manufactures and machinery . . . . .	65,013	74,074	91,644
Rubber and leather and manufactures thereof . . . . .	2,634	3,502	5,502
Wood and wicker, raw and manufactured . . . . .	3,247	4,379	6,393
Earthenware, cement, china, glass, and stoneware . . . . .	5,903	5,954	6,742
Pulp, paper and board, paper manufacture, and stationery . . . . .	5,556	5,608	6,476
Sporting materials, toys, fancy goods, jewellery, and time-pieces . . . . .	7,201	7,515	8,853
Optical, surgical and scientific instruments, photographic goods . . . . .	3,354	3,836	4,769
Chemicals, pharmaceutical products, essential oils, and fertilisers . . . . .	4,441	6,066	6,228
Miscellaneous goods . . . . .	12,136	13,904	16,905
Primage . . . . .	4,304	4,638	5,465
Other receipts . . . . .	275	764	887
<b>All classes . . . . .</b>	<b>210,202</b>	<b>232,572</b>	<b>268,480</b>
<b>Less Remission of duty under special circumstances . . . . .</b>	<b>66</b>	<b>75</b>	<b>80</b>
<b>Total . . . . .</b>	<b>210,136</b>	<b>232,497</b>	<b>268,400</b>

**CUSTOMS DUTIES ACCORDING TO BRUSSELS TARIFF DIVISIONS(a), 1966-67**  
(\$'000)

<i>Source of receipts</i>	<i>1965-66</i>	<i>1966-67</i>
Live animals; animal products . . . . .	1,155	1,040
Vegetable products . . . . .	1,755	1,797
Animal and vegetable fats and oils and their cleavage products; prepared edible fats; animal and vegetable waxes . . . . .	1,923	2,440
Prepared foodstuffs; beverages, spirits and vinegar; tobacco . . . . .	43,656	47,149
Mineral products . . . . .	19,394	9,488
Products of the chemical industry and allied industries . . . . .	10,420	12,340
Artificial resins and plastic materials, cellulose esters and ethers, and articles thereof; rubber, synthetic rubbers, factice and articles thereof . . . . .	11,781	12,278
Raw hides and skins, leather, furskins and articles thereof; saddlery and harness; travel goods, handbags and similar containers; articles of gut (other than silk-worm gut) . . . . .	1,962	2,409
Wood and articles of wood; wood charcoal; cork and articles of cork; manufactures of straw, of esparto and of other plaiting materials; basketware and wickerwork . . . . .	6,627	6,902
Paper-making material; paper and paper-board and articles thereof . . . . .	6,838	7,545
Textiles and textile articles . . . . .	34,952	38,019
Footwear, headgear, umbrellas, sunshades, whips, riding-crops and parts thereof; prepared feathers and articles made therewith; artificial flowers; articles of human hair; fans . . . . .	3,193	4,362
Articles of stone, of plaster, of cement, of asbestos, of mica and of similar materials; ceramic products; glass and glassware . . . . .	7,272	7,346
Pearls, precious and semi-precious stones, precious metals, rolled precious metals, and articles thereof; imitation jewellery; coin . . . . .	1,187	1,200
Base metals and articles of base metal . . . . .	18,606	18,321
Machinery and mechanical appliances; electrical equipment; parts therefor . . . . .	47,052	44,813
Vehicles, aircraft, and parts therefor; vessels and certain associated transport equipment . . . . .	25,575	29,280
Optical, photographic, cinematographic, measuring, checking, precision, medical and surgical instruments and apparatus; clocks and watches, musical instruments; sound recorders and reproducers; television image and sound recorders and reproducers, magnetic; parts therefor . . . . .	8,880	9,054
Arms and ammunition; parts therefor . . . . .	466	473
Miscellaneous manufactured articles . . . . .	8,537	8,422
Works of art, collector's pieces and antiques . . . . .	—5	5
Miscellaneous . . . . .	4,366	4,613
Primage . . . . .	5,420	5,799
<i>Total, customs duties and primage . . . . .</i>	<i>271,010</i>	<i>275,095</i>
<i>Less Remission of duty under special circumstances . . . . .</i>	<i>139</i>	<i>222</i>
<b>Total . . . . .</b>	<b>270,871</b>	<b>274,873</b>

(a) Following the adoption as from 1 July 1965 of the Brussels Tariff Nomenclature in the new Australian Customs Tariff, the source of customs duties is shown under the heads of the sections of Customs Tariff. In earlier years, collections of customs duties were shown by statistical classes—see preceding table.



**COMMONWEALTH EXCISE REVENUE: CLASSIFICATION OF NET RECEIPTS**  
**1962-63 TO 1966-67**  
**(\$'000)**

	1962-63	1963-64	1964-65	1965-66	1966-67
Beer . . . . .	234,525	247,169	260,214	302,104	320,832
Spirits . . . . .	17,164	18,306	19,207	22,871	24,873
Tobacco . . . . .	21,082	18,710	17,795	18,070	17,040
Cigars and cigarettes . . . . .	140,372	146,199	171,073	199,740	201,051
Cigarette papers . . . . .	1,141	1,013	901	858	824
Petrol . . . . .	122,029	135,974	148,194	190,670	220,639
Diesel fuel . . . . .	5,152	7,665	9,099	13,597	15,481
Matches . . . . .	2,253	2,288	2,276	2,267	2,167
Playing cards . . . . .	98	104	106	114	112
Coal . . . . .	560	585	599	621	634
Cathode ray tubes . . . . .	4,212	3,911	605	..	..
Canned fruit . . . . .	..	402	1,092	1,092	1,263
Miscellaneous . . . . .	103	42	1	-68	1,530
<i>All items</i> . . . . .	<i>548,692</i>	<i>582,369</i>	<i>631,162</i>	<i>751,936</i>	<i>806,445</i>
Diesel fuel taxation . . . . .	323	319	309	265	362
Less Rebates . . . . .	211	224	229	241	298
	<i>111</i>	<i>95</i>	<i>80</i>	<i>24</i>	<i>64</i>
<b>Total . . . . .</b>	<b>548,803</b>	<b>582,464</b>	<b>631,242</b>	<b>751,960</b>	<b>806,509</b>

**Primary production and other charges**

**COMMONWEALTH PRIMARY PRODUCTION AND OTHER CHARGES: RECEIPTS**  
**1962-63 TO 1966-67**  
**(\$'000)**

Source of revenue	1962-63	1963-64	1964-65	1965-66	1966-67
Apple and pear export charge . . . . .	198	251	213	272	207
Butter fat levy . . . . .	..	..	..	1,812	2,120
Canned fruit export charge . . . . .	138	183	176	223	224
Canning fruit charge . . . . .	142	61	102	120	116
Cattle slaughter levy . . . . .	813	879	298	..	..
Dairy produce export charge . . . . .	437	527	674	5	..
Dairy produce levy . . . . .	791	793	817	31	..
Dried fruits export charge . . . . .	85	118	155	193	159
Dried vine fruits contributory charge—					
Currants . . . . .	..	..	..	72	52
Raisins . . . . .	..	..	..	165	..
Sultanas . . . . .	..	..	..	1,530	..
Egg export charge . . . . .	35	56	82	20	5
Honey levy . . . . .	7	81	104	101	92
Livestock slaughter levy—					
Cattle . . . . .	..	..	1,157	1,441	1,315
Sheep and lambs . . . . .	..	..	299	399	809
Meat export charge . . . . .	438	486	103	..	..
Poultry industry levy . . . . .	..	..	..	6,000	8,859
Tobacco charge . . . . .	239	348	354	369	239
Wine export charge . . . . .	320	224	274	288	380
<b>Total . . . . .</b>	<b>3,643</b>	<b>4,007</b>	<b>4,808</b>	<b>13,041</b>	<b>14,575</b>

**Other Commonwealth taxation**

Taxes other than customs and excise duties, the various export charges and some taxes on particular commodities are assessed and collected by the Commissioner of Taxation. The Commissioner's organisation comprises a head office in Canberra, an office in each State assessing the returns of taxpayers whose interests are restricted to that State, and a central office situated in Melbourne assessing taxpayers whose interests are in the Australian Capital Territory or are in more than one State.

Details of the purposes and rates applicable to the main forms of Commonwealth taxation, excluding customs and excise, currently imposed and of current legislation are given in the following pages. Historical information is given in Year Book No. 51, pages 905-10, and in earlier issues. Taxes on income are treated separately on pages 797-807 and customs and excise duties are dealt with in the chapter Overseas Transactions. For detailed statistics relating to Commonwealth income taxes, estate duty, gift duty, and sales tax see the annual bulletin *Commonwealth Taxation Assessments*.

**Sales tax.** The general rate of tax levied on all goods other than those specified in the schedules to the *Sales Tax (Exemptions and Classifications) Act 1935-1967* was 12½ per cent, and goods subject to special rates were taxed at the rates of 2½ and 25 per cent.

Particulars of the net amount of sales tax payable and the sales of taxable and exempt goods in each State for 1966-67 are given in the following table. The figures relate to sales during the period 1 July to 30 June. The figures for sales tax payable differ from those for net collections shown on page 747 because the latter include some adjustments in respect of earlier tax years and relate to tax payable on returns lodged during the year, which in general cover sales for the period June to May.

**COMMONWEALTH SALES TAX AND AMOUNT OF SALES: STATES AND TERRITORIES  
1966-67  
(\$'000)**

	<i>N.S.W. (a)</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>Aust.</i>
Net sales on which sales tax was payable at—								
2½ per cent . . . . .	225,893	223,058	70,493	47,236	36,834	11,464	324	615,302
12½ per cent . . . . .	618,444	428,774	182,530	114,298	103,842	29,391	2,462	1,479,741
25 per cent . . . . .	301,534	215,784	90,930	62,120	53,989	18,423	470	743,250
<i>Total net sales</i>	<i>1,145,872</i>	<i>867,615</i>	<i>343,952</i>	<i>223,654</i>	<i>194,665</i>	<i>59,279</i>	<i>3,255</i>	<i>2,838,294</i>
Sales of exempt goods by registered persons . . . . .	3,248,326	2,202,583	988,357	557,775	574,995	215,404	14,345	7,801,785
<b>Total sales of taxable and exempt goods . . . . .</b>	<b>4,394,198</b>	<b>3,070,198</b>	<b>1,332,309</b>	<b>781,429</b>	<b>769,660</b>	<b>274,683</b>	<b>17,600</b>	<b>10,640,079</b>
Sales tax payable . . . . .	158,336	113,119	47,311	30,998	27,398	8,566	433	386,163

(a) Includes Australian Capital Territory.

Sales of taxable and exempt goods and sales tax payable for Australia as a whole are shown in the following table for the years 1962-63 to 1966-67.

**COMMONWEALTH SALES TAX AND AMOUNT OF SALES  
AUSTRALIA, 1962-63 TO 1966-67  
(\$ million)**

<i>Year of sale</i>	<i>Net sales on which sales tax was payable</i>	<i>Sales of exempt goods by registered persons</i>	<i>Total sales of taxable and exempt goods</i>	<i>Sales tax payable</i>
1962-63 . . . . .	2,303	5,254	7,557	314
1963-64 . . . . .	2,393	6,116	8,509	329
1964-65 . . . . .	2,589	6,819	9,408	365
1965-66 . . . . .	2,645	7,112	9,757	367
1966-67 . . . . .	2,838	7,802	10,640	386

In the foregoing tables sales include goods transferred to stock for sale by retail, goods imported by persons other than registered taxpayers, and goods used in the business of the taxpayer. Exempt sales relate to goods exempted from sales tax under the *Sales Tax (Exemptions and Classifications) Act 1935-1967*. The figures shown do not represent the total sales of all commodities, as vendors trading only in exempt goods are not required to be registered, and consequently the volume of their sales is not included in the statistics above. In addition, non-taxable sales (i.e. goods sold by one registered taxpayer to another registered taxpayer) are excluded.

*Pay-roll tax* came into operation on 2 May 1941 and provided for the imposition of a tax on wages accruing after 30 June 1941. The relevant laws are *Pay-roll Tax Assessment Act 1941-1967*, *Pay-roll Tax Act 1941-1966*, and *Pay-roll Tax Regulations*. From 1 September 1957 pay-roll tax of 2½ per cent (rate unchanged since its inception) was payable by employers on all wages and salaries in excess of \$400 a week or \$20,800 per annum. Collections of pay-roll tax amounted to \$172,232,000 in 1966-67.

Employers whose export sales have increased above the annual average of export sales effected during a base period of two years ended 30 June 1960 are entitled under the Commonwealth Government's export incentive scheme to a rebate of pay-roll tax of twelve and one-half times the percentage increase in export sales.

*Estate duty.* Under the *Estate Duty Assessment Act 1914-1967* estate duty is assessed on the net value of the estate less a statutory exemption determined in accordance with the following formula, applying from 31 October 1963: (a) where the whole of the estate passes to the widow or widower, children (including adopted children, step-children and ex-nuptial children), or grand-children of the deceased, the sum of \$20,000 decreasing by \$2 for every \$8 by which the value exceeds \$20,000 and ceasing to apply at \$100,000; (b) where no part of the estate passes to the widow or widower, children or grand-children, the sum of \$10,000 decreasing by \$2 for every \$8 by which the value exceeds \$10,000 and ceasing to apply at \$50,000; and (c) where only part of the estate passes to the widow or widower, children or grand-children, an amount calculated proportionately under (a) and (b). Special exemptions are also allowed in respect of estates of defence personnel who die on active service or within three years of termination of their active service from injuries received or diseases contracted while on active service, and prescribed personal property held in Australia by certain United States personnel who are in Australia solely for purposes connected with projects of the United States Government. A rebate of duty may be allowable if the deceased was a beneficiary in an estate (upon which duty is payable or has been paid) of a person who predeceased him by not more than five years.

The rates of duty levied under the *Estate Duty Act 1914-1966* increase as the value of the estate for duty increases, as follows: does not exceed \$20,000, 3 per cent; \$20,001 to \$40,000, 3 per cent to 6 per cent; \$40,001 to \$240,000, 6 per cent to 26 per cent; \$240,001 to \$1,000,000, 26 per cent to 27.9 per cent; \$1,000,000 or more, 27.9 per cent.

Particulars of the number and value of estates and duty assessed, for each of the assessment years 1962-63 to 1966-67, are given in the following table.

#### COMMONWEALTH ESTATE DUTY ASSESSMENTS, 1962-63 TO 1966-67

		1962-63	1963-64	1964-65	1965-66	1966-67
Estates . . . . .	No.	16,634	17,658	12,423	10,948	12,056
Gross value assessed . . . . .	\$'000	588,306	633,552	602,216	587,488	664,034
Deductions . . . . .	"	106,732	115,002	116,821	117,304	131,930
Statutory exemption . . . . .	"	74,510	81,836	92,641	109,468	127,602
Dutiable value . . . . .	"	407,064	436,714	392,754	360,715	404,502
Net duty payable . . . . .	"	37,988	39,840	40,935	38,410	43,817
Average dutiable value . . . . .	\$	24,472	24,732	31,615	32,948	33,552
Average duty per estate . . . . .	\$	2,284	2,256	3,295	3,508	3,634

*Gift duty.* The *Gift Duty Act 1941-1967* and the *Gift Duty Assessment Act 1941-1967* impose a gift duty on gifts made after 29 October 1941. A gift is defined as any disposition of property which is made otherwise than by will, without adequate consideration in money or money's worth. There is a liability on both the donor and the donee to furnish a return, and both are jointly and severally liable for payment of the duty. However, if a return is furnished by the donor, the donee is relieved of this obligation.

Certain exemptions from duty are provided by the Assessment Act, the more important being: payments to an employees' superannuation or like fund; retiring allowances or gratuities granted to employees; gifts to non-profit organisations; gifts to the Commonwealth or a State; and small gifts not exceeding \$100.

Where the value of the gift together with the total value of gifts made by the donor during the preceding eighteen months does not exceed \$4,000, no duty is payable.

The rate of gift duty applicable to any particular gift is fixed by reference to the total value of all gifts made by the same donor within the period of eighteen months before and eighteen months after the time of making that gift. The present rates of duty are: (a) where the total value of all gifts

does not exceed \$4,000, nil; (b) \$4,001 to \$20,000, 3 per cent provided that the gift duty payable shall not exceed half the amount by which the gift exceeds \$4,000, or a proportionate amount where more than one gift is involved; (c) \$20,001 to \$40,000, 3 per cent to 6 per cent; (d) \$40,001 to \$240,000, 6 per cent to 26 per cent; (e) \$240,001 to \$1,000,000, 26 per cent to 27.9 per cent; and (f) \$1,000,000 or more, 27.9 per cent.

Particulars of the number of gift duty assessments, value of gifts as assessed and duty assessed for each of the assessment years 1962-63 to 1966-67 are given in the following table.

COMMONWEALTH GIFT DUTY ASSESSMENTS, 1962-63 TO 1966-67

		1962-63	1963-64	1964-65	1965-66	1966-67
Assessments . . . . .	No.	7,020	7,676	8,306	7,516	8,946
Value as assessed . . . . .	\$'000	107,146	118,126	124,709	111,658	130,771
Duty assessed . . . . .	„	6,066	6,768	6,870	5,911	7,633

*Wool tax.* The present rate of wool tax is 2 per cent of the sale value of the wool and this rate has operated since 1 July 1965.

*Wheat export charge and wheat tax.* The *Wheat Export Charge Act* 1963-1966 repealed the *Wheat Export Charge Act* 1958 and provided for an export charge on wheat and wheat products for the seasons 1963-64 to 1967-68 inclusive. The charge which may be levied is the excess of the export price over the guaranteed price or \$0.15 per bushel, whichever is the less. Under the *Wheat Industry Stabilization Act* 1963-1966, to which the *Wheat Export Charge Act* is complementary, the Commonwealth Government guarantees a return to wheat-growers of the ascertained cost of production on up to 150 million bushels of wheat harvested each season exported from Australia. Collections from the wheat export charge are paid into the Wheat Prices Stabilization Fund, out of which payments will be made to the Australian Wheat Board, when required, for the purpose of building up the average export price for any season to the guaranteed price in respect of exports up to 150 million bushels. If the fund is exhausted, payments will be made as necessary from the Consolidated Revenue Fund. As the return from exports has been below the guaranteed price, there have been no collections of the wheat export charge since the 1956-57 (No. 20) Pool, when \$3,178,000 was collected. The *Wheat Tax Act* 1957-1966 imposes a tax of three-tenths of a penny (0.25 cents) for each bushel of wheat delivered to the Wheat Board on or after 1 October 1965. (See also the chapter Rural Industry.)

*Miscellaneous export charges.* These consist of charges levied on exports of apples and pears (*Apple and Pear Export Charges Act* 1938-1966), canned fruits (*Canned Fruits Export Charges Act* 1926-1966), dried fruits (*Dried Fruits Export Charges Act* 1924-1965), and eggs (*Eggs Export Charges Act* 1947-1965).

*Stevedoring Industry Charge.* The rate of charge between 1 April 1962 and March 1967 was 33½ cents per man-hour. The rate was increased to 48 cents per man-hour from 8 March 1967.

*Tobacco charge.* The rates of tobacco charge currently in force are as follows:

- (a) in respect of leaf sold to a manufacturer:
  - (i) one half cent per pound of leaf, payable by the grower or other persons who own the leaf immediately before sale, and
  - (ii) one cent per pound of leaf, payable by the manufacturer;
- (b) in respect of leaf grown and used by grower-manufacturers:
  - (i) where the manufacturer grows nine-tenths of the leaf used by him—one half cent per pound of leaf,
  - (ii) in other cases—one cent per pound of leaf.

(See also the chapter Rural Industry.)

*Dairy produce and butterfat levies.* The *Butter Fat Levy Act* 1965-1966, which superseded the *Dairy Produce Levy Act* 1958, and the *Dairy Produce Export Charge Act* 1924-1962 provide for a maximum rate of \$0.60 per hundredweight of butterfat content of dairy products and for the apportionment of the proceeds between overseas marketing (40 per cent), local promotion (40 per cent), and research (20 per cent). (See also the chapter Rural Industry.)

*Canning-fruit charge.* The present rate of canning-fruit charge is \$0.75 per ton of fruit. This rate has operated since 1 December 1964.

*Honey levy.* The current rate of levy on honey sold for domestic consumption in Australia is four-tenths of a cent per pound.

*Livestock slaughter levy.* The *Livestock Slaughter Levy Act* 1964-1966 imposed a levy on all cattle (over 200 lb dressed weight), sheep and lambs slaughtered within Australia for human consumption. These levies operated from 1 August 1964 and replaced the charge imposed on meat exports and also subsumed the cattle slaughter levy for beef research purposes imposed in 1960 (see page 909 of Year Book No. 51). The rates of levy are not to exceed 75 cents for cattle, of which a maximum of 20 cents is for beef research, and 7.5 cents for sheep or lambs, of which a maximum of 3.33 cents is for sheep or lamb research.

*Dried Vine Fruits Contributory Charge.* Charges in respect of 1965 season fruits were paid into the varietal stabilisation funds at the following rates: currants, \$4.12 a ton, and raisins \$3.76 a ton.

*Poultry industry levy.* The rates of levy for each hen kept for commercial purposes (the first twenty hens being exempt) was three pence and one farthing per fortnight from 1 July 1965 to 23 February 1966, 2.8 cents per fortnight from 23 February 1966 to 13 July 1966, 3.5 cents per fortnight from 13 July 1966 to 19 April 1967, 5.0 cents per fortnight from 19 April 1967 to 12 July 1967, and 4.0 cents from 12 July 1967.

### Commonwealth Consolidated Revenue Fund: expenditure

#### Details of expenditure from Consolidated Revenue

In the following table gross expenditure from Consolidated Revenue is classified by function and economic type, the classification being consistent with that used for tables on pages 731-3. As with grants to other Commonwealth authorities, transfers to trust funds are here classified as expenditure according to the nature of the respective trust funds. Further information on the expenditure of business undertakings and the Territories, and on other particular functions is included in the chapters Transport and Communication and The Territories of Australia and in the chapters dealing with the respective activities.

#### COMMONWEALTH CONSOLIDATED REVENUE FUND: EXPENDITURE BY FUNCTION AND ECONOMIC TYPE, 1962-63 TO 1966-67

(\$'000)

	1962-63	1963-64	1964-65	1965-66	1966-67
<b>Health and welfare—</b>					
Advances . . . . .	1,000	..	600	..	..
Cash benefits to persons . . . . .	757,443	831,327	877,037	926,616	1,016,930
Current expenditure on goods and services . . . . .	26,993	29,034	32,181	35,099	42,079
Capital expenditure on goods and services . . . . .	2,375	3,081	3,489	3,681	2,738
Grants to the States . . . . .	2,602	2,218	3,224	5,261	8,199
Grants towards private capital expenditure . . . . .	6,372	7,408	8,000	8,666	10,332
<i>Total, health and welfare</i> . . . . .	<i>796,785</i>	<i>873,068</i>	<i>924,531</i>	<i>979,323</i>	<i>1,080,278</i>
<b>Defence—</b>					
Current expenditure on goods and services . . . . .	427,014	474,422	568,686	753,679	778,615
Grants to overseas governments and organisations . . . . .	7,584	5,414	12,210	25,678	37,439
Other . . . . .	—2,326	38,842	17,214	—37,502	35,009
<i>Total</i> . . . . .	<i>432,272</i>	<i>518,678</i>	<i>598,110</i>	<i>741,855</i>	<i>851,063</i>
<i>Less</i> Amounts charged to loan fund . . . . .	<i>132,140</i>	<i>77,430</i>	<i>..</i>	<i>89,545</i>	<i>198,426</i>
<i>Total, defence</i> . . . . .	<i>300,132</i>	<i>441,248</i>	<i>598,110</i>	<i>652,310</i>	<i>652,637</i>
<b>Repatriation—</b>					
Cash benefits to persons . . . . .	163,888	181,925	181,036	200,509	192,780
Current expenditure on goods and services . . . . .	50,056	55,210	58,818	63,659	70,419
Capital expenditure on goods and services . . . . .	996	712	1,124	1,156	889
Grants towards private capital expenditure . . . . .	2,342	800	2,794	5,714	6,031
<i>Total, repatriation</i> . . . . .	<i>217,282</i>	<i>238,647</i>	<i>243,772</i>	<i>271,038</i>	<i>270,119</i>
<b>Housing—</b>					
Expenses of business undertakings . . . . .	1,298	1,458	1,376	1,299	1,354
<b>Advances—</b>					
War Service Homes . . . . .	75,000	70,000	70,000	70,000	59,100
Other . . . . .	6,682	7,770	16,890	12,410	14,306
Cash benefits to persons . . . . .	38	46	130	213	142
Current expenditure on goods and services . . . . .	2,602	3,056	3,842	4,172	4,593
Capital expenditure on goods and services . . . . .	10,502	9,686	12,436	15,257	13,485
Grants towards private capital expenditure . . . . .	..	..	11,350	13,346	11,885
<i>Total, housing</i> . . . . .	<i>96,122</i>	<i>92,016</i>	<i>116,024</i>	<i>116,697</i>	<i>104,865</i>

For footnotes see next page.

**COMMONWEALTH CONSOLIDATED REVENUE FUND: EXPENDITURE  
BY FUNCTION AND ECONOMIC TYPE, 1962-63 TO 1966-67—continued**  
(\$'000)

	1962-63	1963-64	1964-65	1965-66	1966-67
<b>Other functions—</b>					
Expenses of business undertakings . . . . .	261,947	286,279	314,254	345,379	385,638
Other current expenditure on goods and services . . . . .	234,154	275,988	329,082	372,555	433,174
Capital expenditure on goods and services—					
Business undertakings(a) . . . . .	137,460	151,120	177,330	201,745	225,896
Other . . . . .	51,993	61,885	73,965	81,053	98,396
Subsidies . . . . .	71,252	115,658	99,808	143,472	162,298
Cash benefits to persons . . . . .	14,810	14,357	21,526	27,755	35,974
Grants to the States—					
Current purposes . . . . .	20,396	23,106	31,258	44,478	62,402
Capital purposes . . . . .	133,222	140,476	178,742	194,102	211,600
Grants to overseas governments and organisations(b) . . . . .	64,995	81,210	94,260	101,754	112,694
Grants towards private capital expenditure Advances—	..	..	4,040	19,500	16,308
Snowy Mountains Hydro-electric Authority . . . . .	18,532	23,658	26,100	26,520	44,096
States . . . . .	6,720	10,754	13,788	34,231	28,191
Overseas governments and organisations . . . . .	..	4	78	296	5,822
Other . . . . .	7,974	15,430	8,272	7,549	2,270
<b>Total, other functions . . . . .</b>	<b>1,023,455</b>	<b>1,199,925</b>	<b>1,372,503</b>	<b>1,600,389</b>	<b>1,824,759</b>
<b>Not allocated to function—</b>					
Current expenditure on goods and services . . . . .	9,178	11,104	13,912	15,750	15,160
Capital expenditure on goods and services . . . . .	12,536	11,028	13,462	12,952	20,069
Grants to the States . . . . .	695,808	729,730	744,884	832,052	900,805
Advances to overseas governments and organisations . . . . .	31,148	8,070	24,868	45,985	33,193
Debt charges(c)—					
Interest . . . . .	81,084	81,260	81,868	77,392	74,306
Payments to National Debt Sinking Fund . . . . .	54,486	57,530	61,500	64,849	21,586
Loan Consolidation and Investment Reserve . . . . .	52,756	29,750	222,744	210,464	227,654
Redemption of Treasury bills . . . . .	..	36,000	..	..	..
Redemption of International Bank loans . . . . .	..	..	..	..	2,286
<b>Total, not allocated . . . . .</b>	<b>936,996</b>	<b>964,472</b>	<b>1,163,238</b>	<b>1,259,444</b>	<b>1,295,059</b>
<b>Grand total . . . . .</b>	<b>3,370,772</b>	<b>3,809,376</b>	<b>4,418,178</b>	<b>4,879,201</b>	<b>5,227,721</b>

(a) Includes expenses of undertakings in Northern Territory and Australian Capital Territory. (b) Includes grants to Administration of Papua and New Guinea and grants under Colombo Plan, United Nations Technical Assistance Administration, etc. (c) Excludes loan management expenses included in other functions.

Minus sign (—) denotes the result of differences in timing between payments for, and deliveries of, defence equipment.

More detailed information on defence expenditure, on current and capital expenditure on goods and services, and on primary production research and sales promotion, etc. is given in the following tables.

#### Defence services expenditure

Details of the expenditure on defence services shown in the following table cover expenditure from Consolidated Revenue and Loan Funds by the services and associated departments, including the cost of maintaining forces in overseas posts. In recent years there has been no expenditure on defence services from Trust Funds.

**COMMONWEALTH CONSOLIDATED REVENUE FUND**  
**EXPENDITURE ON DEFENCE, 1962-63 TO 1966-67**  
 (\$'000)

	1962-63	1963-64	1964-65	1965-66	1966-67
<b>Department of Defence—</b>					
Administrative and general expenses . . . . .	5,293	3,532	4,207	6,961	7,346
Buildings, works, sites, etc. . . . .	241	113	294	197	904
Maintenance and rent . . . . .	100	112	117	202	238
<i>Total, Defence</i> . . . . .	<i>5,634</i>	<i>3,757</i>	<i>4,618</i>	<i>7,359</i>	<i>8,488</i>
<b>Department of the Navy—</b>					
Naval forces—pay, maintenance, etc. . . . .	63,708	72,359	83,624	99,046	110,437
Naval construction and additions to the fleet . . . . .	14,805	23,763	35,967	44,918	51,689
Ships, aircraft and aircraft engines . . . . .	14,932	9,702	8,622	15,494	8,438
Buildings, works, sites, etc. . . . .	2,879	2,413	4,052	7,232	7,927
Maintenance and rent . . . . .	2,099	2,417	2,631	3,159	3,692
Retirement benefits . . . . .	838	1,024	1,172	1,229	1,392
<i>Total, Navy</i> . . . . .	<i>99,261</i>	<i>111,678</i>	<i>136,069</i>	<i>171,079</i>	<i>183,575</i>
<b>Department of the Army—</b>					
Military forces—pay, maintenance, etc. . . . .	83,544	91,300	108,920	133,675	169,795
Special units serving abroad—maintenance . . . . .	3,658	4,026	4,566	9,773	26,386
Arms, armament and equipment . . . . .	36,958	48,432	61,690	67,921	69,913
Buildings, works, sites, etc. . . . .	5,482	6,551	13,856	38,693	58,088
Maintenance and rent . . . . .	4,649	5,444	6,372	7,503	8,447
Retirement benefits . . . . .	2,202	2,668	3,368	3,657	3,827
<i>Total, Army</i> . . . . .	<i>136,493</i>	<i>158,421</i>	<i>198,772</i>	<i>261,223</i>	<i>336,456</i>
<b>Department of Air—</b>					
Air force—pay, maintenance, etc. . . . .	55,848	59,221	69,389	77,674	86,311
R.A.A.F. squadrons overseas . . . . .	5,156	5,570	5,592	7,080	9,447
Aircraft, equipment and stores . . . . .	61,302	101,418	91,034	111,712	111,117
Buildings, works, sites, etc. . . . .	6,144	5,616	7,598	13,336	11,719
Maintenance and rent . . . . .	5,279	5,324	5,570	6,024	7,096
Retirement benefits . . . . .	1,738	1,996	2,996	2,582	2,808
<i>Total, Air</i> . . . . .	<i>135,467</i>	<i>179,145</i>	<i>182,179</i>	<i>218,408</i>	<i>228,498</i>
<b>Department of Supply—</b>					
Administrative and general expenses . . . . .	6,825	3,746	8,912	9,566	14,107
Defence Research and Development Laboratories . . . . .	7,756	9,292	10,608	10,401	10,627
Government factories—maintenance of production capacity . . . . .	2,952	3,090	2,766	2,270	3,139
Transport and storage services . . . . .	4,178	4,508	6,764	7,027	7,661
Weapons Research Establishment . . . . .	15,256	29,012	28,320	27,725	28,030
Munitions factories—working capital . . . . .	660	164	..	2,004	475
Machinery, plant equipment, etc. . . . .	4,080	4,650	4,850	7,067	7,601
Buildings, works, sites, n.e.i. etc. . . . .	2,602	2,185	2,486	3,011	3,853
Maintenance and rent . . . . .	1,799	1,939	2,038	2,293	2,465
<i>Total, Supply</i> . . . . .	<i>46,110</i>	<i>58,586</i>	<i>66,744</i>	<i>71,364</i>	<i>77,958</i>
Defence aid for Malaysia . . . . .	..	144	3,376	5,034	8,036
Economic assistance to support defence programme of S.E.A.T.O. member countries . . . . .	2,496	1,888	2,504	2,258	2,309
Security Intelligence Organization . . . . .	1,410	1,716	1,920	1,990	2,656
Civil defence . . . . .	546	642	644	724	709
Recruiting campaign . . . . .	1,000	1,378	1,690	1,646	1,556
Aid to India . . . . .	2,892	1,284	60	17	..
Other . . . . .	963	39	—466	751	821
<i>Total, Defence services</i> . . . . .	<i>432,272</i>	<i>518,678</i>	<i>598,110</i>	<i>741,855</i>	<i>851,063</i>
<i>Less Expenditure charged to Loan Fund.</i> . . . .	<i>132,140</i>	<i>77,430</i>	<i>..</i>	<i>89,545</i>	<i>198,426</i>
<b>Total expenditure charged to Consolidated Revenue Fund</b> . . . . .	<b>300,132</b>	<b>441,248</b>	<b>598,110</b>	<b>652,310</b>	<b>652,637</b>

**Current expenditure on goods and services**

This table gives details of expenditure on items included under this general heading in the table on pages 754-5, and in the main includes expenditure on administrative services and other activities (i.e. what might be termed 'running expenses') and therefore *excludes* expenditure on capital works (see table on page 759). Information on the functions of departments and the Acts administered by the Ministers of Departments may be found on pages 87-98 of Year Book No. 49.

**COMMONWEALTH CONSOLIDATED REVENUE FUND: CURRENT EXPENDITURE ON  
GOODS AND SERVICES, 1962-63 TO 1966-67**  
(£'000)

	1962-63	1963-64	1964-65	1965-66	1966-67
<b>Education—</b>					
Australian National University . . . . .	7,020	8,640	11,400	12,658	14,223
Other . . . . .	5,256	6,074	7,655	8,674	9,725
<i>Total, education . . . . .</i>	<i>12,276</i>	<i>14,714</i>	<i>19,055</i>	<i>21,332</i>	<i>23,948</i>
<b>Health and welfare . . . . .</b>	<b>26,993</b>	<b>29,034</b>	<b>32,181</b>	<b>35,099</b>	<b>42,079</b>
<b>Defence—</b>					
Total . . . . .	427,014	474,422	568,686	753,679	778,615
Less Amounts charged to Loan Fund . . . . .	132,140	77,430	..	89,545	198,426
<i>Total, defence . . . . .</i>	<i>294,874</i>	<i>396,992</i>	<i>568,686</i>	<i>664,134</i>	<i>580,189</i>
Repatriation . . . . .	50,056	55,210	58,818	63,659	70,419
Housing . . . . .	2,602	3,056	3,842	4,172	4,593
<b>Law, order and public safety—</b>					
Crown Solicitor's Office . . . . .	960	1,144	1,216	1,322	1,512
High Court . . . . .	332	340	370	398	431
Bankruptcy administration . . . . .	522	576	624	662	828
Other . . . . .	3,819	4,419	5,092	5,884	8,434
<i>Total, law, order, etc. . . . .</i>	<i>5,633</i>	<i>6,479</i>	<i>7,302</i>	<i>8,266</i>	<i>11,205</i>
<b>Development of resources and assistance to industry—</b>					
Bureau of Meteorology . . . . .	3,992	4,428	4,906	5,364	5,893
Forestry Branch . . . . .	419	374	607	735	1,081
Commercial intelligence services abroad	2,376	2,726	2,996	3,313	3,727
Primary production—					
Wheat and wool industries . . . . .	8,396	9,122	22,150	26,416	27,090
Other research and sales promotion, export funds, etc. . . . .	3,918	5,230	6,532	9,632	8,229
Bureau of Agricultural Economics . . . . .	372	444	472	523	630
Bureau of Mineral Resources, Geology and Geophysics . . . . .	4,020	4,930	4,708	4,775	4,725
Division of National Mapping . . . . .	1,346	1,414	1,706	1,786	2,111
Atomic Energy Commission . . . . .	6,518	7,594	8,040	8,226	8,593
Commonwealth Scientific and Industrial Research Organization . . . . .	18,746	21,121	24,097	25,393	28,593
Other . . . . .	15,173	16,749	17,366	25,273	31,783
<i>Total, development, etc. . . . .</i>	<i>65,276</i>	<i>74,132</i>	<i>93,580</i>	<i>111,436</i>	<i>122,455</i>
<b>Civil aviation—</b>					
Maintenance and development of civil aviation . . . . .	15,728	17,736	20,296	22,516	25,005
Meteorological services . . . . .	1,920	2,140	2,392	2,600	2,898
Other . . . . .	5,819	6,773	7,271	8,337	10,696
<i>Total, civil aviation, etc. . . . .</i>	<i>23,467</i>	<i>26,649</i>	<i>29,959</i>	<i>33,453</i>	<i>38,599</i>

For footnotes see next page.



**COMMONWEALTH CONSOLIDATED REVENUE FUND: CURRENT EXPENDITURE  
ON GOODS AND SERVICES, 1962-63 TO 1966-67—continued**  
(\$'000)

	1962-63	1963-64	1964-65	1965-66	1966-67
<b>Legislature and general administration—</b>					
Parliament . . . . .	4,278	4,414	4,894	5,494	5,712
Governor-General . . . . .	344	358	392	375	422
Audit . . . . .	1,692	1,950	2,024	2,081	2,514
Public Service Board . . . . .	1,838	2,134	2,420	2,738	3,407
Taxation Branch and Boards of Review . . . . .	22,628	25,400	27,080	30,464	36,027
Bureau of Census and Statistics . . . . .	5,572	6,276	7,346	8,783	14,081
Commonwealth Superannuation Board . . . . .	362	422	498	752	931
Electoral Branch . . . . .	1,568	2,530	2,772	2,164	4,749
News and Information Bureau . . . . .	1,240	1,396	1,660	1,903	2,327
Other . . . . .	(a)37,149	51,440	59,284	66,949	81,898
<i>Total, legislature, etc.</i> . . . .	76,671	96,320	108,370	121,703	152,068
<b>Immigration—</b>					
Assisted migration . . . . .	13,205	17,745	25,458	26,186	26,332
Other . . . . .	7,683	7,901	8,566	9,409	11,337
<i>Total, immigration</i> . . . . .	20,888	25,646	34,024	35,595	37,669
<b>Regulation of trade and industry—</b>					
Conciliation and Arbitration Commission, Industrial Court and Registrar . . . . .	734	816	884	996	1,080
Patents, trade marks and designs . . . . .	1,178	1,330	1,478	1,515	1,663
Inspection of goods for export . . . . .	3,186	3,670	4,498	4,910	5,545
Other . . . . .	3,240	3,466	3,380	3,134	1,965
<i>Total, regulation, etc.</i> . . . .	8,338	9,282	10,240	10,555	10,253
<b>Other functions—</b>					
National Library . . . . .	1,034	1,374	1,622	1,941	2,356
High Commissioner's Office, United Kingdom . . . . .	2,330	2,562	2,982	3,748	4,309
Other overseas representation . . . . .	6,144	6,752	7,290	9,670	10,556
United Nations and allied Organizations . . . . .	2,396	3,864	3,288	3,455	3,739
Antarctic Division . . . . .	1,628	1,668	1,902	1,985	2,036
Other . . . . .	(a)8,073	6,546	9,468	9,416	13,981
<i>Total, other functions</i> . . . . .	21,605	22,766	26,552	30,215	36,977
<b>Not allocated to function—</b>					
Superannuation contributions, n.e.i. . . . .	6,790	8,706	10,592	12,019	11,626
Other . . . . .	2,388	2,398	3,320	3,731	3,534
<i>Total, not allocated</i> . . . . .	9,178	11,104	13,912	15,750	15,160
<b>Grand total . . . . .</b>	<b>617,858</b>	<b>771,384</b>	<b>1,006,521</b>	<b>1,155,369</b>	<b>1,145,614</b>

(a) Changes in departmental accounting procedures, which were introduced in 1963-64, affect comparability with later years.

**Capital expenditure on goods and services**

In the following table details are given of capital expenditure on goods and services during each of the years 1962-63 to 1966-67. The table covers capital expenditure on goods and services from the Consolidated Revenue Fund for purposes other than defence and repatriation services.

**COMMONWEALTH CONSOLIDATED REVENUE FUND: CAPITAL EXPENDITURE  
ON GOODS AND SERVICES, 1962-63 TO 1966-67**  
(\$'000)

	1962-63	1963-64	1964-65	1965-66	1966-67
<b>Business undertakings—</b>					
Cultural and recreational facilities . . . . .	7,660	6,548	9,246	7,567	5,573
<b>Transport and communication—</b>					
Postmaster-General . . . . .	123,946	136,836	159,796	181,738	205,777
Railways . . . . .	4,416	5,878	6,514	9,724	10,855
Other . . . . .	388	708	960	1,916	3,251
Housing(a) . . . . .	9,564	8,814	11,620	14,194	11,718
Other . . . . .	1,050	1,150	914	800	440
<i>Total, business undertakings . . . . .</i>	<i>147,024</i>	<i>159,934</i>	<i>189,050</i>	<i>215,939</i>	<i>237,614</i>
<b>Other—</b>					
<b>Education—</b>					
Australian National University . . . . .	2,896	4,678	5,392	5,062	5,316
Australian Capital Territory . . . . .	3,350	3,712	3,956	3,284	4,652
Northern Territory . . . . .	849	864	1,377	1,503	1,242
Other . . . . .	..	..	..	..	110
<i>Total, education . . . . .</i>	<i>7,095</i>	<i>9,254</i>	<i>10,725</i>	<i>9,849</i>	<i>11,320</i>
<b>Health and welfare—</b>					
Australian Capital Territory . . . . .	1,608	2,148	2,584	1,866	1,142
Other health and welfare . . . . .	767	933	905	1,815	1,596
<i>Total, health and welfare . . . . .</i>	<i>2,375</i>	<i>3,081</i>	<i>3,489</i>	<i>3,681</i>	<i>2,738</i>
Repatriation . . . . .	996	712	1,124	1,156	889
<b>Development of resources and assistance to industry—</b>					
Atomic Energy Commission . . . . .	1,524	1,064	1,390	1,292	1,629
Australian Capital Territory . . . . .	1,582	920	2,822	3,395	13,775
Commonwealth Scientific and Industrial Research Organisation . . . . .	1,936	3,610	6,396	3,380	3,726
Other development, etc. . . . .	1,768	1,684	1,580	2,181	2,112
<i>Total, development . . . . .</i>	<i>6,810</i>	<i>7,278</i>	<i>12,188</i>	<i>10,248</i>	<i>21,242</i>
Civil aviation . . . . .	9,770	11,774	17,628	21,941	29,241
<b>Roads—</b>					
Australian Capital Territory . . . . .	5,932	5,388	6,450	10,156	8,569
Other roads . . . . .	3,930	3,664	2,912	4,319	4,585
<i>Total, roads . . . . .</i>	<i>9,862</i>	<i>9,052</i>	<i>9,362</i>	<i>14,475</i>	<i>13,154</i>
Housing(b) . . . . .	938	872	816	1,063	1,698
<b>Other functions—</b>					
Australian Capital Territory . . . . .	7,732	12,936	11,178	11,321	10,664
Papua and New Guinea . . . . .	80	48	4	125	35
Other . . . . .	10,644	11,543	12,780	13,094	12,809
<i>Total, other functions . . . . .</i>	<i>18,456</i>	<i>24,527</i>	<i>23,962</i>	<i>24,540</i>	<i>23,508</i>
Not allocated to function . . . . .	12,536	11,028	13,462	12,952	20,069
<b>Grand total . . . . .</b>	<b>215,862</b>	<b>237,512</b>	<b>281,806</b>	<b>315,844</b>	<b>361,473</b>

(a) See also separate item Housing. (b) See also under Business undertakings.

**Expenditure on primary production—research and sales promotion, export funds, etc.**

Expenditure under this item is classified in the table on page 757 to development of resources and assistance to industry as it includes the proceeds of special industry taxes and profits from marketing schemes which are paid to trust funds or other authorities for the purposes of the industries concerned. Information relating to the taxes levied is given in the table on page 750. Some details of expenditure from the trust funds are included in the table on page 761. Details of expenditure from the Consolidated Revenue Fund during the last five years are given in the following table.

**COMMONWEALTH CONSOLIDATED REVENUE FUND: EXPENDITURE ON  
PRIMARY PRODUCTION—RESEARCH AND SALES PROMOTION,  
EXPORT FUNDS, ETC., 1962-63 TO 1966-67  
(\$'000)**

	1962-63	1963-64	1964-65	1965-66	1966-67
Research and sales promotion—					
Canned fruit (sales promotion) . . . . .	84	101	64	130	128
Meat research . . . . .	1,008	1,433	1,613	1,930	2,368
Dairy produce research . . . . .	523	590	510	712	712
Dairy produce sales promotion . . . . .	525	523	526	779	805
Tobacco industry research . . . . .	183	401	364	322	319
Wheat research . . . . .	595	638	720	590	1,082
Wool industry research . . . . .	..	1,594	3,181	2,824	3,045
Wool research . . . . .	2,925	1,604	..	..	..
Wool use promotion . . . . .	4,875	5,286	18,249	23,002	22,964
Export funds—					
Apple and pear . . . . .	169	245	213	312	199
Canned fruits . . . . .	131	185	170	216	223
Canned fruits excise . . . . .	..	279	1,044	1,033	1,200
Dairy produce . . . . .	412	530	675	776	876
Dried fruits . . . . .	89	102	165	188	147
Dried vine fruits stabilisation fund—					
Currants . . . . .	..	..	..	72	52
Raisins . . . . .	..	..	..	165	..
Sultanas . . . . .	..	..	..	1,530	..
Egg . . . . .	36	57	78	25	4
Honey . . . . .	4	74	94	110	92
Meat . . . . .	431	484	741	1,042	864
Wine . . . . .	319	225	274	288	239
Other—					
Fisheries development . . . . .	1	..	..	..	..
Other . . . . .	1	1	2	1	1
Total . . . . .	12,312	14,351	28,682	36,048	35,319

**Commonwealth Consolidated Revenue Fund: receipts**

**Sources of receipts**

**COMMONWEALTH CONSOLIDATED REVENUE FUND: SOURCES OF RECEIPTS  
1962-63 TO 1966-67  
(\$'000)**

Source	1962-63	1963-64	1964-65	1965-66	1966-67
Taxation . . . . .	2,880,918	3,218,838	3,787,030	4,185,338	4,453,815
Business undertakings . . . . .	342,400	375,777	423,948	457,738	490,160
Territories—					
Northern Territory . . . . .	4,210	4,944	5,611	6,434	7,273
Australian Capital Territory . . . . .	11,250	14,086	18,193	18,571	16,600
Christmas Island . . . . .	..	..	..	..	245
Cocos (Keeling) Islands . . . . .	4	8	8	9	11
Total, Territories . . . . .	15,464	19,038	23,813	25,013	24,128
Interest . . . . .	43,524	46,852	48,394	51,440	59,128
Dividends or payments in the nature of a dividend . . . . .	3,826	5,076	5,118	5,197	6,156
Repayments . . . . .	7,007	11,532	8,897	9,680	44,438
Coinage . . . . .	212	..	..	..	..
Defence . . . . .	12,325	44,651	28,961	28,906	26,336
Air navigation charges . . . . .	2,966	3,755	4,437	6,888	8,184
Quarantine and other health services . . . . .	311	372	344	463	389
Patents, trade marks, etc. . . . .	1,211	1,281	1,315	1,447	1,539
Bankruptcy . . . . .	362	405	430	438	450
Net profit on Australian note issue . . . . .	25,561	26,983	30,521	31,070	33,852
Unrequired balances of trust accounts . . . . .	9,400	25,182	8,472	6,980	8,322
Australian Aluminium Production Commission . . . . .	500	500	500	1,250	1,250
Reserve Bank Reserve Fund . . . . .	8,973	3,351	4,983	10,500	4,712
Commonwealth Banking Corporation . . . . .	1,433	2,290	3,477	3,232	3,649
Other . . . . .	14,379	23,493	37,538	53,622	61,212
Grand total . . . . .	3,370,772	3,809,376	4,418,178	4,879,201	5,227,721

Further information on receipts of business undertakings and the Territories is included respectively in the Chapters 12, Transport and Communication and 29, The Territories of Australia.

### Commonwealth trust funds

The next table shows the opening and closing balances and receipts and expenditure of some of the more important trust funds of the Commonwealth for the year 1966-67, and the following table shows the totals for the last five years.

#### COMMONWEALTH TRUST FUNDS: RECEIPTS, EXPENDITURE AND BALANCES, 1966-67 (\$'000)

Fund	Balance at 1 July 1966	1966-67		Balance at 30 June 1967
		Receipts	Expenditure	
Canadian Loan . . . . .	15,385	563	432	15,516
Coal Mining Industry Long Service Leave . . . . .	3,082	785	919	2,948
Coinage . . . . .	8,417	22,035	22,582	7,870
Defence Forces Retirement Benefits . . . . .	71,724	22,242	11,676	82,290
Insurance Deposits . . . . .	25,200	4,758	4,566	25,392
Imperial Pensions . . . . .	776	16,995	16,707	1,064
International Development and Relief . . . . .	769	820	1,044	545
Lend-Lease Settlement . . . . .	301	13	..	314
Loan Consolidation and Investment Reserve . . . . .	807,942	260,408	153,006	915,344
Munitions Factories . . . . .	4,479	55,607	55,962	4,124
Munitions Production . . . . .	3,364	26,155	26,509	3,010
National Debt Sinking . . . . .	304,996	131,728	239,441	197,283
National Welfare . . . . .	426,822	1,035,401	1,031,117	431,106
Parliamentary Retiring Allowances . . . . .	1,361	452	330	1,483
Post Office Stores and Services . . . . .	107	194,600	194,654	53
Poultry Industry . . . . .	155	9,058	9,213	..
Superannuation . . . . .	278,906	68,826	59,748	287,984
Supply, Stores and Transport . . . . .	562	15,360	15,092	830
Swiss Loan . . . . .	35,862	1,116	..	36,978
Temple Society . . . . .	3,624	254	2,426	1,452
Tobacco Industry . . . . .	479	673	623	529
War Service Homes . . . . .	..	62,529	62,529	..
War Service Homes Insurance . . . . .	1,716	770	910	1,576
Wheat Prices Stabilisation . . . . .	..	16,154	16,154	..
Wheat Research . . . . .	1,720	1,955	2,047	1,628
Wine Research . . . . .	824	37	37	824
Wool Research . . . . .	7,351	3,484	7,145	3,690
Other . . . . .	17,518	115,217	111,195	21,540
<b>Total . . . . .</b>	<b>2,023,442</b>	<b>2,067,995</b>	<b>2,046,064</b>	<b>2,045,374</b>

#### COMMONWEALTH TRUST FUNDS: SUMMARY, 1962-63 TO 1966-67 (\$ million)

	1962-63	1963-64	1964-65	1965-66	1966-67
Balances brought forward . . . . .	1,655	1,613	1,661	1,863	2,023
Receipts . . . . .	1,443	1,546	1,827	1,999	2,068
Expenditure . . . . .	1,485	1,498	1,625	1,839	2,046
Balance carried forward . . . . .	1,613	1,661	1,863	2,023	2,045

### Commonwealth Loan Fund

Brief historical notes relating to the Commonwealth Loan Fund are given in earlier issues of the Year Book (see No. 37, page 640). The following tables show details for the years 1962-63 to 1966-67 of receipts by, and expenditure from, Commonwealth Loan Fund in respect of loans raised for both Commonwealth and State Governments. Information relating to the Commonwealth Government securities on issue is given in the division Government Securities on Issue, Commonwealth and States, of this chapter.

## Loans raised for the Commonwealth

**COMMONWEALTH LOAN FUND: LOANS RAISED FOR THE COMMONWEALTH**  
**RECEIPTS AND EXPENDITURE, 1962-63 TO 1966-67**  
(\$'000)

	1962-63	1963-64	1964-65	1965-66	1966-67
<b>RECEIPTS</b>					
Balance from 30 June . . . . .	196	97	125	205	139
Loans raised in Australia—					
Stocks and bonds . . . . .	57,831	143,919	87,905	111,308	134,937
Special bonds . . . . .	38,972	26,352	34,342	32,304	39,580
Advance loan subscriptions . . . . .	22,814	Dr 21,560	3,305	Dr 213	9,297
Treasury bills—public (net) . . . . .	Dr 117,400	Dr 2,400	38,000	5,500	149,000
Treasury bills—internal (investment of Trust Fund) (net) . . . . .	77,800	39,400	33,400	49,100	Dr 2,000
Treasury notes . . . . .	138,980	13,590	Dr 72,138	35,664	Dr 25,933
Peace savings certificates . . . . .	2	2	2	..	1
Loans raised overseas—					
London—stock and bonds . . . . .	5,414	20,636	..	..	..
New York—bonds . . . . .	34,931	..	4,421	4,474	43,593
Loan—Qantas Empire Airways Limited . . . . .	4,134	4,033	26,292	25,214	16,368
Loan—Australian National Airlines Commission . . . . .	1,119	1,121	8,566	5,075	14,367
International Bank Dollar loan . . . . .	28,472	24,232	21,151	15,299	499
Netherlands loan . . . . .	..	..	..	..	10,352
<i>Total, loans raised . . . . .</i>	<i>293,069</i>	<i>249,325</i>	<i>185,247</i>	<i>283,725</i>	<i>390,060</i>
Deduct—					
Expenses of flotation—					
Loans raised in Australia . . . . .	1,804	Cr 631	306	372	462
London loans . . . . .	85	317	..	..	..
New York loans . . . . .	911	..	147	87	1,152
Swiss loans . . . . .	..	..	..	..	523
<i>Total, deductions . . . . .</i>	<i>2,799</i>	<i>Cr 314</i>	<i>452</i>	<i>460</i>	<i>2,138</i>
<i>Total loan raisings less expenses of flotation . . . . .</i>	<i>290,270</i>	<i>249,638</i>	<i>184,795</i>	<i>283,265</i>	<i>387,922</i>
<i>Grand total . . . . .</i>	<i>290,466</i>	<i>249,736</i>	<i>184,920</i>	<i>283,471</i>	<i>388,061</i>
<b>EXPENDITURE</b>					
Financial assistance to States for housing—					
New South Wales . . . . .	32,600	33,000	35,000	40,271	41,500
Victoria . . . . .	25,700	26,500	27,000	31,126	32,020
Queensland . . . . .	7,800	8,600	6,600	8,497	9,060
South Australia . . . . .	18,982	19,400	20,500	21,057	20,750
Western Australia . . . . .	6,940	6,800	7,200	8,601	9,170
Tasmania . . . . .	5,200	6,000	6,400	7,448	7,500
<i>Total, States, housing . . . . .</i>	<i>97,222</i>	<i>100,300</i>	<i>102,700</i>	<i>117,000</i>	<i>120,000</i>
Defence services . . . . .	132,141	77,431	..	89,545	198,426
War and repatriation services . . . . .	1,214	8,525	7,234	6,358	5,936
Loan—Qantas . . . . .	4,134	4,033	26,292	25,214	16,368
Loan—Australian National Airlines Commission . . . . .	1,119	1,121	8,566	5,075	14,367
Mount Isa Railway Agreement . . . . .	11,917	12,100	3,016	..	..
Snowy Mountains Hydro-electric Authority . . . . .	26,200	23,402	19,600	16,000	4,450
Works and other purposes—repayments . . . . .	Cr 33	Cr 566	Cr 93	..	..
Other . . . . .	..	..	..	330	195
Redemptions—					
Stock and bonds—Australia . . . . .	9,299	9,085	..	..	..
Stock and bonds—London . . . . .	..	14,180	..	..	..
Special bonds . . . . .	7,155	..	17,400	23,810	28,268
Balance at 30 June . . . . .	97	125	205	139	51
<i>Grand total . . . . .</i>	<i>290,466</i>	<i>249,736</i>	<i>184,920</i>	<i>283,471</i>	<i>388,061</i>

## Loans raised for the States

**COMMONWEALTH LOAN FUND: LOANS RAISED FOR THE STATES**  
**RECEIPTS AND EXPENDITURE, 1962-63 TO 1966-67**  
 (\$'000)

	1962-63	1963-64	1964-65	1965-66	1966-67
<b>RECEIPTS</b>					
Balance from 30 June . . . . .	..	..	..	..	..
<b>Loans raised in Australia—</b>					
Stock and bonds . . . . .	361,622	363,889	457,159	523,795	583,236
Special bonds . . . . .	39,192	65,207	53,124	48,121	44,673
<b>Loans raised overseas—</b>					
London—stock and bonds . . . . .	32,221	28,762	..	..	..
New York—bonds . . . . .	39,287	..	17,686	17,895	..
<b>Total . . . . .</b>	<b>472,323</b>	<b>457,857</b>	<b>527,969</b>	<b>589,812</b>	<b>627,909</b>
<b>EXPENDITURE</b>					
<b>Payments of loan proceeds to the States—</b>					
New South Wales . . . . .	130,808	140,020	149,470	152,150	163,640
Victoria . . . . .	105,360	111,728	120,954	123,206	132,520
Queensland . . . . .	42,576	42,412	48,000	63,692	55,915
South Australia . . . . .	51,458	55,184	59,020	61,892	67,680
Western Australia . . . . .	41,044	44,006	46,968	47,902	51,070
Tasmania . . . . .	29,768	30,318	32,244	33,228	34,517
<b>Total payments to States . . . . .</b>	<b>401,014</b>	<b>423,668</b>	<b>456,656</b>	<b>482,070</b>	<b>505,342</b>
<b>Redemptions—</b>					
Stock and bonds—Australia . . . . .	54,620	24,384	30,000	56,000	30,000
Special bonds . . . . .	8,543	9,806	16,238	31,683	27,468
London . . . . .	8,146	..	25,075	20,060	37,613
New York . . . . .	..	..	..	..	26,806
Other . . . . .	..	..	..	..	680
Balance at 30 June . . . . .	..	..	..	..	..
<b>Grand total . . . . .</b>	<b>472,323</b>	<b>457,857</b>	<b>527,969</b>	<b>589,812</b>	<b>627,909</b>

## STATE FINANCE

## Functions of State Governments

In comparing the financial results of the States allowances must be made for the various functions discharged by the respective State Governments and for local conditions in each case. Direct comparisons of the revenue, expenditure and debt of the individual States are difficult owing to the fact that functions which in one State are assumed by the central government are in another delegated to local government or semi-governmental bodies which are vested with certain defined borrowing powers and whose financial transactions are not included with those of the central government. Care is needed, therefore, in making comparisons, and the particulars contained in this chapter should be read with those contained in the chapter Local Government.

## Accounts of State Governments

The various financial transactions of the States are in each case concerned mainly with one or other of three funds—the Consolidated Revenue Fund, the Trust Fund and the Loan Fund.

All revenue (except certain items paid into special funds) collected by a State is paid into its *Consolidated Revenue Fund*, from which payments are made under authority of an annual Appropriation Act passed by the legislature, or by a permanent appropriation under a special Act. Figures relating to New South Wales represent the transactions of the Consolidated Revenue Fund and the business undertakings included in the annual budget papers. These undertakings are: railways, tramways and omnibuses, and Sydney Harbour Trust Section of the Maritime Services Board. Adjustments have been made to the Budget figures, however, in order to eliminate duplications caused by inter-fund payments. Particulars for all other States relate to the transactions of the Consolidated Revenue Fund.

The *Trust Fund* comprises all moneys held in trust by the Government and includes such items as superannuation funds, road funds, insurance companies' deposits, etc.

The *Loan Fund* is debited with all loan moneys raised for the State and credited with the expenditure therefrom on public works or other purposes.

#### Inter-relation of Commonwealth and State finances

A statement in some detail, covering the inter-relation of Commonwealth and State finances during the period from the inception of federation to the passing of the *Financial Agreement Act* 1928, was published in Year Book No. 22, pages 379-80. Changes in the financial relations between the Commonwealth and States since the passing of the Financial Agreement Act have been described in issues of the Year Book from year to year.

### State Consolidated Revenue Fund: expenditure

The principal heads of State expenditure from Consolidated Revenue Funds are: (a) interest, exchange and debt redemption charges in connection with debt; (b) working expenses of business undertakings; (c) education; (d) health and charitable expenditure; (e) justice; (f) police; (g) penal establishments; and (h) all other expenditure, including expenditure on public works, lands and surveys, agriculture and forestry, legislative and general administration, pensions, and miscellaneous.

In 1966-67 education constituted 24.2 per cent of the total expenditure from the State Consolidated Revenue Funds; the working expenses of railways, tramways, and omnibuses, 20.4 per cent; debt charges, 17.3 per cent; charitable, public health and hospitals, 13.5 per cent; and law, order and public safety, 6.1 per cent.

#### Total expenditure

The total expenditure from the Consolidated Revenue Funds of the several States and the expenditure per head of population during each of the years 1962-63 to 1966-67 are shown in the following table.

#### STATE CONSOLIDATED REVENUE FUND EXPENDITURE, 1962-63 TO 1966-67

Year	N.S.W.(a)	Vic.	Qld	S.A.	W.A.	Tas.	Total
EXPENDITURE (\$'000)							
1962-63	624,888	414,150	246,928	186,789	158,687	64,301	1,695,742
1963-64	683,992	444,874	260,454	199,755	170,681	69,577	1,829,333
1964-65	734,160	480,668	271,215	216,803	184,840	77,447	1,965,133
1965-66	776,314	516,689	298,022	235,650	206,665	86,917	2,120,259
1966-67	833,832	559,595	323,523	250,717	228,174	94,414	2,290,254
PER HEAD OF POPULATION (\$)							
1962-63	155.41	137.51	157.95	187.07	204.12	179.52	158.04
1963-64	167.69	144.75	163.29	195.18	213.67	191.80	167.33
1964-65	177.22	153.26	166.70	206.07	226.20	211.39	176.38
1965-66	184.41	161.77	179.52	217.82	246.83	235.17	186.76
1966-67	195.15	172.19	191.65	227.10	264.66	252.50	198.28

(a) See above for transactions included.

**Details of expenditure**

The following tables show the total expenditure and expenditure per head of population for each of the principal items. For further information on the finances of the various types of business undertakings in the States see the chapters Transport, Communication, and Travel, and Local Government of this Year Book.

**STATE CONSOLIDATED REVENUE FUND EXPENDITURE: DETAILS, 1966-67**

	<i>N.S.W.</i> (a)	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i> (b)	<i>Total</i>
<b>EXPENDITURE</b> (£'000)							
Debt (interest, exchange, debt redemption, etc.) . . . . .	109,026	103,000	54,722	60,263	41,840	28,226	397,077
Railways . . . . .	172,689	97,046	87,661	31,118	45,764	2,859	437,138
Tramways and omnibuses . . . . .	28,444	..	..	..	642	975	30,062
Harbours and rivers, etc. . . . .	13,127	1,459	..	3,451	2,474	69	20,580
Water supply, sewerage, irrigation and drainage . . . . .	..	10,079	..	11,777	6,759	654	29,269
Other business and industrial undertakings . . . . .	..	1,035	27	653	3,363	105	5,183
Education . . . . .	209,853	156,717	63,478	57,111	44,370	21,308	552,836
Health and charitable . . . . .	103,821	78,863	46,853	34,490	31,901	13,640	309,569
Justice . . . . .	14,570	5,340	4,370	1,903	1,875	971	29,029
Police . . . . .	33,430	23,009	13,827	7,938	6,261	3,151	87,616
Penal establishments . . . . .	7,466	3,299	1,812	1,964	2,085	810	17,436
Public safety . . . . .	2,043	98	1,420	379	501	203	4,644
All other expenditure . . . . .	139,362	79,649	49,355	39,670	40,337	21,441	369,814
<b>Total . . . . .</b>	<b>833,832</b>	<b>559,595</b>	<b>323,523</b>	<b>250,717</b>	<b>228,174</b>	<b>94,414</b>	<b>2,290,254</b>

**PER HEAD OF POPULATION**  
(£)

Debt (interest, exchange, debt redemption, etc.) . . . . .	25.52	31.69	32.42	34.59	48.53	75.49	34.38
Railways . . . . .	40.42	29.86	51.93	28.19	53.08	7.65	37.85
Tramways and omnibuses . . . . .	6.66	..	..	..	0.74	2.61	2.60
Harbours and rivers, etc. . . . .	3.07	0.45	..	3.13	2.87	0.18	1.78
Water supply, sewerage, irrigation and drainage . . . . .	..	3.10	..	10.67	7.84	1.75	2.53
Other business and industrial undertakings . . . . .	..	0.32	0.02	0.59	3.90	0.28	0.45
Education . . . . .	49.11	48.22	37.60	51.73	51.47	56.99	47.86
Health and charitable . . . . .	24.30	24.27	27.76	31.24	37.00	36.48	26.80
Justice . . . . .	3.41	1.64	2.59	1.72	2.17	2.60	2.51
Police . . . . .	7.82	7.08	8.19	7.19	7.26	8.43	7.59
Penal establishments . . . . .	1.75	1.02	1.07	1.78	2.42	2.17	1.51
Public safety . . . . .	0.48	0.03	0.84	0.34	0.58	0.54	0.40
All other expenditure . . . . .	32.62	24.51	29.24	35.93	46.79	57.34	32.02
<b>Total . . . . .</b>	<b>195.15</b>	<b>172.19</b>	<b>191.65</b>	<b>227.10</b>	<b>264.66</b>	<b>252.50</b>	<b>198.28</b>

(a) See page 764 for transactions included. (b) Tasmanian transport services are under the separate control of semi-governmental authorities. Figures shown for relevant items represent payments to the authorities.



**TOTAL STATE CONSOLIDATED REVENUE FUND EXPENDITURE: DETAILS**  
**1962-63 TO 1966-67**  
**(\$'000)**

	1962-63	1963-64	1964-65	1965-66	1966-67
Debt (interest, exchange, debt redemption, etc.) . . . . .	301,723	320,403	343,990	370,551	397,077
Railways, tramways and omnibuses (working expenses) . . . . .	397,940	420,585	443,947	451,226	467,200
Harbours and rivers, etc. . . . .	15,985	19,035	20,652	19,445	20,580
Water supply, sewerage, irrigation and drainage . . . . .	25,706	26,313	24,840	27,301	29,269
Other business and industrial undertakings . . . . .	5,492	5,187	6,260	5,235	5,183
Education . . . . .	359,053	401,009	457,333	499,733	552,836
Health and charitable . . . . .	231,051	239,167	260,508	285,587	309,569
Justice . . . . .	19,910	21,749	24,187	26,286	29,029
Police . . . . .	62,961	68,008	72,981	77,102	87,616
Penal establishments . . . . .	12,223	13,054	14,204	15,258	17,436
Public safety . . . . .	3,773	3,935	4,038	4,400	4,644
All other expenditure . . . . .	259,925	290,887	292,194	338,135	369,814
<b>Total . . . . .</b>	<b>1,695,742</b>	<b>1,829,333</b>	<b>1,965,133</b>	<b>2,120,259</b>	<b>2,290,254</b>

### State Consolidated Revenue Fund: receipts

The principal sources of State revenue are: (a) taxation; (b) the business undertakings controlled by the State Governments; (c) sale of and rental from crown lands; (d) interest on advances; (e) payments by the Commonwealth Government under the Financial Agreements, Special Grants and Financial Assistance Acts, etc.; (f) Commonwealth National Welfare Fund payments; and (g) miscellaneous sources, comprising fines, fees, etc.

Of these sources, that yielding the largest revenue to the Consolidated Revenue Funds for the States as a whole in the year 1966-67 was Commonwealth payments under financial assistance and other grants (40.3 per cent of the total revenue). Next in magnitude was the group of business undertakings (26.4 per cent), the principal contributors being the Government railways and tramways, followed by taxation receipts (18.4 per cent). More than one-quarter of the total State taxation collections are not paid into Consolidated Revenue Funds, however, but into special funds (*see* pages 769 and 771). Of the remaining sources of revenue, interest (n.e.i.) constituted 4.2 per cent, land revenue 2.7 per cent, and National Welfare Fund payments 1.0 per cent.

#### Total receipts

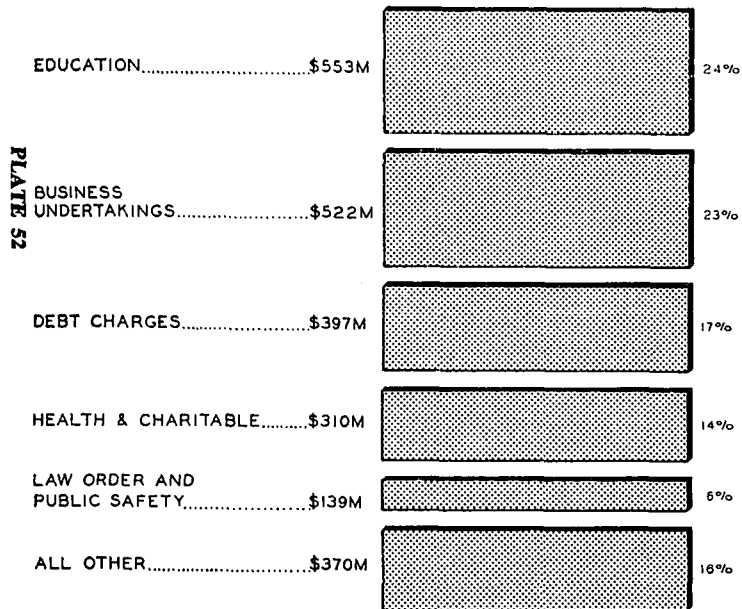
The following table shows particulars of the total receipts and the receipts per head of population of the Consolidated Revenue Funds of the several States.

# STATE CONSOLIDATED REVENUE FUNDS

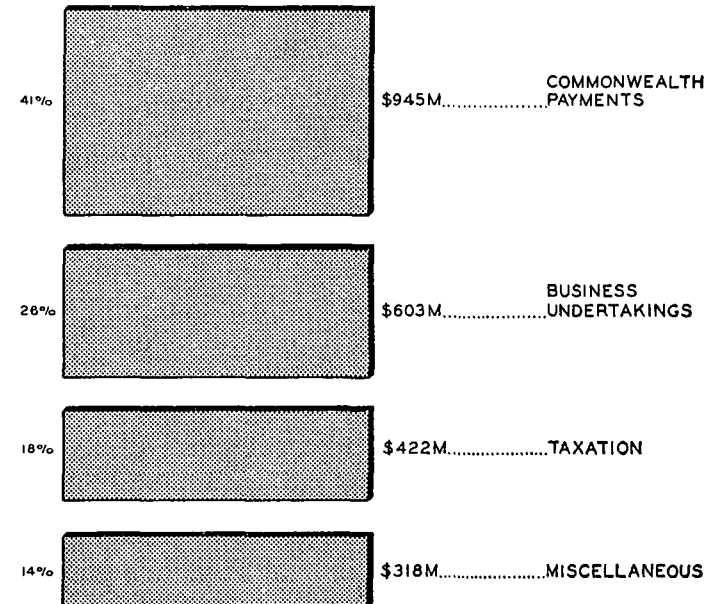
1966-67

## EXPENDITURE

## RECEIPTS



TOTAL EXPENDITURE: \$2,290MILLION



TOTAL RECEIPTS: \$2,287MILLION

## STATE CONSOLIDATED REVENUE FUND RECEIPTS, 1962-63 TO 1966-67

Year	N.S.W. (a)	Vic.	Qld	S.A.	W.A.	Tas.	Total
RECEIPTS (\$'000)							
1962-63 . . .	625,260	414,151	246,983	187,368	157,182	63,318	1,694,262
1963-64 . . .	684,535	444,368	260,897	203,006	167,888	68,391	1,829,087
1964-65 . . .	729,091	480,668	267,139	214,181	180,143	75,828	1,947,050
1965-66 . . .	771,627	508,554	294,502	228,816	206,655	84,746	2,094,901
1966-67 . . .	830,685	559,595	323,781	250,823	228,042	93,842	2,286,768
PER HEAD OF POPULATION (\$)							
1962-63 . . .	155.51	137.51	157.98	187.65	202.19	176.78	157.90
1963-64 . . .	167.82	144.59	163.57	198.35	210.17	188.53	167.31
1964-65 . . .	176.00	153.26	164.20	203.58	220.45	206.97	174.76
1965-66 . . .	183.30	159.22	177.40	211.50	246.81	229.29	184.53
1966-67 . . .	194.42	172.19	191.80	227.20	264.51	250.97	197.98

(a) See page 764 for transactions included.

## Sources of revenue

Classifying the revenue of the several States in the manner indicated on page 766, particulars for the year 1966-67 were as follows.

## STATE CONSOLIDATED REVENUE FUND RECEIPTS, BY SOURCE, 1966-67

Source of revenue	N.S.W. (a)	Vic.	Qld	S.A.	W.A.	Tas. (b)	Total
RECEIPTS (\$'000)							
Taxation(c) . . .	152,449	134,926	50,302	42,270	28,719	13,094	421,761
Business undertakings . . .	257,872	140,627	85,384	61,996	56,525	246	602,650
Lands . . .	27,429	8,973	13,622	2,120	7,655	1,836	61,635
Interest, n.e.i. . .	7,818	22,694	15,974	19,868	13,682	15,479	95,515
Commonwealth grants(d)—							
Financial assistance . . .	276,794	208,790	125,514	94,346	86,396	34,773	826,613
Other(e) . . .	27,732	5,634	14,182	5,855	20,353	21,259	95,013
Commonwealth National Welfare							
Fund payments(f) . . .	13,527	3,889	1,544	2,931	157	1,106	23,155
Miscellaneous . . .	67,064	34,061	17,259	21,438	14,555	6,049	160,426
Total . . .	830,685	559,595	323,781	250,823	228,042	93,842	2,286,768
PER HEAD OF POPULATION (\$)							
Taxation(c) . . .	35.68	41.52	29.80	38.29	33.31	35.02	36.51
Business undertakings . . .	60.35	43.27	50.58	56.16	65.56	0.66	52.17
Lands . . .	6.42	2.76	8.07	1.92	8.88	4.91	5.34
Interest, n.e.i. . .	1.83	6.98	9.46	18.00	15.87	41.40	8.27
Commonwealth grants(d)—							
Financial assistance . . .	64.78	64.24	74.35	85.46	100.21	93.00	71.56
Other(e) . . .	6.49	1.73	8.40	5.30	23.61	56.86	8.23
Commonwealth National Welfare							
Fund payments(f) . . .	3.17	1.20	0.91	2.65	0.18	2.96	2.00
Miscellaneous . . .	15.70	10.48	10.22	19.42	16.88	16.18	13.89
Total . . .	194.42	172.19	191.80	227.20	264.51	250.97	197.98

(a) See page 764. (b) Tasmanian transport services are under the separate control of semi-governmental authorities.  
(c) In all States certain taxation collections are not paid into Consolidated Revenue Fund. For total collections see next page.  
(d) Excludes Commonwealth payments paid to trust funds. (e) Includes payments under Financial Agreement, special grants, additional financial assistance, grants to universities, etc. (f) Consolidated Revenue Fund receipts only. Excludes payments to Trust Funds.

### State receipts from taxation

In the tables on taxation collections in these paragraphs the collections have been grouped according to the nature of the tax rather than the method of collection. For example, stamp duties on betting tickets and bookmakers' licences have been included under Racing instead of under Stamp duties and Licences respectively.

#### Net taxation collections

The following tables show, for the year 1966-67, details of the collections by each State Government from the various types of tax in operation, irrespective of whether such moneys have been paid into the Consolidated Revenue Funds or not. For this reason the particulars hereunder differ from those shown in the tables relating to the Consolidated Revenue Funds and present a comprehensive statement of all taxation collections by the Government in each State.

STATE RECEIPTS FROM TAXATION: NET COLLECTIONS(a), BY TYPE OF TAX  
1966-67  
(\$'000)

Tax	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	Total
Motor—							
Registration fees and taxes . . . . .	38,949	36,558	18,582	11,441	10,334	3,987	119,851
Drivers', etc., licences . . . . .	7,377	2,908	1,357	997	1,239	486	14,363
Other . . . . .	17,942	16,476	10,491	3,820	5,039	653	54,419
<i>Total, motor . . . . .</i>	<i>64,268</i>	<i>55,941</i>	<i>30,429</i>	<i>16,258</i>	<i>16,612</i>	<i>5,125</i>	<i>188,634</i>
Probate and succession duties . . . . .	44,993	34,997	12,008	7,323	4,765	2,149	106,236
Stamp duties, n.e.i. . . . .	45,233	40,546	16,561	9,216	11,681	3,202	126,439
Land . . . . .	33,646	21,132	4,691	7,646	3,514	2,108	72,738
Liquor . . . . .	12,891	8,960	4,462	1,672	2,323	887	31,194
Lotteries . . . . .	..	6,410	731	..	..	..	7,141
Racing . . . . .	13,670	14,075	4,460	2,543	3,154	1,117	39,019
Poker machine licence fees . . . . .	19,650	..	..	..	..	..	19,650
Licences, n.e.i. . . . .	463	1,345	190	227	617	31	2,873
Other . . . . .	..	..	6,611	409	1,167	..	8,187
<i>Grand total . . . . .</i>	<i>234,813</i>	<i>183,406</i>	<i>80,143</i>	<i>45,295</i>	<i>43,833</i>	<i>14,620</i>	<i>602,111</i>

(a) From all sources of taxation irrespective of whether paid to Consolidated Revenue Fund or to other funds.

Of the total taxation collections detailed above, the following were paid into special funds.

STATE RECEIPTS FROM TAXATION: PAYMENTS INTO SPECIAL FUNDS, 1966-67  
(\$'000)

Tax	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	Total
Motor . . . . .	61,632	47,302	22,827	2,070	13,930	1,094	148,854
Stamp duties, n.e.i. . . . .	..	557	..	..	..	..	557
Liquor . . . . .	..	396	129	..	..	..	525
Racing . . . . .	1,059	..	369	955	..	432	2,815
Poker machine licence fees . . . . .	19,650	..	..	..	..	..	19,650
Other . . . . .	24	225	6,516	..	1,185	..	7,948
<i>Total . . . . .</i>	<i>82,364</i>	<i>48,480</i>	<i>29,840</i>	<i>3,025</i>	<i>15,114</i>	<i>1,526</i>	<i>180,350</i>

The table hereunder shows, for the year 1966-67, the proportions of collections under individual classes of tax to total taxation revenue.

**STATE RECEIPTS FROM TAXATION: PROPORTIONS OF INDIVIDUAL  
TAXES TO TOTAL, 1966-67**

(Per cent)

<i>Tax</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>Total</i>
Motor . . . . .	27.37	30.51	37.97	35.89	37.90	35.06	31.33
Probate and succession duties . . . . .	19.16	19.08	14.98	16.17	10.87	14.70	17.64
Stamp duties, n.e.i. . . . .	19.26	22.11	20.66	20.35	26.65	21.90	21.00
Land . . . . .	14.33	11.52	5.85	16.88	8.02	14.42	12.08
Liquor . . . . .	5.49	4.88	5.57	3.69	5.30	6.06	5.18
Lotteries . . . . .	..	3.49	0.91	..	..	..	1.19
Racing . . . . .	5.82	7.67	5.56	5.61	7.20	7.64	6.48
Poker machine licence fees . . . . .	8.37	..	..	..	..	..	3.26
Licences, n.e.i. . . . .	0.18	0.73	0.24	0.50	1.41	0.21	0.48
Other . . . . .	..	..	8.25	0.90	2.66	..	1.36
<b>Total . . . . .</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>

The total amounts and the amounts per head raised from all sources of taxation by the several State Governments, including amounts not paid into the Consolidated Revenue Funds, during the years 1962-63 to 1966-67 are shown in the following tables.

**STATE RECEIPTS FROM TAXATION: NET COLLECTIONS, 1962-63 TO 1966-67**

<i>Year</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>Total</i>
<b>NET COLLECTIONS</b> (\$'000)							
1962-63 . . . . .	156,182	121,964	54,046	27,691	22,996	10,184	393,062
1963-64 . . . . .	185,919	135,757	60,582	30,619	26,713	11,110	450,701
1964-65 . . . . .	201,026	151,640	64,887	37,255	29,600	11,918	496,326
1965-66 . . . . .	213,824	169,028	68,268	39,532	34,981	13,154	538,787
1966-67 . . . . .	234,813	183,406	80,143	45,295	43,833	14,620	602,111
<b>PER HEAD OF POPULATION</b> (\$)							
1962-63 . . . . .	38.84	40.49	34.57	27.73	29.58	28.43	36.63
1963-64 . . . . .	45.58	44.17	37.98	29.92	33.44	30.63	41.23
1964-65 . . . . .	48.53	48.35	39.88	35.41	36.22	32.53	44.55
1965-66 . . . . .	50.79	52.92	41.12	36.54	41.78	35.59	47.46
1966-67 . . . . .	54.96	56.43	47.48	41.03	50.84	39.10	52.13

**STATE RECEIPTS FROM TAXATION: TOTAL NET COLLECTIONS(a)**  
**BY TYPE OF TAX, 1962-63 TO 1966-67**  
 (\$'000)

<i>Tax</i>	<i>1962-63</i>	<i>1963-64</i>	<i>1964-65</i>	<i>1965-66</i>	<i>1966-67</i>
Motor . . . . .	115,518	136,714	153,270	172,708	188,634
Probate and succession duties . . . . .	80,028	91,090	91,443	94,457	106,236
Stamp duties, n.e.i. . . . .	81,757	93,080	104,436	109,592	126,439
Land . . . . .	49,410	55,134	62,765	69,570	72,738
Liquor . . . . .	22,203	23,784	26,179	27,369	31,194
Lotteries . . . . .	7,090	7,310	7,454	7,004	7,141
Racing . . . . .	21,198	23,361	27,340	32,309	39,019
Entertainments . . . . .	941	53	..	..	..
Poker machine licence fees . . . . .	6,558	11,268	13,666	15,761	19,650
Licences, n.e.i., and all other . . . . .	8,360	8,906	9,772	10,017	11,060
<b>Total . . . . .</b>	<b>393,062</b>	<b>450,701</b>	<b>496,326</b>	<b>538,787</b>	<b>602,111</b>

(a) From all sources of taxation irrespective of whether paid to Consolidated Revenue or to other funds.

**Taxation collections paid to special funds**

Details of taxation collections paid into special funds and included in the foregoing table are shown below.

**STATE RECEIPTS FROM TAXATION: TOTAL PAYMENTS INTO SPECIAL FUNDS, 1962-63 TO 1966-67**  
 (\$'000)

<i>Tax</i>	<i>1962-63</i>	<i>1963-64</i>	<i>1964-65</i>	<i>1965-66</i>	<i>1966-67</i>
Motor . . . . .	96,872	111,830	121,398	136,455	148,854
Stamp duties, n.e.i. . . . .	484	508	546	571	557
Liquor . . . . .	464	540	535	555	525
Racing . . . . .	1,356	1,481	1,832	2,123	2,815
Poker machine licence fees . . . . .	6,558	11,268	13,666	15,761	19,650
Other . . . . .	5,527	5,948	6,756	7,050	7,948
<b>Total . . . . .</b>	<b>111,262</b>	<b>131,575</b>	<b>144,734</b>	<b>162,515</b>	<b>180,350</b>

**State Consolidated Revenue Fund receipts  
from business undertakings**

A considerable proportion of State gross revenue is made up of receipts from business undertakings under the control of the Governments. The most important of these are railways and tramways, harbour works, water supply and sewerage, and electricity supply. In addition, State batteries for the treatment of auriferous ores in Western Australia and various minor revenue-producing services rendered by the Governments of all States are included. For the year 1966-67 the receipts from these sources was \$602,650,000 or 26.4 per cent of the receipts from all sources.

**STATE CONSOLIDATED REVENUE FUND: RECEIPTS FROM BUSINESS  
UNDERTAKINGS, BY SOURCE, 1966-67**

(\$'000)

<i>Source</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.(a)</i>	<i>Total</i>
Railways(b) . . . . .	213,335	104,989	85,384	30,084	48,194	..	481,987
Tramways and omnibuses . . . . .	26,859	..	..	..	..	..	26,859
Harbours, rivers, lights . . . . .	17,678	(c)3,160	..	6,676	2,497	..	30,010
Water supply, sewerage, irrigation and drainage . . . . .	..	13,767	..	23,319	4,073	47	41,206
Electricity supply . . . . .	..	16,765	..	..	..	..	16,765
Other . . . . .	..	1,946	..	1,917	1,761	199	5,823
<b>Total . . . . .</b>	<b>257,872</b>	<b>140,627</b>	<b>85,384</b>	<b>61,996</b>	<b>56,525</b>	<b>246</b>	<b>602,650</b>

(a) Tasmanian transport services are under the separate control of semi-governmental authorities. (b) The following contributions to railways revenue from Consolidated Revenue Fund are excluded—New South Wales, \$1,600,000; South Australia, \$10,000,000. (c) Includes Harbour Trust Fund contribution, \$1,307,000.

**STATE CONSOLIDATED REVENUE FUND: RECEIPTS FROM BUSINESS UNDERTAKINGS  
1962-63 TO 1966-67**

<i>Year</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.(a)</i>	<i>Total</i>
<b>RECEIPTS</b>							
(\$'000)							
1962-63 . . . . .	220,965	108,401	73,267	49,927	45,103	163	497,826
1963-64 . . . . .	242,824	115,715	81,124	54,904	47,175	236	541,978
1964-65 . . . . .	255,024	127,416	79,813	57,256	42,631	348	562,487
1965-66 . . . . .	236,989	126,773	81,717	58,597	49,267	602	553,946
1966-67 . . . . .	257,872	140,627	85,384	61,996	56,525	246	602,650

**PER HEAD OF POPULATION**

(\$)

1962-63 . . . . .	54.96	35.99	46.87	50.00	58.02	0.46	46.40
1963-64 . . . . .	59.53	37.65	50.86	53.65	59.06	0.65	49.58
1964-65 . . . . .	61.56	40.63	49.06	54.42	52.17	0.95	50.49
1965-66 . . . . .	56.30	39.69	49.22	54.16	58.84	1.63	48.79
1966-67 . . . . .	60.35	43.27	50.58	56.16	65.56	0.66	52.17

(a) Tasmanian transport services are under the separate control of semi-governmental authorities.

**STATE CONSOLIDATED REVENUE FUND: TOTAL RECEIPTS FROM BUSINESS  
UNDERTAKINGS, BY SOURCE, 1962-63 TO 1966-67**

(\$'000)

<i>Source</i>	<i>1962-63</i>	<i>1963-64</i>	<i>1964-65</i>	<i>1965-66</i>	<i>1966-67</i>
Railways, tramways and omnibuses . . . . .	429,633	465,557	485,800	473,483	508,846
Harbour services . . . . .	21,480	25,058	27,371	27,142	30,010
Water supply, sewerage, irrigation and drainage . . . . .	34,801	38,548	33,424	37,370	41,206
Other . . . . .	11,911	12,815	15,892	15,951	22,588
<b>Total . . . . .</b>	<b>497,826</b>	<b>541,978</b>	<b>562,487</b>	<b>553,946</b>	<b>602,650</b>

For further information on the finances of the various types of business undertakings in the States see the chapters Transport, Communication, and Travel, and Local Government of this Year Book.

### Other State Consolidated Revenue Fund receipts

#### State land receipts

The receipts from the sale and rental of Crown lands have, with few exceptions, been treated from the earliest times as forming part of the Consolidated Revenue Funds, and have been applied to meet ordinary expenses. The following table shows the revenue from sales and rentals of Crown lands for the year 1966-67.

STATE CONSOLIDATED REVENUE FUND: LAND RECEIPTS, BY SOURCE, 1966-67  
(\$'000)

Source	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	Total
Sales . . . . .	2,492	402	1,725	189	357	99	5,263
Conditional purchases . . . . .	468	..	..	22	614	..	1,104
Rentals(a) . . . . .	21,286	2,268	10,794	1,910	3,373	155	39,785
Forestry . . . . .	2,843	5,758	..	..	3,312	1,557	13,469
Other . . . . .	340	545	1,102	..	..	26	2,014
<b>Total . . . . .</b>	<b>27,429</b>	<b>8,973</b>	<b>13,622</b>	<b>2,120</b>	<b>7,655</b>	<b>1,836</b>	<b>61,635</b>

(a) Includes mining royalties, rents, etc.

The total land receipts for all States for the years 1962-63 to 1966-67 respectively were: \$32,725,000, \$38,478,000, \$56,458,000, \$62,281,000, and \$61,635,000.

#### State receipts from Commonwealth grants

Commonwealth grants to the States represent a very large proportion of the States' receipts. In 1966-67 the total amount (excluding sundry minor items) paid to the Consolidated Revenue Funds of the States was \$921,626,000 (40.3 per cent). Details were as follows: contribution towards interest on States' debts under the Financial Agreement, \$15,170,000; special grants to the States of Western Australia and Tasmania, \$40,072,000; financial assistance, \$826,613,000; drought assistance, \$28,669,000; grants to universities, \$8,285,000; and other grants, \$2,817,000. In addition to these, the States receive a number of other grants which are paid to Trust Funds. The main items in this class are the contribution to the sinking fund on States' debts (\$18,951,000 in 1966-67) paid to the National Debt Sinking Fund, grants for Commonwealth Aid Roads (\$150,000,000 in 1966-67), and grants for universities (\$42,331,000 in 1966-67) paid to State Trust Funds. More detailed information concerning Commonwealth grants to the States is given on pages 737-41.

#### State receipts from Commonwealth National Welfare Fund

The States also receive payments from the Commonwealth in respect of hospital and pharmaceutical benefits, milk for school children, and reimbursement of maintenance expenditure on tuberculosis sanatoriums. These receipts are paid into Consolidated Revenue Funds or Trust Funds according to the varying accounting procedures in the States. In 1966-67 the total amount paid to State Consolidated Revenue Funds was \$23,155,000 (1.0 per cent). This amount was made up of hospital benefits, \$3,089,000; pharmaceutical benefits, \$7,028,000; milk for school children, \$3,073,000; tuberculosis—reimbursement of maintenance expenditure, \$9,196,000; other, \$769,000.



## State surplus revenue

## STATE SURPLUS REVENUE, 1962-63 TO 1966-67

Year	N.S.W.(a)	Vic.	Qld	S.A.	W.A.	Tas.	Total
TOTAL AMOUNT (\$'000)							
1962-63	372	1	55	580	-1,506	-983	-1,480
1963-64	544	-505	443	3,251	-2,792	-1,185	-246
1964-65	-5,069	..	-4,076	-2,622	-4,695	-1,619	-18,083
1965-66	-4,687	-8,135	-3,520	-6,834	-10	-2,171	-25,358
1966-67	-3,147	..	258	106	-132	-572	-3,486
PER HEAD OF POPULATION (\$)							
1962-63	0.09	..	0.04	0.58	-1.94	-2.74	-0.14
1963-64	0.13	-0.16	0.28	3.18	-3.50	-3.27	-0.02
1964-65	-1.22	..	-2.51	-2.49	-5.75	-4.42	-1.62
1965-66	-1.11	-2.55	-2.12	-6.32	-0.01	-5.87	-2.23
1966-67	-0.74	..	0.15	0.10	-0.15	-1.53	-0.30

(a) See page 764.

Minus sign (-) indicates deficit.

## State Loan Funds

The principal purpose of State public borrowing is to assist in financing the development of the resources of the country, e.g. the establishment and operation of railway systems and electricity undertakings, construction of roads and water and sewerage works, and improvements to harbours and rivers.

Statements relating to 'gross' loan expenditure are shown on page 775. Gross expenditure represents the amounts disbursed during each year. Details of 'net' loan expenditure, i.e. gross expenditure less any credits to the Loan Fund during the year on account of repayments of advances to local governing bodies, settlers, etc., the sale of assets, and transfers from other funds, may be found in the annual bulletin *State, Territory and Local Government Authorities' Finance and Government Securities*. Such moneys are credited to the Loan Fund in the year of repayment irrespective of when the advance was made.

## Gross loan expenditure

Particulars of gross loan expenditure on works, services, etc., are shown in the following tables.

**STATE GROSS LOAN EXPENDITURE ON WORKS, SERVICES, ETC.: DETAILS, 1966-67**  
(\$'000)

	N.S.W.	Vic.(a)	Qld	S.A.	W.A.	Tas.	Total
<b>Public works and services—</b>							
Railways . . . . .	17,600	16,466	23,703	4,815	11,469	330	74,384
Tramways and omnibuses . . . . .	360	..	..	..	200	..	560
Roads . . . . .	4,004	1,672	(b)–692	670	..	1,893	7,547
Bridges . . . . .	..	..	..	..	..	..	..
Harbours and rivers . . . . .	11,293	2,906	838	2,066	1,771	..	18,874
Lights and lighthouses . . . . .	..	..	..	..	..	..	..
Water supply . . . . .	21,295	18,397	..	14,560	12,431	1,518	78,554
Sewerage . . . . .	..	849	..	9,505	..	..	..
Electricity and gas supplies . . . . .	15,070	15,560	3,641	6,700	2,427	18,000	61,399
Public buildings . . . . .	78,264	65,942	21,257	27,803	19,671	10,693	223,629
Loans and grants to local bodies . . . . .	1,110	1,806	15,089	30	621	49	18,705
Housing(c) . . . . .	540	1,769	2,500	700	3,082	50	8,641
Other public works, etc. . . . .	444	583	..	5,102	661	1,023	7,813
<b>Primary production—</b>							
Soldier settlement . . . . .	121	13	..	..	..	..	134
Land for settlement . . . . .	2,448	2,688	117	..	..	100	5,353
Advances to settlers . . . . .	200	232	..	967	..	500	1,899
Water conservation, irrigation and drainage . . . . .	17,554	..	7,289	1,387	1,400	..	27,629
Vermin-proof fencing . . . . .	..	1	..	(d)	..	..	1
Agriculture . . . . .	1,700	1,768	7	..	379	342	4,196
Forestry . . . . .	1,500	2,152	4,686	1,900	400	1,567	12,205
Mines and mineral resources . . . . .	1,713	145	2,666	162	89	1,563	6,337
Other . . . . .	2,083	2,789	..	745	89	..	5,706
Other purposes . . . . .	..	(e)1,823	..	513	563	2,118	5,017
<b>Total . . . . .</b>	<b>177,299</b>	<b>137,562</b>	<b>81,100</b>	<b>77,624</b>	<b>55,253</b>	<b>39,744</b>	<b>568,582</b>

(a) Expenditure from loan funds and on account of loans; includes expenditure from loan funds, from Treasurer's Advance Account, and from State Loans Repayment Fund. (b) Represents transfer of liability on account of expenditure incurred in earlier years. The amount involved has been debited against the item Loans and grants to local bodies, and included in the expenditure shown for 1966-67. (c) Excludes expenditure from Commonwealth loans under Commonwealth-State Housing Agreement. (d) Included in item Advances to settlers. (e) Includes Rural Finance and Settlement Commission, for advances to rural industries, \$817,000.

**STATE GROSS LOAN EXPENDITURE ON WORKS, SERVICES, ETC.**  
**1962-63 TO 1966-67**

Year	N.S.W.	Vic.(a)	Qld	S.A.	W.A.	Tas.	Total
<b>GROSS LOAN EXPENDITURE</b> (\$'000)							
1962-63 . . . . .	140,661	110,665	62,862	59,602	44,310	32,914	451,014
1963-64 . . . . .	148,897	117,750	69,647	63,496	47,270	34,988	482,048
1964-65 . . . . .	160,441	127,855	77,604	73,597	50,736	35,667	525,900
1965-66 . . . . .	170,395	130,848	77,595	74,974	52,646	39,177	545,635
1966-67 . . . . .	177,299	137,562	81,100	77,624	55,253	39,744	568,582
<b>PER HEAD OF POPULATION</b> (\$)							
1962-63 . . . . .	34.98	36.74	40.21	59.69	57.00	91.89	42.03
1963-64 . . . . .	36.50	38.31	43.67	62.04	59.17	96.45	44.09
1964-65 . . . . .	38.73	40.77	47.70	69.95	62.09	97.35	47.20
1965-66 . . . . .	40.48	40.97	46.74	69.30	62.88	106.00	48.06
1966-67 . . . . .	41.50	42.33	48.04	70.31	64.09	106.29	49.22

(a) See footnote (a) to previous table.

**Total loan expenditure**

The preceding tables do not include particulars of expenditure on loan discounts and flotations, the funding of deficits, the retirement of treasury bills, and similar items of a nature other than works, services, etc. Summaries of the gross and net expenditure and repayments in respect of all loan purposes for the years 1964-65 to 1966-67 are shown in the next table.

**STATE LOAN EXPENDITURE: SUMMARY, 1964-65 TO 1966-67**  
(\$'000)

	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>Total</i>
1964-65							
Works and services—							
Gross expenditure . . . . .	160,441	127,855	77,604	73,597	50,736	35,667	525,900
Net expenditure . . . . .	148,320	120,267	65,421	62,554	46,779	33,306	476,646
Repayments . . . . .	12,121	7,588	12,184	11,042	3,957	2,361	49,254
Other than works, etc.(a)—							
Gross expenditure . . . . .	—3,562	611	1,500	43	293	113	—1,003
Net expenditure . . . . .	—3,562	611	1,500	..	179	46	—1,226
Repayments . . . . .	..	..	..	43	(b)114	67	223
<b>Total loan expenditure—</b>							
Gross . . . . .	156,879	128,465	79,104	73,639	51,029	35,780	524,898
Net . . . . .	144,758	120,878	66,921	62,554	46,958	33,352	475,420
Repayments . . . . .	12,121	7,588	12,184	11,085	4,071	2,428	49,477
1965-66							
Works and services—							
Gross expenditure . . . . .	170,395	130,848	77,595	74,974	52,646	39,177	545,635
Net expenditure . . . . .	154,216	122,702	66,466	64,535	47,800	36,565	492,284
Repayments . . . . .	16,179	8,146	11,129	10,439	4,846	2,612	53,352
Other than works, etc.(a)—							
Gross expenditure . . . . .	589	1,036	..	192	280	169	2,267
Net expenditure . . . . .	589	1,036	1,500	791	143	9	4,069
Repayments . . . . .	..	..	—1,500	—599	137	160	—1,802
<b>Total loan expenditure—</b>							
Gross . . . . .	170,984	131,884	77,595	75,167	52,926	39,346	547,902
Net . . . . .	154,806	123,738	67,966	65,326	47,943	36,573	496,352
Repayments . . . . .	16,179	8,146	9,629	9,840	4,983	2,773	51,550
1966-67							
Works and services—							
Gross expenditure . . . . .	177,299	137,562	81,100	77,624	55,253	39,744	568,582
Net expenditure . . . . .	162,161	128,662	71,021	66,653	51,015	36,395	515,907
Repayments . . . . .	15,138	8,900	10,079	10,971	4,238	3,349	52,675
Other than works, etc.(a)—							
Gross expenditure . . . . .	7,158	4,242	..	185	228	373	12,186
Net expenditure . . . . .	7,158	4,242	1,500	975	74	241	14,191
Repayments . . . . .	..	..	—1,500	—790	154	132	—2,004
<b>Total loan expenditure—</b>							
Gross . . . . .	184,457	141,804	81,100	77,809	55,481	40,118	580,768
Net . . . . .	169,319	132,904	72,521	67,628	51,090	36,636	530,098
Repayments . . . . .	15,138	8,900	8,579	10,181	4,391	3,482	50,670

(a) Includes exchange, discounts and flotation expenses, revenue and general cash deficits. (b) From Consolidated Revenue Fund.

Information relating to the government securities and borrowings on issue on behalf of the States is given in the division on Government Securities on Issue: Commonwealth and States (see page 781).

### Advances to settlers

A detailed statement regarding the terms and conditions governing advances to settlers in the several States and the Northern Territory may be found in earlier issues of the Year Book (*see* List of Special Articles, etc., preceding General Index to this issue). The summaries of loans and advances under State authorities in the following paragraphs are compiled from returns supplied by the State Government lending agencies concerned. This information was previously included in the former chapter Land Settlement and Tenure (*see* Year Book No. 52, page 86). A summary for Western Australia is not included, as practically the only governmental funds being made available are Commonwealth (*see* pages 746-7). The figures include transactions in lands acquired under closer and soldier settlement schemes, but exclude balances owing on former Crown lands sold on the conditional purchase, etc., system. Advances made by general banking institutions in the course of their ordinary business are not included. For information on such advances *see* Chapter 18, Private Finance.

The amounts outstanding do not represent the actual differences between the total advances and settlers' repayments, for considerable remissions of indebtedness have been made in all States as a result of re-appraisements of land values and the writing down of debts. In general they include both principal and interest outstanding.

In New South Wales and Victoria expenditure on the acquisition, development and improvement of land for war service land settlement is provided for by the States, and particulars thereof are included in the respective summaries. In Queensland no money is paid for the value of the land acquired, most land being occupied on lease from the Government, but advances in respect of improvements are included. In the other States this expenditure is provided for by the Commonwealth, and particulars are included on page 746.

Loans (Agricultural Occupations) under the *Re-establishment and Employment Act 1945-1966* and certain advances for the purchase of wire-netting and for other purposes made from finance provided by the Commonwealth are included in the summaries following.

#### New South Wales

##### ADVANCES TO SETTLERS, ETC: NEW SOUTH WALES, TO 30 JUNE 1967

<i>Advances, etc.</i>	<i>Advances, etc., made during 1966-67</i>	<i>Total advances, etc., to 30 June 1967</i>	<i>Balances outstanding at 30 June 1967</i>	
			<i>Number</i>	<i>Amount</i>
<i>Advances, etc.</i>				
Department of Lands—	\$'000	\$'000		\$'000
Closer land settlement . . . . .	1,249	(a)39,787	6,035	(b)3,182
Soldier settlers, 1914-18 War . . . . .	..	6,392	7	4
1939-45 War . . . . .	40	29,594	1,810	3,092
Soldier land settlement—acquisition, development and improvement of land, War Service Land Settlement Agreement Act . . . . .	80	57,910	1,773	(c)49,068
Wire netting . . . . .	..	109	..	..
Prickly pear . . . . .	45	1,310	226	40
Rural Bank—				
General Bank Department (including Common- wealth Re-establishment Scheme advances) . .	20,156	301,248	7,492	47,986
Government Agency Department—				
Rural Industries Agency . . . . .	7,611	35,674	3,490	13,725
Advances to Settlers Agency (including unem- ployment relief and dairy promotion advances)	724	12,982	1,913	2,736
Rural Reconstruction Agency . . . . .	1,217	34,836	628	5,259
Irrigation Agency—				
Shallow bores . . . . .	366	5,730	695	1,431
Farm water supplies . . . . .	883	5,326	1,362	3,269
Soil conservation . . . . .	171	829	350	559
Murrumbidgee Irrigation Area—tree mor- tality advances . . . . .	1	807	99	541
Rivers and foreshores improvement . . . .	..	10	18	1
Irrigation areas . . . . .	47	n.a.	12,419	9,034
Government Guarantee Agency . . . . .	..	451	..	..
Closer Settlement Agency . . . . .	..	336	26	48
<b>Total . . . . .</b>	<b>32,590</b>	<b>(d)533,331</b>	<b>38,343</b>	<b>139,975</b>

(a) In addition, the sum of \$3,910,000 had been expended to 30 June 1967 on subdivision, maintenance, improvement, and disposal of land acquired for closer settlement. (b) Excludes an amount of \$9,378,000 capitalised to 30 June 1967 on conversion into leasehold under the Closer Settlement Amendment (Conversion) Act, 1943 and capital values of leasehold tenures, \$7,800,000. (c) Includes capital value of 2,628 Closer Settlement Leases, \$39,672,000, and unpaid balances on 1,773 Structural Improvement Accounts, \$9,301,000. (d) Incomplete.

## Victoria

## ADVANCES TO SETTLERS, ETC.: VICTORIA, TO 30 JUNE 1967

<i>Advances, etc.</i>	<i>Advances, etc., made during 1966-67</i>	<i>Total advances, etc., to 30 June 1967</i>	<i>Balances outstanding at 30 June 1967</i>	
			<i>Number</i>	<i>Amount</i>
State Savings Bank, Credit Foncier—	\$'000	\$'000		\$'000
Civilians . . . . .	295	25,991	458	1,769
Discharged soldiers . . . . .	..	1,698	1	1
Treasurer—				
Cool stores, canneries, etc. . . . .	..	4,886	(a)1	2,779
Department of Lands and Survey—				
Closer settlement settlers and soldier settlers . . . . .	..	(b)93,810	1,165	2,313
Cultivators of land . . . . .	..	4,927	18	7
Wire netting . . . . .	1	1,480	29	9
Rural Finance and Settlement Commission—				
For soldier settlement—				
Purchase of land, and development and im- provement of holdings . . . . .	4	(c)93,325	n.a.	(d)39,066
Advances for—				
Development of single unit farms . . . . .	..	23,917	1,277	8,831
Improvements, stock, etc. . . . .	9	12,315	141	87
Other advances . . . . .	..	3,594	173	40
For general land settlement—				
Purchase of land . . . . .	389	1,970	n.a. }	(f)20,497
Development and improvement of holdings . . . . .	2,116	(e)20,629	n.a. }	
Improvements, stock, etc. . . . .	187	1,064	234	
Total . . . . .	3,002	289,605	(g)3,497	75,624

(a) Number of companies. (b) Represents consolidated debts of settlers (Section 30, Act 4091). (c) Includes liability for advances for settlers' leases \$57,319,000. (d) Includes \$38,722,000 outstanding on settlers' lease liabilities and \$338,000 owing on contracts of sale for unsuitable land. To 30 June 1967, excess acquisition and developmental costs written off amounted to \$30,764,000. (e) Includes liability for advances for settlers' leases \$7,819,000. (f) Includes \$7,684,000 outstanding on settlers' lease liabilities and \$272,000 owing on contracts of sale for unsuitable land. To 30 June 1967, excess acquisition and developmental costs written off amounted to \$1,329,000. (g) Incomplete.

## Queensland

## ADVANCES TO SETTLERS, ETC.: QUEENSLAND, TO 30 JUNE 1967

<i>Advances, etc.</i>	<i>Advances, etc., made during 1966-67</i>	<i>Total advances, etc., to 30 June 1967</i>	<i>Balances outstanding at 30 June 1967</i>	
			<i>Number</i>	<i>Amount</i>
Co-ordination of Rural Advances and Agricultural Bank Acts . . . . .	\$'000	\$'000		\$'000
Bank Acts . . . . .	12,680	135,108	6,715	59,513
Discharged soldiers' settlement(a) . . . . .	..	4,936	151	59
Water facilities . . . . .	..	116	..	..
Wire netting, etc. . . . .	..	2,039	..	..
Seed wheat and barley . . . . .	6	(b)372	n.a.	25
Drought relief . . . . .	2,030	7,991	1,087	4,861
War Service Land Settlement . . . . .	128	10,403	168	1,634
Financial Arrangements and Development Aid Acts and prior Acts . . . . .	..	2,368	..	..
Irrigation . . . . .	..	110	..	..
Farmers' Assistance (Debt Adjustment) Acts . . . . .	..	2,111	7	15
Commonwealth Re-establishment and Employment Act . . . . .	..	1,748	10	8
Water Supplies Assistance Act . . . . .	800	4,510	879	3,515
Brigalow and Other Lands Development Act . . . . .	822	4,313	74	4,165
Soil Conservation Act . . . . .	14	21	12	21
Total . . . . .	16,480	176,145	(c) 9,103	73,815

(a) Includes advances to group settlers through the Lands Department, as well as advances through the Agricultural Bank. (b) Includes accrued interest. (c) Incomplete.

## South Australia

## ADVANCES TO SETTLERS, ETC.: SOUTH AUSTRALIA, TO 30 JUNE 1967

<i>Advances, etc.</i>	<i>Advances, etc., made during 1966-67</i>	<i>Total advances, etc., to 30 June 1967</i>	<i>Balances outstanding at 30 June 1967</i>	
			<i>Number</i>	<i>Amount</i>
Department of Lands—	\$'000	\$'000		\$'000
Advances to soldier settlers . . . . .	..	10,144	15	304
Advances to blockholders . . . . .	..	(a)	..	..
Advances under Closer Settlement Acts . . . . .	..	5,461	425	344
Settlement of Returned Service Personnel, 1939-45 War . . . . .	2,187	31,286	1,091	12,341
Advances under Crown Lands Development Act . . . . .	..	986	77	701
Irrigation Branch—				
Advances to soldier settlers . . . . .	..	2,096	126	217
State Bank of South Australia—				
Advances to settlers for improvements . . . . .	132	3,574	372	1,198
Advances under Vermin and Fencing Acts . . . . .	6	2,890	73	67
Advances under Loans to Producers Act . . . . .	969	12,054	212	8,092
Commonwealth Re-establishment and Employment Act . . . . .	..	1,655	149	110
<b>Total . . . . .</b>	<b>3,294</b>	<b>70,145</b>	<b>2,540</b>	<b>23,375</b>

(a) Ceased in 1958; no further loans made or to be made. Total advances made up to date of cessation, \$83,000.

## Western Australia

The operations prior to 1945 covered in this section related to moneys made available through, or by, the old Agricultural Bank and other Government Departments for the purpose of agricultural development. On 1 October 1945, however, the Agricultural Bank was reconstituted as the Rural and Industries Bank of Western Australia, and was given authority to operate in similar manner to the associated banks. Certain securities in the books of the old bank were taken over by the general banking division of the new bank, and the clients concerned then operated with privileges and obligations similar to those provided by other banking institutions. The majority of the remaining securities, also, were eventually transferred.

At present, very limited funds are being made available by the State Government for advances for agricultural development, the bulk of the moneys for this purpose being provided by the Commonwealth Government under the War Service Land Settlement and Commonwealth Re-establishment and Employment Acts. Particulars of this expenditure are shown on pages 746-7.

## Tasmania

Particulars of advances made for the purchase of land for closer and soldier land settlement included in this table for earlier years are now omitted, as they are not regarded as outstanding advances by the Department of Agriculture; the areas so purchased have been leased on 99-year terms with an option of purchase which the leaseholder may exercise at any time.

## ADVANCES TO SETTLERS, ETC.: TASMANIA, TO 30 JUNE 1967

<i>Advances, etc.</i>	<i>Advances, etc., made during 1966-67</i>	<i>Total advances, etc., to 30 June 1967</i>	<i>Balances outstanding at 30 June 1967</i>	
			<i>Number</i>	<i>Amount</i>
Agricultural Bank—	\$'000	\$'000		\$'000
State Advances Act and Rural Credits . . . . .	603	12,254	1,245	3,782
Commonwealth Re-establishment and Employment Act . . . . .	..	815	78	63
Primary Producers' Relief Act 1947 . . . . .	..	595	12	5
1960 . . . . .	..	18	2	3
1962 . . . . .	..	19	6	8
Fire Damage Relief Act 1967 . . . . .	28	28	27	28
Minister for Agriculture—				
Soldier settlers—				
Advances . . . . .	14	2,135	136	109
Closer settlers—				
Advances . . . . .	41	443	68	424
<b>Total . . . . .</b>	<b>686</b>	<b>16,307</b>	<b>1,574</b>	<b>4,422</b>

**Northern Territory**

During the year 1966-67 twenty-nine advances totalling \$312,423 were approved and advances made totalled \$254,710. At 30 June 1967 the balance outstanding from seventy-eight settlers, including interest, was \$862,661.

**COMMONWEALTH AND STATE FINANCE****Consolidated Revenue Fund expenditure and receipts**

The following table shows the aggregate expenditure and receipts of the Consolidated Revenue Funds of the Commonwealth and States for each of the years 1962-63 to 1966-67. In the table the combined Commonwealth and State totals have been adjusted to exclude major duplications, but the separate Commonwealth and State figures are as shown in other divisions of this chapter. The items excluded from the total figures are: payments made by the Commonwealth to the States and included in the State Consolidated Revenue Funds on account of financial assistance grants in 1962-63 to 1966-67, interest under the Financial Agreement, special grants, special financial assistance, grants to universities, specific purpose payments, Tuberculosis Act capital expenditure, National Welfare Fund payments, and estimated payments of pay-roll tax by the States to the Commonwealth. There are other relatively minor payments for which adjustments have not been made, and the adjusted figures are therefore still slightly overstated.

**COMMONWEALTH AND STATE CONSOLIDATED REVENUE FUND EXPENDITURE AND RECEIPTS, 1962-63 TO 1966-67**

Year	Expenditure			Receipts		
	Commonwealth	States	Total	Commonwealth	States	Total
	\$'000	\$'000	\$m	\$'000	\$'000	\$m
1962-63 . . . . .	3,370,772	1,695,742	4,347.5	3,370,772	1,694,262	4,346.1
1963-64 . . . . .	3,809,376	1,829,333	4,885.4	3,809,376	1,829,087	4,885.1
1964-65 . . . . .	4,418,178	1,965,133	5,605.2	4,418,178	1,947,050	5,587.2
1965-66 . . . . .	4,879,201	2,120,259	6,105.4	4,879,201	2,094,901	6,080.0
1966-67 . . . . .	5,227,721	2,290,254	6,545.4	5,227,721	2,286,768	6,548.8

**Taxation collections**

The following table shows the combined Commonwealth and State taxation collections and the amount per head of population for the years 1962-63 to 1966-67. Taxation collections by the State Governments which are not paid into the Consolidated Revenue Funds are included.

**COMMONWEALTH AND STATE TAXATION: TOTAL NET COLLECTIONS BY TYPE OF TAX, 1962-63 TO 1966-67**

Tax	1962-63	1963-64	1964-65	1965-66	1966-67
NET COLLECTIONS (\$'000)					
Income taxes . . . . .	1,621,181	1,874,484	2,295,607	2,549,695	2,729,832
Customs and excise duty . . . . .	759,005	815,036	899,722	1,022,970	1,081,603
Sales tax . . . . .	313,062	325,189	362,857	370,044	380,673
Motor taxes . . . . .	115,518	136,714	153,270	172,708	188,634
Pay-roll tax . . . . .	126,510	136,443	150,078	161,943	172,232
Estate, probate and succession duties . . . . .	115,727	130,961	132,974	130,581	147,770
Stamp duties, n.e.i. . . . .	81,757	93,080	104,436	109,593	126,439
Land tax . . . . .	49,410	55,134	62,765	69,570	72,738
Racing . . . . .	21,198	23,361	27,340	32,309	39,019
Liquor . . . . .	22,203	23,784	26,179	27,369	31,194
Licences, n.e.i. and other taxes(a) . . . . .	48,410	55,351	68,127	77,343	85,792
<b>Total—</b>					
Commonwealth . . . . .	2,880,918	3,218,838	3,787,030	4,185,338	4,453,815
States . . . . .	393,062	450,701	496,326	538,787	602,111
<b>Grand total . . . . .</b>	<b>3,273,980</b>	<b>3,669,539</b>	<b>4,283,356</b>	<b>4,724,125</b>	<b>5,055,926</b>

(a) Includes arrears of State income taxes.

**COMMONWEALTH AND STATE TAXATION: TOTAL NET COLLECTIONS  
BY TYPE OF TAX, 1962-63 TO 1966-67—continued**

<i>Tax</i>	<i>1962-63</i>	<i>1963-64</i>	<i>1964-65</i>	<i>1965-66</i>	<i>1966-67</i>
<b>PER HEAD OF POPULATION</b> <b>(\$)</b>					
Income taxes . . . . .	149.46	169.49	203.54	221.70	233.15
Customs and excise duty . . . . .	69.98	73.70	79.77	88.95	92.38
Sales tax . . . . .	28.86	29.40	32.17	32.16	32.51
Motor taxes . . . . .	10.65	12.36	13.59	15.02	16.11
Pay-roll tax . . . . .	11.66	12.34	13.31	14.08	14.71
Estate, probate and succession duties . . . . .	10.67	11.84	11.79	11.35	12.62
Stamp duties, n.e.i. . . . .	7.54	8.42	9.26	9.53	10.80
Land tax . . . . .	4.56	4.99	5.56	6.05	6.21
Racing . . . . .	1.95	2.11	2.42	2.81	3.33
Liquor . . . . .	2.05	2.15	2.32	2.38	2.66
Licences, n.e.i., and other taxes(a) . . . . .	4.46	5.00	6.04	6.73	7.33
<i>Total—</i>					
<i>Commonwealth</i> . . . . .	265.61	291.05	335.77	363.92	380.38
<i>States</i> . . . . .	36.63	41.23	44.55	47.46	52.13
<b>Grand total . . . . .</b>	<b>301.84</b>	<b>331.81</b>	<b>379.78</b>	<b>410.77</b>	<b>431.81</b>

(a) Includes arrears of State income taxes.

### GOVERNMENT SECURITIES ON ISSUE: COMMONWEALTH AND STATES

For the following reasons, Government Securities on Issue, as set out in the tables in this division, may not be aggregated without adjustment to indicate what is sometimes described as the 'public debt' or 'net public debt' of the Commonwealth and State Governments. There are forms of debt not evidenced by the issue of securities. Again, some of the securities included in the tables are held by the Governments themselves. For example, a State Government may hold temporarily, or even for long periods, securities issued by the Commonwealth Government. The Commonwealth Government itself, through such institutions as the National Debt Commission, or through the Trust Funds, holds large investments in securities issued, either directly by itself or on behalf of the States. In addition, some of the securities issued on behalf of the States and held by the Commonwealth Government represent the proceeds of overseas loans, securities for which were issued directly by the Commonwealth Government. From the point of view of the aggregate net debt of the Commonwealth and the States, it would thus involve duplication if the sum of the securities on issue were to be regarded as representing the 'net public debt'.

Under the Financial Agreement between the Commonwealth and the States in 1927 the Commonwealth Government accepted responsibility for the securities of the State Governments then on issue, and was empowered to arrange for all future borrowings on behalf of the Commonwealth and the States and to issue Commonwealth securities for all money borrowed. The Commonwealth is reimbursed by the States for interest, exchange, etc., paid on their behalf, and the securities are redeemed from the National Debt Sinking Fund to which both the Commonwealth and State Governments make contributions.

In the statistical tables relating to Government securities, details of securities on issue, annual interest liability and average rate of interest liability, except on pages 785-7, are shown in the currencies in which they are repayable or payable respectively. Australian currency equivalents for overseas loans have been calculated using International Monetary Fund par rates of exchange (and the calculated equivalent for Swiss francs) ruling at 30 June in each year shown. Rates of exchange to \$A at 30 June 1967 were as follows: £Sterling, 0.4000; United States dollars, 1.1200; Canadian dollars, 1.2108; Swiss francs, 4.8978; Netherlands guilders, 4.0544; German Deutsche marks, 4.4800.

The full text of the original Financial Agreement between the Commonwealth and the States was given in Year Book No. 31, page 21, a summary of the original Agreement as affected by the subsequent Agreements in later issues up to No. 37 (see pages 685-90), and a summary of the main provisions in further issues up to No. 50 (see pages 952-3).



### Government securities on issue: Commonwealth and States

#### Government securities on issue, annual interest payable and average rate of interest

In the following tables details are given of government securities on issue on account of the Commonwealth and States, annual interest payable and average rates of interest.

#### GOVERNMENT SECURITIES ON ISSUE: COMMONWEALTH AND STATES 30 JUNE 1967

	Currency in which repayable							Total— Australian currency equiva- lents(a)
	Australian currency	Sterling	United States dollars	Canadian dollars	Swiss francs	Nether- lands guilders	German Deutsche marks	
	\$A'000	£Stg'000	\$US '000	\$Can '000	Sw. fr. '000	f.'000	D.M. '000	\$A'000
For Commonwealth purposes	2,531,402	69,262	516,494	48,479	239,711	7,150	84,596	3,275,339
On account of States—								
New South Wales	2,333,082	101,797	78,327	4,361	15,833	10,383	..	2,666,905
Victoria	1,755,151	37,882	39,937	3,508	12,732	8,346	..	1,893,069
Queensland	947,522	24,845	28,518	1,759	6,391	4,250	..	1,038,902
South Australia	927,218	30,666	21,549	1,865	6,774	4,191	..	1,027,080
Western Australia	677,807	31,869	13,582	1,340	4,863	3,264	..	772,511
Tasmania	504,880	6,822	12,857	1,019	3,703	2,416	..	535,606
Total, States	7,145,660	233,880	194,770	13,852	50,296	32,850	..	7,934,074
Total, Commonwealth and States—								
Stock and bonds	8,757,364	298,087	344,409	26,325	290,000	40,000	..	9,900,907
Treasury bills, internal	679,500	..	..	..	..	..	..	679,500
Treasury notes	88,452	..	..	..	..	..	..	88,452
Treasury bills, public	90,000	..	..	..	..	..	..	90,000
International Bank loans	..	..	163,066	36,006	7	..	84,596	194,217
Commonwealth notes	..	..	102,800	..	..	..	..	91,786
Debentures	52,536	..	..	..	..	..	..	52,536
Loans for defence purposes	..	..	100,989	..	..	..	..	90,169
Balance of securities of States taken over by Commonwealth and still represented by State securities	..	4,166	..	..	..	..	..	10,415
Other	9,209	(b)889	..	..	..	..	..	11,432
Grand total—								
Currencies in which repayable	9,677,061	303,142	711,264	62,331	290,007	40,000	84,596	..
Australian currency equivalents(a)\$A'000	9,677,061	757,855	635,057	51,479	59,212	9,866	18,883	11,209,413

(a) For rates of exchange to \$A ruling at 30 June 1967 see page 781. (b) State securities issued by the Government of Western Australia to meet the costs of acquisition of the Midland Railway Company of Western Australia Ltd.

#### GOVERNMENT SECURITIES ON ISSUE: COMMONWEALTH AND STATES ANNUAL INTEREST PAYABLE, 30 JUNE 1967

	Currency in which payable							Total— Australian currency equiva- lents(a)
	Australian currency	Sterling	United States dollars	Canadian dollars	Swiss francs	Nether- lands guilders	German Deutsche marks	
	\$A'000	£Stg'000	\$US '000	\$Can '000	Sw. fr. '000	f.'000	D.M. '000	\$A'000
For Commonwealth purposes	91,848	3,367	26,577	2,244	10,537	357	4,801	129,159
On account of States—								
New South Wales	112,312	4,671	4,098	251	712	519	..	128,128
Victoria	85,417	1,707	2,086	202	573	417	..	91,936
Queensland	44,844	1,000	1,530	101	288	213	..	48,904
South Australia	44,829	1,101	1,134	107	305	210	..	48,797
Western Australia	32,708	1,098	689	77	219	163	..	36,217
Tasmania	24,474	294	694	58	166	121	..	25,941
Total, States	344,583	9,871	10,231	796	2,263	1,643	..	379,921
Grand total—								
Currencies in which repayable	436,432	13,238	36,808	3,040	12,800	2,000	4,801	..
Australian currency equivalents(a)\$A'000	436,432	33,096	32,864	2,511	2,613	493	1,072	509,080

(a) For rates of exchange to \$A ruling at 30 June 1967 see page 781.

**GOVERNMENT SECURITIES ON ISSUE: COMMONWEALTH AND STATES**  
**ANNUAL INTEREST PAYABLE, 30 JUNE 1967—continued**

	Currency in which payable							Total— Australian currency equiva- lents(a)
	Australian currency	Sterling	United States dollars	Canadian dollars	Swiss francs	Nether- lands guilders	German Deutsche marks	
AVERAGE RATE OF INTEREST LIABILITY (Per cent)								
For Commonwealth purposes	3.63	4.86	5.15	4.63	4.40	5.00	5.68	3.94
On account of States—								
New South Wales	4.81	4.59	5.23	5.75	4.50	5.00	..	4.80
Victoria	4.87	4.51	5.22	5.75	4.50	5.00	..	4.86
Queensland	4.73	4.02	5.37	5.75	4.50	5.00	..	4.71
South Australia	4.83	3.59	5.26	5.75	4.50	5.00	..	4.75
Western Australia	4.83	3.45	5.07	5.75	4.50	5.00	..	4.69
Tasmania	4.85	4.31	5.40	5.75	4.50	5.00	..	4.84
Total, States	4.82	4.22	5.25	5.75	4.50	5.00	..	4.79
Grand total	4.51	4.38	5.17	4.88	4.41	5.00	5.68	4.54

(a) For rates of exchange to \$A ruling at 30 June 1967 see page 781.

**GOVERNMENT SECURITIES ON ISSUE: COMMONWEALTH AND STATES**  
**30 JUNE 1963 TO 1967**

	30 June—				
	1963	1964	1965	1966	1967
For Commonwealth purposes—					
Australian currency . . . \$A'000	2,518,728	2,568,714	2,512,888	2,520,779	2,531,402
Sterling . . . £Stg'000	77,327	79,393	76,253	73,398	69,262
United States dollars . . . \$US'000	362,025	351,347	368,641	380,067	516,494
Canadian dollars . . . \$Can'000	50,948	50,376	49,665	49,191	48,479
Swiss francs . . . Sw.fr.'000	196,556	194,288	194,288	194,088	239,711
Netherlands guilders . . . f.'000	7,150	7,150	7,150	7,150	7,150
German Deutsche marks . . . D.M.'000	6,355	37,901	84,596	84,596	84,596
Total, Commonwealth—Aus- tralian currency equivalents(a)	\$A'000 3,120,672	3,172,396	3,133,997	3,144,518	3,275,339
On account of States—					
Australian currency . . . \$A'000	5,393,340	5,749,642	6,182,321	6,613,686	7,145,660
Sterling . . . £Stg'000	273,843	284,795	268,670	255,670	233,880
United States dollars . . . \$US'000	227,930	220,966	229,884	236,610	194,770
Canadian dollars . . . \$Can'000	16,668	16,065	15,633	14,690	13,852
Swiss francs . . . Sw.fr.'000	50,296	50,296	50,296	50,296	50,296
Netherlands guilders . . . f.'000	32,850	32,850	32,850	32,850	32,850
Total, States—Australian cur- rency equivalents(a)	\$A'000 6,313,596	6,690,562	7,090,533	7,494,623	7,934,074
Total, Commonwealth and States—Australian currency equivalents(a)	\$A'000 9,434,268	9,862,958	10,224,530	10,639,141	11,209,413

(a) For rates of exchange to \$A ruling at 30 June 1967 see page 781.

**GOVERNMENT SECURITIES ON ISSUE: COMMONWEALTH AND STATES  
ANNUAL INTEREST PAYABLE, 30 JUNE 1963 TO 1967**

		30 June—				
		1963	1964	1965	1966	1967
AMOUNT						
<b>For Commonwealth purposes—</b>						
Australian currency . . . . .	\$A'000	84,550	89,405	89,540	91,723	91,848
Sterling . . . . .	£Stg'000	3,504	3,714	3,608	3,509	3,367
United States dollars . . . . .	\$US'000	17,711	17,334	18,437	18,955	26,577
Canadian dollars . . . . .	\$Can'000	2,352	2,327	2,297	2,275	2,244
Swiss francs . . . . .	Sw.fr.'000	8,080	7,982	7,982	7,973	10,537
Netherlands guilders . . . . .	f.'000	357	357	358	357	357
German Deutsche marks . . . . .	D.M.'000	302	2,116	4,801	4,801	4,801
<b>Total, Commonwealth—Australian currency equivalents(a)</b>	<b>\$A'000</b>	<b>112,870</b>	<b>118,280</b>	<b>119,709</b>	<b>122,087</b>	<b>129,159</b>
<b>On account of States—</b>						
Australian currency . . . . .	\$A'000	238,128	255,105	283,118	313,379	344,583
Sterling . . . . .	£Stg'000	10,917	11,529	11,034	10,632	9,871
United States dollars . . . . .	\$US'000	11,227	10,889	11,428	11,889	10,231
Canadian dollars . . . . .	\$Can'000	959	924	899	845	796
Swiss francs . . . . .	Sw.fr.'000	2,263	2,263	2,263	2,263	2,263
Netherlands guilders . . . . .	f.'000	1,643	1,643	1,643	1,643	1,643
<b>Total, States—Australian currency equivalents(a)</b>	<b>\$A'000</b>	<b>277,106</b>	<b>295,278</b>	<b>322,515</b>	<b>352,138</b>	<b>379,921</b>
<b>Total, Commonwealth and States—Australian currency equivalents(a)</b>	<b>\$A'000</b>	<b>389,976</b>	<b>413,558</b>	<b>442,223</b>	<b>474,225</b>	<b>509,080</b>

**AVERAGE RATE OF INTEREST LIABILITY**

(Per cent)

<b>For Commonwealth purposes—</b>						
Australian currency . . . . .		3.36	3.48	3.56	3.64	3.63
Sterling . . . . .		4.53	4.68	4.73	4.78	4.86
United States dollars . . . . .		4.89	4.93	5.00	4.99	5.15
Canadian dollars . . . . .		4.62	4.62	4.62	4.63	4.63
Swiss francs . . . . .		4.11	4.11	4.11	4.11	4.40
Netherlands guilders . . . . .		5.00	5.00	5.00	5.00	5.00
German Deutsche marks . . . . .		4.75	4.58	5.68	5.68	5.68
<b>Total, Commonwealth—Australian currency equivalents(a)</b>		<b>3.62</b>	<b>3.73</b>	<b>3.82</b>	<b>3.88</b>	<b>3.94</b>
<b>On account of States—</b>						
Australian currency . . . . .		4.42	4.44	4.58	4.74	4.82
Sterling . . . . .		3.99	4.05	4.11	4.16	4.22
United States dollars . . . . .		4.93	4.93	4.97	5.02	5.25
Canadian dollars . . . . .		5.75	5.75	5.75	5.75	5.75
Swiss francs . . . . .		4.50	4.50	4.50	4.50	4.50
Netherlands guilders . . . . .		5.00	5.00	5.00	5.00	5.00
<b>Total, States—Australian currency equivalents(a)</b>		<b>4.39</b>	<b>4.41</b>	<b>4.55</b>	<b>4.70</b>	<b>4.79</b>
<b>Total, Commonwealth and States—Australian currency equivalents(a)</b>		<b>4.13</b>	<b>4.19</b>	<b>4.33</b>	<b>4.46</b>	<b>4.54</b>

(a) For rates of exchange to \$A ruling at 30 June 1967 see page 781.

## Government securities on issue and annual interest payable—Australian currency

In the following tables, details, including per capita figures, are shown in Australian currency equivalents calculated at rates of exchange ruling at 30 June of each of the years concerned.

**GOVERNMENT SECURITIES ON ISSUE: COMMONWEALTH AND STATES**  
**30 JUNE 1967—AUSTRALIAN CURRENCY**

	Currency in which repayable							
	Australian currency	Sterling	United States dollars	Can- adian dollars	Swiss francs	Nether- lands guilders	German Deutsche marks	Total
SECURITIES ON ISSUE (\$A'000)								
For Commonwealth pur- poses—								
Treasury Bills, internal . . . . .	679,500	..	..	..	..	..	..	679,500
Other short-term . . . . .	178,452	..	..	..	..	..	..	178,452
Other . . . . .	1,673,450	173,154	461,155	40,039	48,943	1,764	18,883	2,417,388
Total, Commonwealth.	2,531,402	173,154	461,155	40,039	48,943	1,764	18,883	3,275,339
On account of States—								
New South Wales . . . . .	2,333,082	254,493	69,935	3,602	3,233	2,561	..	2,666,905
Victoria . . . . .	1,755,151	94,705	35,658	2,897	2,600	2,058	..	1,893,069
Queensland . . . . .	947,522	62,112	25,462	1,452	1,305	1,048	..	1,038,902
South Australia . . . . .	927,218	76,665	19,240	1,540	1,383	1,034	..	1,027,080
Western Australia . . . . .	677,807	79,672	12,127	1,107	993	805	..	772,511
Tasmania . . . . .	504,880	17,055	11,479	842	756	596	..	535,606
Total, States . . . . .	7,145,660	584,701	173,902	11,440	10,269	8,102	..	7,934,074
Total, Commonwealth and States—								
Treasury Bills, internal . . . . .	679,500	..	..	..	..	..	..	679,500
Other short-term . . . . .	178,452	..	..	..	..	..	..	178,452
Other . . . . .	8,819,110	757,855	635,057	51,479	59,212	9,866	18,883	10,351,461
Grand total . . . . .	9,677,061	757,855	635,057	51,479	59,212	9,866	18,883	11,209,413

**PER HEAD OF POPULATION**  
(\$A)

For Commonwealth purposes . . . . .	214.34	14.66	39.05	3.39	4.14	0.15	1.60	277.33
On account of States—								
New South Wales . . . . .	541.70	59.09	16.24	0.84	0.75	0.59	..	619.21
Victoria . . . . .	536.02	28.92	10.89	0.88	0.79	0.63	..	578.14
Queensland . . . . .	556.83	36.50	14.96	0.85	0.77	0.62	..	610.54
South Australia . . . . .	834.22	68.98	17.31	1.39	1.24	0.93	..	924.07
Western Australia . . . . .	773.43	90.91	13.84	1.26	1.13	0.92	..	881.50
Tasmania . . . . .	1,341.22	45.31	30.49	2.24	2.01	1.58	..	1,422.84
<i>Total, States . . . . .</i>	<i>613.50</i>	<i>50.20</i>	<i>14.93</i>	<i>0.98</i>	<i>0.88</i>	<i>0.70</i>	<i>..</i>	<i>681.20</i>
<i>Total Commonwealth and States . . . . .</i>	<i>819.38</i>	<i>64.17</i>	<i>53.77</i>	<i>4.36</i>	<i>5.01</i>	<i>0.84</i>	<i>1.60</i>	<i>949.13</i>

**ANNUAL INTEREST PAYABLE**  
(\$A'000)

For Commonwealth purposes . . . . .	91,848	8,418	23,729	1,853	2,151	88	1,072	129,159
On account of States—								
New South Wales . . . . .	112,312	11,678	3,659	207	145	128	..	128,128
Victoria . . . . .	85,417	4,268	1,862	167	117	103	..	91,936
Queensland . . . . .	44,844	2,500	1,366	83	59	53	..	48,904
South Australia . . . . .	44,829	2,753	1,012	88	62	52	..	48,797
Western Australia . . . . .	32,708	2,745	615	64	45	40	..	36,217
Tasmania . . . . .	24,474	735	620	48	34	30	..	25,941
<i>Total, States . . . . .</i>	<i>344,583</i>	<i>24,678</i>	<i>9,135</i>	<i>658</i>	<i>462</i>	<i>405</i>	<i>..</i>	<i>379,921</i>
<i>Total, Commonwealth and States . . . . .</i>	<i>436,432</i>	<i>33,096</i>	<i>32,864</i>	<i>2,511</i>	<i>2,613</i>	<i>493</i>	<i>1,072</i>	<i>509,080</i>

**GOVERNMENT SECURITIES ON ISSUE: COMMONWEALTH AND STATES**  
**30 JUNE 1967—AUSTRALIAN CURRENCY—continued**

	Currency in which repayable—							Total
	Australian	Sterling	United States dollars	Canadian dollars	Swiss francs	Netherlands guilders	German Deutsche marks	
ANNUAL INTEREST PAYABLE PER HEAD OF POPULATION (\$A)								
For Commonwealth purposes . . . . .	7.78	0.71	2.01	0.16	0.18	..	0.09	10.94
On account of States—								
New South Wales . . . . .	26.08	2.71	0.85	0.05	0.03	0.03	..	29.75
Victoria . . . . .	26.09	1.30	0.57	0.05	0.04	0.03	..	28.08
Queensland . . . . .	26.35	1.47	0.80	0.05	0.03	0.03	..	28.74
South Australia . . . . .	40.33	2.48	0.91	0.08	0.06	0.05	..	43.90
Western Australia . . . . .	37.32	3.13	0.70	0.07	0.05	0.05	..	41.33
Tasmania . . . . .	65.02	1.95	1.65	0.13	0.09	0.08	..	68.91
<i>Total, States</i> . . . . .	<i>29.58</i>	<i>2.12</i>	<i>0.78</i>	<i>0.06</i>	<i>0.04</i>	<i>0.03</i>	<i>..</i>	<i>32.62</i>
<i>Total, Commonwealth and States</i> . . . . .	<i>36.95</i>	<i>2.80</i>	<i>2.78</i>	<i>0.21</i>	<i>0.22</i>	<i>0.04</i>	<i>0.09</i>	<i>43.11</i>

**GOVERNMENT SECURITIES ON ISSUE: COMMONWEALTH AND STATES**  
**SECURITIES ON ISSUE AND ANNUAL INTEREST PAYABLE, 30 JUNE 1963**  
**TO 1967—AUSTRALIAN CURRENCY**  
**(\$A'000)**

	<i>30 June—</i>				
	<i>1963</i>	<i>1964</i>	<i>1965</i>	<i>1966</i>	<i>1967</i>
<b>SECURITIES ON ISSUE</b>					
For Commonwealth purposes—					
Treasury Bills, Internal . . . . .	559,600	599,000	632,400	681,500	679,500
Other short-term . . . . .	385,076	330,570	196,432	195,996	178,452
Other . . . . .	2,175,996	2,242,826	2,305,165	2,267,022	2,417,388
<i>Total, Commonwealth</i> . . . . .	<i>3,120,672</i>	<i>3,172,396</i>	<i>3,133,997</i>	<i>3,144,518</i>	<i>3,275,339</i>
On account of States—					
New South Wales . . . . .	2,167,012	2,283,382	2,407,364	2,531,928	2,666,905
Victoria . . . . .	1,482,260	1,577,722	1,679,339	1,781,544	1,893,069
Queensland . . . . .	811,274	862,774	919,706	977,046	1,038,902
South Australia . . . . .	824,186	870,504	919,446	970,473	1,027,080
Western Australia . . . . .	613,396	652,796	691,660	730,700	772,511
Tasmania . . . . .	415,468	443,384	473,019	502,932	535,606
<i>Total, States</i> . . . . .	<i>6,313,596</i>	<i>6,690,562</i>	<i>7,090,533</i>	<i>7,494,623</i>	<i>7,934,074</i>
Total, Commonwealth and States—					
Treasury Bills, internal . . . . .	559,600	599,000	632,400	681,500	679,500
Other short-term . . . . .	385,076	330,570	196,432	195,996	178,452
Other . . . . .	8,489,592	8,933,388	9,395,698	9,761,645	10,351,461
<i>Grand total</i> . . . . .	<i>9,434,268</i>	<i>9,862,958</i>	<i>10,224,530</i>	<i>10,639,141</i>	<i>11,209,413</i>

GOVERNMENT SECURITIES ON ISSUE: COMMONWEALTH AND STATES  
SECURITIES ON ISSUE AND ANNUAL INTEREST PAYABLE, 30 JUNE 1967  
TO 1967—AUSTRALIAN CURRENCY—*continued*  
(\$'000)

	30 June—				
	1963	1964	1965	1966	1967
ANNUAL INTEREST PAYABLE					
For Commonwealth purposes . . . . .	112,870	118,280	119,708	122,087	129,159
On account of States—					
New South Wales . . . . .	95,314	101,280	110,250	119,668	128,128
Victoria . . . . .	66,350	70,890	77,650	85,023	91,936
Queensland . . . . .	34,524	36,920	40,492	44,493	48,904
South Australia . . . . .	35,974	38,114	41,534	45,350	48,797
Western Australia . . . . .	26,420	28,284	30,886	33,617	36,217
Tasmania . . . . .	18,524	19,790	21,706	23,987	25,941
<i>Total, States</i> . . . . .	<i>277,106</i>	<i>295,278</i>	<i>322,515</i>	<i>352,138</i>	<i>379,921</i>
<i>Total, Commonwealth and States</i> . . . . .	<i>389,976</i>	<i>413,558</i>	<i>442,223</i>	<i>474,225</i>	<i>509,080</i>

**Government securities on issue at each rate of interest and according to earliest and latest years of maturity**

For details of securities on issue for Commonwealth and State purposes at 30 June 1967 at each rate of interest and classified according to the earliest and latest years of maturity see the annual bulletin *State, Territory and Local Government Authorities' Finance and Government Securities*.

**Short-term securities on issue**

Particulars of the short-term securities (Treasury bills, Treasury notes and seasonal securities) of the Commonwealth and States in Australia at intervals from 30 June 1962 to 30 June 1966 are shown on page 814 of Year Book No. 53, and particulars at earlier dates are shown in previous issues. These securities are included in the government securities on issue as shown elsewhere. No short-term securities have been raised overseas since September 1956, when all such securities held in London were expatriated to Australia.

The Treasury bill discount rate in Australia has remained at 1 per cent since 29 July 1952.

In 1962–63, daily issues of Treasury notes replaced those of seasonal securities which had, during the three previous financial years, all matured in the course of the same financial year in which they were issued. Treasury notes with a currency of thirteen weeks were issued in multiples of \$2,000 of the minimum subscription of \$10,000, and increases in value were subject to the usual income tax rebate of ten cents in the dollar. In 1966–67 the issue prices of Treasury notes were 98.87 per cent from 1 July to 27 December and 99.95 per cent from 28 December to 30 June, and yields varied accordingly from 4.58 per cent to 4.26 per cent.

**Government securities on issue on account of the States; local government and semi-governmental authority securities on issue**

In some States certain public utilities, such as tramways, water supply and sewerage, harbour services, etc., are controlled by boards or trusts, which, in addition to receiving advances from the central government, raise loans by borrowing on their own behalf, while in other States these services are controlled by the central government. Direct comparisons between States of the securities on issue on account of the several States should therefore be made with caution. The table following shows for 1961–62 to 1965–66 particulars of the securities on issue on account of the States, the securities on issue by local government and semi-governmental authorities, and the aggregates of these.

**GOVERNMENT SECURITIES ON ISSUE ON ACCOUNT OF THE STATES;  
LOCAL GOVERNMENT AND SEMI-GOVERNMENTAL AUTHORITY  
SECURITIES ON ISSUE, 30 JUNE 1962 TO 1966**

	<i>State</i>	<i>Local government (a)</i>	<i>Semi- govern- mental (a)</i>	<i>Total</i>
<b>SECURITIES ON ISSUE</b> (\$A'000)(b)				
<b>30 June 1966—</b>				
New South Wales . . . .	2,531,928	539,203	560,517	3,631,648
Victoria . . . . .	1,781,544	162,802	1,400,429	3,344,775
Queensland . . . . .	977,046	293,627	264,230	1,534,903
South Australia . . . . .	970,473	31,147	124,956	1,126,576
Western Australia . . . .	730,700	48,153	78,861	857,714
Tasmania . . . . .	502,932	47,023	52,397	602,352
<b>Total, 30 June 1966</b> . . .	<b>7,494,623</b>	<b>1,121,955</b>	<b>2,481,391</b>	<b>11,097,969</b>
1965 . . . . .	7,090,533	1,035,982	2,312,414	10,438,929
1964 . . . . .	6,690,562	953,311	2,140,919	9,784,792
1963 . . . . .	6,313,596	872,337	1,965,699	9,151,632
1962 . . . . .	5,962,610	792,116	1,793,002	8,547,728

<b>PER HEAD OF POPULATION</b> (\$A)(b)				
<b>30 June 1966—</b>				
New South Wales . . . .	597.45	127.23	132.26	856.94
Victoria . . . . .	553.24	50.56	434.89	1,038.68
Queensland . . . . .	583.55	175.37	157.81	916.73
South Australia . . . . .	886.29	28.45	114.12	1,028.85
Western Australia . . . .	861.57	56.78	92.99	1,011.34
Tasmania . . . . .	1,354.02	126.60	141.07	1,621.68
<b>Total, 30 June 1966</b> . . .	<b>654.73</b>	<b>98.01</b>	<b>216.77</b>	<b>969.51</b>
1965 . . . . .	630.53	92.13	205.63	928.28
1964 . . . . .	606.31	86.39	194.01	886.71
1963 . . . . .	583.05	80.56	181.53	845.14
1962 . . . . .	560.92	74.52	168.67	804.11

(a) Excludes amounts due to the central government. Includes bank overdrafts. (b) Overseas holdings have been converted to Australian currency at the rates of exchange current at 30 June of each year shown.

NOTE. The considerable changes in the figures for local government and semi-governmental debt in the table above when compared with figures in previous issues are due to the transfer of New South Wales County Councils from the semi-governmental division to that of local government authorities (see page 816).

## Commonwealth loan raisings

Under the Financial Agreement between the Commonwealth and the States the Commonwealth is responsible for raising all loan moneys required either by the Commonwealth or by the State Governments. Details of loan transactions given in this section relate, therefore, to all loans raised for the Commonwealth and the States.

## New loans raised

*Australia.* The following table shows details of new loans raised in Australia by the Commonwealth during the three years 1964-65 to 1966-67.

## COMMONWEALTH NEW LOANS(a) RAISED IN AUSTRALIA, 1964-65 TO 1966-67

Month of raising	Amount invited	Amount sub- scribed	Rate of interest per annum	Year of maturity	Price of issue	Allocation of loan		
						Commonwealth		States
	\$'000	\$'000	Per cent		Per cent	\$'000	\$'000	\$'000
1964-65—								
August (Loan No. 149)	100,000	13,794 13,062 115,184	4.50 4.75 5	1967 1975 1984	99.50 100 100	..	25,152	116,888
November (Loan No. 151)	120,000	11,500 17,560 71,351	4.25 4.75 5	1967 1975 1985	99.50 100 100	..	20,093	80,318
February (Loan No. 152)	120,000	9,169 24,327 45,109	4.25 4.50 5	1967 1972 1985	99.62 99.25 100	..	13,925	64,680
April (Loan No. 153)	80,000	33,566 6,577 52,731	5 5 5.25	1968 1975 1985	100 99 100	..	61,769	31,104
June (Loan No. 155)(b)	134,000	22,000 20,000 92,000	5 5 5.25	1968 1975 1985	100 99 100	..	24,408	109,592
July-June	..	52,190	3.75-5.25	1972	100	7,187	8,117	36,886
1965-66—								
August (Loan No. 156)	70,000	39,307 17,404 38,671	5 5 5.25	1968 1975 1985	100 99 100	..	16,490	78,893
November (Loan No. 158)	100,000	42,138 27,325 63,327	5 5 5.25	1968 1976 1988	100 99 100	..	85,995	46,796
February (Loan No. 160)	100,000	85,140 10,969 78,101	5 5 5.25	1969 1976 1988	100 99 100	..	30,118	144,092
May (Loan No. 161)	75,000	24,464 7,933 29,677	5 5 5.25	1970 1976 1988	100 99 100	..	11,999	50,076
June (Loan No. 163)(b)	169,000	72,000 24,000 73,000	5 5 5.25	1970 1976 1988	100 99 100	..	40,544	128,456
July-June	..	25,266	4.50-5.25	1974	100	5,068	3,758	16,440
1966-67—								
July (Loan No. 164)	80,000	35,066 13,531 15,111	5 5 5.25	1970 1976 1989	100 98.75 100	..	46,950	40,826
October (Loan No. 166)	120,000	24,068 106,475 32,868	5.25 5 5.25	2002 1970 1977	100 100 98.80	..	58,679	134,971
February (Loan No. 168)	(c)	18,168 36,139 38,868	5.25 5.25 4.5	1989 2002 1970	100 100 99.75	..	8,006	195,882
May (Loan No. 170)	(c)	46,209 43,858 74,953	5 5.25 5.25	1977 1989 2002	100 100 100	..	31,009	37,735
June (Loan No. 172)(b)	(c)	6,270 7,754 22,217	4.5 5 5.25	1970 1977 1989	99.75 100 100	..	9,984	80,016
July-June	..	32,503 31,000 17,000	5.25 4.5 5	2002 1970 1977	100 99.75 100	7,127	5,987	16,524

(a) Includes loans raised for redemption of Treasury bills, but excludes conversion loans, loans for redemption of debt maturing in London, short-term debt and certain miscellaneous debt (see page 793). (b) Special issue. For details see following paragraph. (c) As from February 1967 the practice of specifying the amount invited for each loan was discontinued.



The loan of \$90,000,000 raised in June 1967 was for the purpose of fulfilling an undertaking given by the Commonwealth that the States would have access to loan funds for their works programmes up to the approved Loan Council borrowing programmes. These programmes totalled \$544,000,000 in 1963-64, \$580,000,000 in 1964-65, \$605,000,000 in 1965-66, and \$645,000,000 in 1966-67. The subscription to the special loan in 1966-67 came from the Loan Consolidation and Investment Reserve Trust Account. Loan No. 155 of June 1965 and Loan No. 163 of June 1966 were for the same purpose.

Finance for the approved Loan Council programmes from 1963-64 to 1966-67 was provided from the following sources:

	1963-64	1964-65	1965-66	1966-67
	\$'000	\$'000	\$'000	\$'000
Public loans, domestic raisings, etc.	508,782	424,092	413,871	501,133
Overseas loans and special Commonwealth assistance . . . . .	35,218	155,908	191,129	143,867
<b>Total . . . . .</b>	<b>544,000</b>	<b>580,000</b>	<b>605,000</b>	<b>645,000</b>

In addition to the new loans raised as shown in the table on the previous page and the redemption and conversion loans shown on page 791 there were other miscellaneous loan operations in Australia (see page 793).

*London.* A loan of £Stg12,000,000, 5.5 per cent interest, price of issue 98 per cent, maturing 1978, was raised in London during 1962-63, and a further loan of £Stg20,000,000, 5.5 per cent interest, price of issue 98.5 per cent, maturing 1982, was raised in 1963-64.

*New York.* The following table gives details of the loans raised during the period 1964-65 to 1966-67.

**COMMONWEALTH NEW LOANS REPAYABLE IN UNITED STATES  
DOLLARS, 1964-65 TO 1966-67**

Month of raising	Amount of loan	Rate of interest per annum	Price of issue	Year of maturity	Allocation of loan	
					Commonwealth	States
	\$US'000	Per cent	Per cent		\$US'000	\$US'000
1964-65—						
May(c) . . . . .	25,000	5.50	98.50	1985	5,000	20,000
July-June . . . . .	7,000	4.50-4.75	100	1965-71	(a)7,000	..
July-June . . . . .	17,500	4.75-5.25	100	1966-72	(a)17,500	..
July-June . . . . .	4,750	4.75-5.25	100	1967-73	(a)4,750	..
July-June . . . . .	8,500	4.50-4.75	100	1971	(b)8,500	..
July-June . . . . .	1,000	4.75-5.25	100	1973	(b)1,000	..
1965-66—						
November(c) . . . . .	25,000	5.75	99.75	1986	5,000	20,000
July-June . . . . .	5,000	4.50-5.25	100	1966-73	(a)5,000	..
July-June . . . . .	18,850	4.50-5.25	100	1966-74	(a)18,850	..
July-June . . . . .	4,250	5.00-5.75	100	1966-75	(a)4,250	..
July-June . . . . .	5,400	4.50-5.25	100	1966-74	(b)5,400	..
July-June . . . . .	250	5.00-5.75	100	1966-75	(b)250	..
1966-67—						
December(c) . . . . .	25,000	6.50	97.50	1977	25,000	..
June(c) . . . . .	25,000	6.50	97.50	1982	25,000	..
July-June . . . . .	18,250	5.00-5.75	100	1975	(a)18,250	..
July-June . . . . .	16,000	5.00-5.75	100	1975	(b)16,000	..
July-June . . . . .	4,742	4.00	100	1972	(d)4,742	..
July-June . . . . .	5,274	5.50	100	1972	(d)5,274	..
July-June . . . . .	90,972	4.75	100	1974	(d)90,972	..

(a) Proceeds used for Qantas Empire Airways Loan. (b) Proceeds used for Australian National Airlines Commission Loan. (c) Prospectus issued in New York and loan offered for subscription in the United States, United Kingdom and the various European centres. (d) Proceeds used for defence purposes.

**Conversion and redemption loans**

*Australia.* Particulars of conversion loans raised in Australia during the three years 1964-65 to 1966-67 are given in the following table.

## COMMONWEALTH CONVERSION AND REDEMPTION LOANS RAISED IN AUSTRALIA, 1964-65 TO 1966-67

Month of raising	Old loan		New loan		Price of issue	Year of maturity	Increase in annual liability for interest
	Amount	Rate of interest per annum	Amount	Rate of interest per annum			
	\$A'000	Per cent	\$A'000	Per cent	Per cent		\$A'000
1964-65—							
August . . .	415,672	3.13	{ 58,284 58,018 165,109 (a)27,970 69,967	{ 4.25 4.75 5.00 4.25-5.00 5.00	{ 99.50 100 100 100 100	{ 1967 1975 1975 1972 1968	{ 1,687
April . . .	303,026	4.25-5.00	{ 42,466 80,514 (a)3,041	{ 5.00 5.25 4.50-5.25	{ 99 100 100	{ 1975 1985 1972	{ -2,894
July-June (special bonds) . . . }	35,276	3.75-5.25	35,276	3.75-5.25	100	{ 1971 1972	{ ..
1965-66—							
August . . .	158,700	4.25	{ 78,998 24,626 22,779 (a)304 73,832	{ 5.00 5.00 5.25 4.50-5.25 5.00	{ 100 99 100 100 100	{ 1968 1975 1985 1973 1968	{ -354
November . . . }	{ 95,391 132,238	{ 3.13 4.50	{ 70,144 89,598 (a)13,152 123,956	{ 5.00 5.25 4.50-5.25 5.00	{ 99 100 100 100	{ 1976 1988 1973 1970	{ 3,562
May . . . }	{ 199,573 129,287	{ 4.00 4.25	{ 74,477 100,748 (a)627	{ 5.00 5.25 4.50-5.25	{ 99 100 100	{ 1976 1988 1973	{ 1,761
July-June (special bonds) . . .	87,759	4.50-5.25	87,759	4.50-5.25	100	1974	..
1966-67—							
July . . .	140,272	3.75	{ 44,146 30,904 21,297 10,001 (a)187 56,725	{ 5 5 5.25 5.25 4.50-5.25 5	{ 100 98.75 100 100 100 100	{ 1970 1976 1989 2002 1974 1970	{ 145
October . . . }	{ 9,169 140,481	{ 4.25 4.5	{ 30,412 18,565 239 (a)2,805 101,158	{ 5 5.25 5.25 4.50-5.25 4.5	{ 98.80 100 100 100 99.75	{ 1977 1989 2002 1974 1970	{ -1,241
February . . . }	{ 105,091 98,762 61,902	{ 3.75 4.75 5	{ 59,955 25,354 10,431 (a)5,084 68,021	{ 5 5.25 5.25 4.50-5.25 4.50	{ 100 100 100 100 99.75	{ 1977 1989 2002 1974 1970	{ -2,029
May . . .	160,359	4.25	{ 36,494 11,138 9 (a)2,111	{ 5 5.25 5.25 4.50-5.25	{ 100 100 100 100	{ 1977 1985 2002 1974	{ -1,249
July-June (special bonds) . . .	83,231	4.50-5.25	83,231	4.50-5.25	100	1,974	..

(a) Special bonds.

Minus sign (—) indicates reduction in liability for interest.

London. The following table shows particulars of loans raised in London during the years 1960-61, 1962-63 and 1963-64 for the purpose of redeeming and converting London loans. None was raised during 1961-62 or since 1963-64.

## COMMONWEALTH LOANS RAISED FOR THE CONVERSION AND REDEMPTION OF LOANS MATURING IN LONDON, 1960-61 TO 1963-64

Month of raising	Old loan		New loan		Rate of interest per annum	Price of issue	Year of maturity	Increase in annual liability for interest and exchange	
	Amount	Rate of interest per annum	Amount raised in—						
	£Stg '000	Per cent	\$A'000	£Stg '000	Per cent	Per cent		£Stg '000	\$A'000 (a)
1960-61—									
July . . .	13,925	3	..	13,925	6	98	1977-80	418	1,045
January . . .	20,579	3.25	..	20,000	6	97.50	{ 1975 1981-83 }	531	1,328
1962-63—									
July . . .	11,790	4	..	10,000	6	97	1972	128	320
1963-64—									
October . . .	5,655	4	..	5,741	5.50	98.50	1982	90	225

(a) No account has been taken of the cost of issuing the conversion loans at a discount. Exchange calculated at \$A1 = £Stg 0.4000 (the International Monetary Fund par rate of exchange in the years shown).

*New York.* During 1946–47 four loans totalling \$US128,000,000 were raised in New York to redeem loans which became due for redemption or which the Commonwealth had the option of redeeming. No further loans were raised in New York for this purpose until December 1954. The loan raised in New York for this purpose in March 1957 amounted to \$US17,114,000 at 5 per cent interest, issued at par, maturing in 1972. No loans were raised for the purpose of redeeming loans which became due for redemption or which the Commonwealth had the option of redeeming during 1957–58 to 1960–61, or in 1962–63 and 1963–64. In 1961–62 a re-financing loan of \$US30,000,000 was raised at 5.5 per cent interest, issued at 98.25 per cent, maturing in 1982.

Drawings from cash loans, for which Commonwealth notes were issued in New York between 1956 and 1966, were used to finance the purchase of aircraft and equipment by Qantas Empire Airways from November 1956, and to finance aircraft purchases by Trans-Australia Airlines from September 1958. At 30 June 1967 outstanding notes which are subject to interest rates varying between 4.5 per cent and 5.75 per cent and which are all repayable before 1 January 1975 amounted to \$US102,800,000.

Between May 1965 and June 1967 four loans each of \$US25,000,000 were raised, mainly in Europe.

#### **Credit arrangements for defence purchases in the United States of America**

The *Loan (Defence) Act* 1966 authorises arrangements for the financing on extended payment terms of purchases of defence equipment in the United States. Drawings of \$US100,989,000 were made under these arrangements in 1966–67.

#### **International Bank for Reconstruction and Development loans**

To provide dollar funds for the purchase of certain types of capital equipment and plant which were indispensable to the furtherance of development in Australia and which could be obtained only in the United States of America or Canada, the Commonwealth Government arranged five loans from the International Bank for Reconstruction and Development between August 1950 and December 1956, amounting to \$US308,500,000, repayable over periods of from ten to twenty-five years at rates of interest of from 4.25 to 4.75 per cent. The proceeds of the latest of these loans were finally drawn in March 1959.

The capital equipment and plant purchased from the proceeds of these loans were made available to Commonwealth and State Government departments and agencies, and private firms and individuals for use in the development of Australian resources. The goods were imported and distributed through normal channels, and payment was made through the Australian banking system.

The loan on behalf of Qantas Empire Airways of \$US9,230,000 at 4.75 per cent maturing in 1966–87 was finally drawn at the end of July 1958, and in 1962–63, 1963–64, 1964–65, 1965–66, and 1966–67 respectively drawings of \$US31,851,000, \$US27,018,000, \$US23,519,000, \$US17,057,000, and \$US555,000 were made from the loan (at 5.75 per cent maturing in 1966–87) raised for the purposes of the Snowy Mountains Hydro-electric Authority.

Drawings from International Bank loans have been made mainly in United States dollars but partly in Canadian dollars, Swiss francs and German Deutsche marks.

#### **Swiss loans**

To foster industrial development in Australia and to stimulate trade relations between the two countries, the Commonwealth Government arranged for the issue in Switzerland in November 1953, February 1955, March 1960, and March 1961 of four public loans each of 60,000,000 Swiss francs. The loans were underwritten by a Swiss banking group headed by the Swiss Bank Corporation, the Cr dit Suisse and the Union Bank of Switzerland. Certain Swiss taxes connected with the issue and servicing of the loans were paid on an agreed basis by the Australian Government.

The first loan was for a period of fifteen years with an option on the part of the Commonwealth Government to repay the loan in full or in part after twelve years. The rate of interest was 4 per cent and the issue price 99. Bondholders have the option of requiring payment either in Australian currency or in the foreign currency equivalent.

The second loan was for a period of fifteen years with an option to redeem after ten years. The rate of interest was 3.75 per cent, issue price 99.50 per cent. Bonds and interest are payable in Swiss francs only. The third loan was for a period of fifteen years with an option to redeem after ten years. The rate of interest was 4.5 per cent, issue price 99 per cent. The fourth loan was issued at par in March 1961, at the rate of 4.5 per cent maturing in April 1976. Payments of interest and repayments of principal are to be made in Swiss francs only.

A fifth loan of 50,000,000 Swiss francs was raised in April 1967 at the rate of 5.5 per cent maturing in April 1982.

**Canadian loans**

In October 1955 the Commonwealth Government arranged for the issue in Canada of a public loan of 15,000,000 Canadian dollars raised to assist Australia's development programme. The loan was for a period of fifteen years with an option on the part of the Australian Government to repay the loan in full or in part at any time prior to 1 November 1970. The rate of interest was 4 per cent, payable half-yearly, and the issue price 98.50 per cent. A second loan, of 20,000,000 Canadian dollars, was raised in March 1961, on the security of the Commonwealth of Australia, 5.75 per cent twenty-year bonds being issued at the rate of 98.50 per cent. Bonds and interest are payable in Canadian dollars in each case. The loans were fully subscribed, and the net Canadian dollar proceeds were sold to the Reserve Bank for Australian currency.

**Netherlands loan**

In 1961 the Commonwealth arranged for a public flotation in the Netherlands of a loan of 40,000,000 Netherlands guilders at par, with an interest rate of 5 per cent per annum. The proceeds were used to assist the loan programmes of the Commonwealth and States. The loan is to be repaid in fifteen annual instalments from 1967 to 1981, but, at the Commonwealth's option, an earlier redemption date may be negotiated on and after 15 December 1971.

**Summary of loan transactions**

The following table contains a summary of loan transactions on behalf of the Commonwealth and State Governments during the five years 1962-63 to 1966-67.

**COMMONWEALTH LOAN TRANSACTIONS: SUMMARY, 1962-63 TO 1966-67**

		1962-63	1963-64	1964-65	1965-66	1966-67
<b>New loans(a) raised in—</b>						
Australia . . . . .	\$A'000	476,160	582,238	600,120	658,725	673,696
London . . . . .	\$Stg'000	12,000	21,067	..	..	..
New York(b) . . . . .	\$US'000	122,701	32,768	87,269	75,807	185,794
Switzerland . . . . .	Francs'000	..	..	..	..	50,000
Miscellaneous debt in Australia(c) . . . . .	\$A'000	34,793	— 54	24,184	6,350	29,271
<b>Net change in short-term debt—</b>						
Australia—Public . . . . .	\$A'000	— 170,000	— 68,000	— 62,000	— 36,000	10,000
Internal . . . . .	\$A'000	77,800	39,400	33,400	49,100	— 2,000
Treasury notes . . . . .	\$A'000	139,076	13,494	— 72,138	35,564	— 27,544
<b>Loans raised for conversion or redemption of existing securities maturing in—</b>						
Australia . . . . .	\$A'000	793,663	455,820	540,645	761,000	618,268
London . . . . .	\$Stg'000	10,000	5,741	..	..	..

(a) Includes loans raised for redemption of Treasury bills. (b) Includes proceeds of \$US31,851,000, \$US27,018,000, \$US23,519,000, \$US17,057,000 and \$US555,000 in 1962-63, 1963-64, 1964-65, 1965-66 and 1966-67 from International Bank for Reconstruction and Development loan used for the purposes of the Snowy Mountains Hydro-electric Authority. (c) Advance loan subscriptions (net change), 'over the counter sales' (instalment stock and inscribed stock and bonds issued by State Governments), and Peace Savings Certificates (interest credited).

Minus sign (—) denotes a decrease in debt.

**Government securities on issue maturing in Australia, classified by holder**

The following table shows details of government securities maturing in Australia classified according to holder as at 30 June 1966 and 1967.

**GOVERNMENT SECURITIES ON ISSUE: COMMONWEALTH AND STATE  
MATURING IN AUSTRALIA, BY HOLDER(a), 30 JUNE 1966 AND 1967**

*(Source: Reserve Bank of Australia Statistical Bulletin)*

Holder	30 June—			
	1966		1967	
	Amount	Proportion of total	Amount	Proportion of total
	\$ million	Per cent	\$ million	Per cent
Reserve Bank of Australia . . . . .	692	7.6	815	8.4
Trading banks . . . . .	1,115	12.2	1,196	12.4
Savings banks . . . . .	2,116	23.2	2,178	22.5
Life insurance offices . . . . .	834	9.1	978	10.1
Fire, marine and general insurance offices . . . . .	108	1.2	118	1.2
Other private financial institutions—				
Pension and provident funds . . . . .	138	1.5	156	1.6
Friendly societies, hospitals and medical funds . . . . .	17	0.2	20	0.2
Trustee companies . . . . .	127	1.4	123	1.3
Pastoral finance companies . . . . .	27	0.3	26	0.3
Money market dealers . . . . .	377	4.1	462	4.8
Miscellaneous . . . . .	42	0.5	47	0.5
Government financial institutions—				
Insurance offices and funds . . . . .	108	1.2	113	1.2
Pension and provident funds . . . . .	180	2.0	176	1.8
Public trustees . . . . .	33	0.4	31	0.3
All other(b) . . . . .	7	0.1	3	..
Public authorities (excluding finance)—				
Commonwealth Government (including Commonwealth semi-governmental) . . . . .	1,644	18.0	1,639	16.9
State Government . . . . .	29	0.3	26	0.3
Local government and State semi-governmental . . . . .	250	2.7	231	2.4
Companies (excluding finance) . . . . .	150	1.7	187	1.9
Other holders—				
Marketing boards . . . . .	4	..	4	..
Farmers . . . . .	103	1.1	97	1.0
Non-profit organisations . . . . .	53	0.6	51	0.5
All other . . . . .	980	10.7	1,002	10.4
<b>Total . . . . .</b>	<b>9,134</b>	<b>100.0</b>	<b>9,677</b>	<b>100.0</b>

(a) Total stock inscribed, bonds in circulation, amounts paid up on outstanding applications, in transit claims and advance applications, Commonwealth Treasury Bills, debentures, and Savings Certificates. (b) Includes securities held by Commonwealth Development Bank of Australia.

### National Debt Sinking Fund

#### Securities on issue on behalf of the Commonwealth

The National Debt Sinking Fund was established by the *National Debt Sinking Fund Act 1923–1950* and came into operation on 11 August 1923. Particulars of the creation and operation of sinking funds by that Act are included in issues of the Year Book prior to No. 23. The *National Debt Sinking Fund Act 1966* repealed all previous legislation on sinking funds relating to securities on issue on behalf of the Commonwealth. Under this Act the period of redemption is 25 years from 1 July 1966 for debt outstanding at 30 June 1966 and 25 years for net debt created in subsequent years.

Broadly, the amounts payable to the National Debt Sinking Fund each year are made up of contributions from the Consolidated Revenue Fund of the Commonwealth as follows:

- (a) an amount of \$30.94m each year for a period of 25 years;
- (b) an amount equal to 4 per cent of the amount of net debt created (if any) in any year for a period of 25 years.

In addition, an amount equal to specified receipts by the Commonwealth in repayment of loans or advances made out of moneys in the Loan Fund will be paid to the Sinking Fund.

The amounts payable to the Fund in any year from Consolidated Revenue Fund are to be reduced by the following:

- (a) the net income from investments in any year; and
- (b) an amount equal to 4 per cent of the amount of the net reduction of debt in any year.

Particulars of receipts and expenditure of the Commonwealth Account for the years 1962-63 to 1966-67 are as follows.

**NATIONAL DEBT SINKING FUND: COMMONWEALTH ACCOUNT, 1962-63 TO 1966-67**  
(\$'000)

	1962-63	1963-64	1964-65	1965-66(a)	1966-67
<b>Receipts—</b>					
From Consolidated Revenue . . . . .	54,460	57,739	62,171	64,969	21,589
Loans and advances repaid . . . . .	7,984	8,806	10,318	11,659	12,684
War Service Homes money repaid . . . . .	22,175	27,131	31,137	31,045	..
Reparation moneys . . . . .	..	..	..	221	..
Interest on investments . . . . .	(b)12,082	(b)12,872	(b)12,040	(b)11,910	(b)9,351
<i>Total, receipts . . . . .</i>	<i>96,701</i>	<i>106,547</i>	<i>115,666</i>	<i>119,804</i>	<i>43,624</i>
<b>Expenditure (net cost)—</b>					
Securities repurchased and redeemed in—					
Australia . . . . .	31,309	49,311	153,857	81,869	112,435
London . . . . .	165	1,507	7,239	6,565	9,905
New York . . . . .	(c)19,350	(c)20,334	(c)22,301	(c)26,166	(c)29,852
Canada . . . . .	15	97	69	151	131
<i>Total, expenditure . . . . .</i>	<i>50,838</i>	<i>71,249</i>	<i>183,466</i>	<i>114,751</i>	<i>152,324</i>
Balance at 30 June . . . . .	330,264	365,562	297,761	302,814	194,114
<b>Face value of securities repurchased and redeemed in—</b>					
Australia . . . . .	31,279	48,881	153,823	82,258	112,784
London . . . . .	130	1,268	6,279	5,711	10,340
New York . . . . .	(c)8,913	(c)9,330	(c)10,204	(c)12,026	(c)29,875
Canada . . . . .	7	48	34	75	134
<i>Total, face value . . . . .</i>	<i>40,330</i>	<i>59,526</i>	<i>170,340</i>	<i>100,070</i>	<i>153,133</i>

(a) For details of operation of provisions of the *National Debt Sinking Fund Act 1966* see page 794. (b) Includes interest received under *National Debt Sinking Fund (Special Payment) Act 1951*: 1962-63, \$3.5m; 1963-64, \$3.5m; 1964-65, \$3.5m; 1965-66, \$3.5m; 1966-67, \$3.5m. (c) Includes instalment repayments of loans from International Bank for Reconstruction and Development: 1962-63—face value, \$7.6m, net cost, \$16.6m; 1963-64—face value, \$8.0m, net cost, \$17.4m; 1964-65—face value, \$8.4m, net cost, \$18.3m; 1965-66—face value, \$8.7m, net cost, \$19.1m; 1966-67—face value, \$19.9m, net cost, \$20.0m.

### Securities on issue on behalf of States

A sinking fund for the redemption of the securities on issue on behalf of States was established under the Financial Agreement. Particulars of the transactions of the National Debt Sinking Fund (States' Account) for each State during the year 1966-67 and for all States during the years 1962-63 to 1966-67 are shown in the following tables.

**NATIONAL DEBT SINKING FUND: STATES' ACCOUNT, 1966-67**  
**(\$'000)**

	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>Total</i>
<b>Receipts—</b>							
Contributions under Financial Agreement—							
Commonwealth . . . . .	6,368	4,524	2,439	2,482	1,844	1,293	18,951
States . . . . .	22,672	17,500	8,610	8,820	7,373	3,892	68,867
Interest from States on cancelled securities . . . . .	42	22	14	17	13	6	113
Special contributions by States . . . . .	63	102	30	20	6	..	220
Interest on investments, etc. . . . .	-19	-10	-4	-4	-6	-4	-46
<b>Total, receipts . . . . .</b>	<b>29,125</b>	<b>22,138</b>	<b>11,089</b>	<b>11,335</b>	<b>9,230</b>	<b>5,188</b>	<b>88,105</b>
<b>Expenditure (net cost)—</b>							
Securities repurchased and redeemed in—							
Australia . . . . .	23,836	10,807	4,752	8,666	7,130	4,260	59,451
London . . . . .	1,023	8,302	4,694	1,231	1,191	104	16,545
New York . . . . .	3,990	2,408	1,412	1,151	895	585	10,441
Canada . . . . .	214	172	87	93	65	50	680
<b>Total, expenditure . . . . .</b>	<b>29,064</b>	<b>21,689</b>	<b>10,945</b>	<b>11,140</b>	<b>9,281</b>	<b>4,999</b>	<b>87,118</b>
<b>Balance at 30 June 1967 . . . . .</b>	<b>1,036</b>	<b>660</b>	<b>423</b>	<b>487</b>	<b>216</b>	<b>348</b>	<b>3,169</b>
<b>Face value of securities repurchased and redeemed in—</b>							
Australia . . . . .	23,856	10,820	4,752	8,678	7,130	4,260	59,496
London(a) . . . . .	920	6,640	3,780	1,090	1,059	90	13,579
New York(a) . . . . .	1,886	1,134	665	542	422	276	4,925
Canada(a) . . . . .	108	87	44	47	33	25	344
<b>Total, face value . . . . .</b>	<b>26,770</b>	<b>18,681</b>	<b>9,240</b>	<b>10,357</b>	<b>8,644</b>	<b>4,652</b>	<b>78,345</b>

(a) Converted in accordance with the Financial Agreement at the equivalent of the mint par of exchange prevailing on 1 July 1927.

**NATIONAL DEBT SINKING FUND: STATES' ACCOUNT, 1962-63 TO 1966-67**  
(\$'000)

	1962-63	1963-64	1964-65	1965-66	1966-67
<b>Receipts—</b>					
Contributions under Financial Agreement—					
Commonwealth . . . . .	14,497	15,691	16,646	17,761	18,951
States . . . . .	52,108	55,669	60,099	64,385	68,867
Interest from States on cancelled securities . . . . .	66	45	26	106	113
Special contributions by States . . . . .	344	974	222	222	220
Interest on investments, etc. . . . .	-80	107	-36	30	-46
<i>Total, receipts</i> . . . . .	<i>66,935</i>	<i>72,486</i>	<i>76,958</i>	<i>82,503</i>	<i>88,105</i>
<b>Expenditure (net cost)—</b>					
Securities repurchased and redeemed in—					
Australia . . . . .	54,068	60,791	52,808	60,861	59,451
London . . . . .	6,068	4,075	14,612	11,685	16,545
New York . . . . .	4,138	6,228	9,948	11,775	10,441
Canada . . . . .	79	501	358	782	680
<i>Total, expenditure</i> . . . . .	<i>64,353</i>	<i>71,594</i>	<i>77,726</i>	<i>85,104</i>	<i>87,118</i>
<b>Balance at 30 June</b> . . . . .	<b>4,660</b>	<b>5,552</b>	<b>4,783</b>	<b>2,182</b>	<b>3,169</b>
<b>Face values of securities repurchased and redeemed in—</b>					
Australia . . . . .	54,116	60,806	52,825	60,888	59,496
London(a) . . . . .	4,230	3,520	12,250	10,002	13,579
New York(a) . . . . .	1,920	2,862	4,554	5,455	4,925
Canada(a) . . . . .	40	248	178	388	344
<i>Total, face value</i> . . . . .	<i>60,306</i>	<i>67,435</i>	<i>69,807</i>	<i>76,733</i>	<i>78,345</i>

(a) Converted in accordance with the Financial Agreement at the equivalent of the mint par of exchange prevailing on 1 July 1927.

## TAXES ON INCOME

A description of the development of income taxes in Australia appeared in Year Book No. 35, page 926. Since July 1942 the Commonwealth, under the uniform tax arrangement, has been the only authority imposing taxes on income.

The *Income Tax Assessment Act 1936-1967*, the *Income Tax Act 1966-1967*, the *Income Tax (Partnerships and Trusts) Act 1966-1967*, the *Income Tax (Non-Resident Dividends) Act 1965*, and the *Income Tax Regulations* deal with the assessment and imposition of Income Tax. The second-mentioned Act is an annual measure, and its primary purpose is to declare the rates of tax payable for the financial year.

Both individuals and companies are liable for income tax. Private companies are subject to tax on undistributed income in addition to the primary income tax levied on all companies.

The operation of the *Income Tax Assessment Act 1936-1967* is affected by the following Acts:

- (a) *Taxation Administration Act 1953-1966*, which provides for the administration of certain Acts relating to taxation;
- (b) *Income Tax (International Agreements) Act 1954-1967* which gives the force of law to agreements between the Commonwealth and the Governments of the United Kingdom, Canada and New Zealand, and to a convention between the Government of the Commonwealth and the United States of America, for the avoidance of double taxation and the prevention of evasion of taxes on income.

### Lodgment of returns and assessment of income tax

Individuals and non-profit companies with total income in excess of \$416 and all partnerships, trusts and companies deriving income are required to lodge returns of income by 31 July each year (31 August for business incomes). The income tax payable is assessed, and assessment notices showing



the amounts payable are issued, during the year following the year of income. In respect of individuals the approximate amount payable, however, has already been collected during the income year from employees by deductions from wages and from non-employees by a provisional tax. The amount shown on the assessment notice is therefore adjusted against the amount already paid and any difference either collected or refunded. No such system of 'pay-as-you-earn' is in operation in respect of companies.

#### **Pay-as-you-earn system**

*Salary and wage earners* are subject to instalment deductions by employers for payment of the tax in accordance with a prescribed scale which shows the amount to be deducted according to income and number of dependants. Under the group scheme of deduction, covering most employers of more than ten persons, the amount deducted is required to be remitted to the Taxation Department within seven days of the close of the month in which the deduction is made.

Not later than 14 July each year employers are required to supply each employee with a group certificate showing amount earned and total deductions during the year ended 30 June. This certificate, together with the employee's return of income, is forwarded to the Taxation Department. If the tax assessed on the basis of the return is less than the amount shown on the group certificate, a refund is forwarded with the assessment, if not, the employee is required to pay the balance.

Under the stamp scheme used by employers other than group employers a stamp deduction sheet in two parts is used. Each four weeks the employer purchases stamps (also in two parts) for the amount of deductions made each pay day and sticks one part on each half of the sheet. At the end of the year the employer gives the employee one half of the sheet and sends the other half to the Taxation Department. The employee's half is then used in the same way as a group certificate.

*Taxpayers with income other than salary or wages* pay provisional tax in respect of that income. Collection of tax for the current year is made at the same time as collection and assessment for the previous year are adjusted. The notice of assessment shows an amount of provisional tax for the current year. The provisional amount is an approximation to the tax which will be payable after the return of income for the current year has been lodged. It is ascertained by assuming that the income of the current year will be the same as that for the previous year (for which a return has already been lodged), but the rates for the current year are applied to the income and not the rates for the year in which it was derived. The assessment notice shows the provisional tax paid in the previous year as a credit against the tax assessed on the basis of the return for that year. On receipt of his assessment, the taxpayer may elect to substitute his own estimate of income for the current year and pay tax on basis of this estimate. To protect the revenue, a penalty is imposed if the taxpayer elects to pay provisional tax on an estimate of income more than twenty per cent lower than the income of the previous year and he underestimates his income by more than twenty per cent. An employee with income of \$300 or more from sources other than salaries or wages is required to pay provisional tax in respect of that income.

*Tax collected.* During the collection years 1962-63 to 1966-67 net receipts (i.e. tax collected less refunds to taxpayers) from individual taxpayers were \$1,083.4m; \$1,272.2m; \$1,570.6m; \$1,731.4m and \$1,922.5m respectively. Of these amounts, instalments from salaries and wages in the respective years accounted for \$684.4m (63.17 per cent), \$792.2m (62.28 per cent), \$990.6m (63.08 per cent), \$1,160.4m (67.03 per cent) and \$1,323.5m (68.84 per cent). The remainder came from direct cash payments from individual taxpayers.

#### **Assessable income**

As a general principle income assessable to income tax includes all income other than exempt income derived directly or indirectly from sources in Australia. Thus a non-resident is taxed on income derived in Australia, while a resident, in general, is not taxed on income (other than dividends) derived from overseas if the income is taxed in the country in which it is derived.

The word income is used in its ordinary sense and includes certain receipts declared by the Assessment Act to be assessable income. Receipts such as gifts (other than gratuities received by an employee from his employer in the course of his employment), legacies, profits from the sale of property (not acquired for the purpose of profit making by sale), lottery wins, and most capital gains are not regarded as income and are not assessable.

Certain types of Australian income are exempt from tax in Australia, the more important being (i) war and service pensions, (ii) age and invalid pensions, child endowment and other payments under the *Social Services Act* 1947-1967 and the *Tuberculosis Act* 1948, (iii) income from gold-mining and some other mining operations, (iv) twenty per cent of certain mining profits, (v) dividends paid out of exempt mining profits, (vi) income received from a scholarship, bursary or other educational allowance, (vii) income of certain non-profit institutions and mutual income of some other organisations,

and (viii) income of specified superannuation funds. No amount is included in assessable income on account of a house occupied by its owner.

For the 1966-67 and subsequent income years the pay and allowances and bounties for part-time duty, and the gratuity payable on a call out for continuous full-time service of members of each service of the Defence Force Emergency Reserves is exempt from income tax. This exemption does not apply to pay and allowances for continuous full-time service in Australia. Also the pay and allowances earned by members of the Defence Force for service outside Australia while allotted for duty in special areas (i.e. part of Borneo and adjacent waters, and South Vietnam) are exempt from income tax.

Expenditure incurred in gaining or producing assessable income or necessarily incurred in carrying on a business for that purpose is an allowable deduction, except to the extent that such expenditure is of a capital, private, or domestic nature, or is incurred in gaining or producing exempt income. Certain subscriptions to business associations and trade union dues are also allowable deductions.

Special deductions for both resident and non-resident taxpayers include such items as trading losses incurred over the previous seven years, bad debts, depreciation, annual rates and taxes on land, gifts to certain institutions (e.g. scientific, charitable, benevolent, etc.), and one-third of amounts paid as calls to certain mining, prospecting, oil-prospecting, or afforestation companies operating in Australia. Resident taxpayers only are allowed a deduction from income of the full amount paid as calls and as application and allotment moneys to certain companies engaged in the search for oil in Australia and the Territory of Papua and New Guinea.

Special deductions may be allowed for capital actually expended in mining operations conducted for the purpose of earning assessable income. In the case of primary producers certain developmental expenditure of a capital nature may be deducted. Deductions in addition to depreciation are allowed to manufacturers and primary producers by way of an investment allowance for expenditure on specified plant and equipment. Subject to a maximum permissible tax saving, a double deduction is effectively allowed for certain expenditure incurred in export market development.

Zone allowance deductions are prescribed for residents of isolated areas subject to uncongenial climatic conditions and high costs of living. Two zones, A and B, have been prescribed and the allowances are: Zone A, \$540 plus an amount equal to half the total deductions allowable for the maintenance of dependants; and Zone B, \$90 plus an amount equal to one-twelfth of the total deductions allowable for the maintenance of dependants. Members of the defence forces serving in certain overseas localities, other than those declared to be special areas (*see* top of page), for more than half the year of income are also entitled to a deduction of the same amount as residents of Zone A.

Income tax is levied on the taxable income remaining after making these deductions and the concessional deductions to which reference is made in the following paragraphs.

#### Concessional deductions

Concessional allowances to residents for dependants, medical and dental expenses, life insurance and superannuation contributions, etc. are made by way of a deduction from income. The maximum deduction allowed for the income year 1967-68 for each dependant or for a housekeeper is shown in the following table.

<i>Dependant, etc. (resident)</i>	<i>Maximum deduction (a)</i>
	\$
Spouse . . . . .	312
Daughter-housekeeper(b); housekeeper(c) . . . . .	312
Parent or parent-in-law . . . . .	312
One child under 16 years of age . . . . .	208
Other children under 16 years of age . . . . .	156
Invalid relative(d) . . . . .	208
Child 16 to 21 years receiving full-time education . . . . .	208

(a) If the dependant is maintained for part only of the year, a partial deduction is allowed. (b) Of a widower or widow. (c) Caring for a spouse in receipt of an invalid pension, or caring for children under 16 years of age of a widower or widow. (d) Child, step-child, brother or sister over 16 years of age.

When the dependant maintained derives separate income, the amount of the concessional deduction is reduced by the amount, if any, by which the separate net income exceeds \$130. Separate net

income includes age and invalid pensions but not child endowment. Scholarships are excluded except insofar as they relate to maintenance.

For the 1967-68 income year medical expenses (less amounts recouped from hospital and medical funds) paid by a taxpayer who is a resident, in respect of himself or dependants, including children under twenty-one years of age, are allowed as a concessional deduction. Medical expenses include payments made to a legally qualified medical practitioner, nurse or chemist, or to a hospital, in respect of an illness or operation, payments for dental services, payments for therapeutic treatment and eye tests, expenditure on medical or surgical appliances, artificial limbs or eyes, hearing aids and spectacles, the remuneration of an attendant of a person who is blind or confined to a bed or invalid chair, and payments for the maintenance of a trained dog used for the guidance of a blind person.

Other concessional deductions allowed to resident taxpayers include: (i) payments of life insurance premiums and contributions to superannuation funds and friendly societies, not exceeding an aggregate of \$1,200, (ii) payments to medical or hospital benefits funds, (iii) funeral expenses of a dependant not exceeding \$100, and (iv) expenditure incurred for the full-time education of children or dependants who are less than twenty-one years of age, with a maximum of \$300 for each child or dependant.

### Effective exemption from tax

For the income years 1950-51 to 1962-63 taxpayers without dependants were exempt from income tax if their income did not exceed \$208. For 1963-64 to 1967-68 this exemption was \$416. The effect of the deductions for dependants was to exempt resident taxpayers up to the incomes shown hereunder.

### RESIDENT TAXPAYERS: EFFECTIVE EXEMPTIONS FROM TAX (\$)

Income years ended June—	Taxpayer with—		Wife and—			
	No dependants	Wife	one child	two children	three children	four children
1954 to 1957 . . . . .	208	468	624	728	832	936
1958 to 1963 . . . . .	208	494	676	806	936	1,066
1964 to 1967 . . . . .	416	702	884	1,014	1,144	1,274
1968 . . . . .	416	728	936	1,092	1,248	1,404

For the 1967-68 income year an aged person (i.e. a man who has attained the age of sixty-five years or a woman who has attained the age of sixty years and is a resident of Australia during the whole of the year of income) is exempt from income tax if his or her taxable income does not exceed \$1,196. If the taxable income exceeds \$1,196 but does not exceed \$1,451 the tax cannot exceed nine-twentieths of the excess of the income over \$1,196. An aged person who contributes to the maintenance of a spouse is exempt from tax if the combined taxable incomes of the taxpayer and the spouse do not exceed \$2,106. Where their combined taxable incomes exceed \$2,106 the tax payable by the taxpayer (provided his taxable income does not exceed \$3,287) is limited to nine-twentieths of the excess of their combined taxable incomes over \$2,106.

### Rates of income tax on individuals

The table on page 801 shows the rates of income tax for income years 1953-54 to 1967-68 as set out in the first schedule to the Income Tax Act.

Assessable income represents total actual income minus exempt income. Taxable income is the amount remaining after all allowable deductions have been made on assessable income.

The minimum amount of income tax payable is 50c.

Where the taxable income of a person does not exceed \$428 the amount of tax payable is limited to one half of the amount by which the taxable income exceeds \$416.

The only cases in which incomes below \$416 attract tax are those for which special rates are payable in accordance with the provisions of the *Income Tax (Partnerships and Trusts) Act* 1966-1967.

For primary producers the rate of income tax for the current year is determined by the average of the taxable incomes for the five years up to and including the current year. In 1951 a taxpayer was given the right to elect not to have the averaging provisions applied to his assessment but up to

1965-66 income year the election, if made under then existing legislation, was irrevocable. The *Income Tax Assessment Act 1966* amended this and a primary producer who elected to withdraw from the averaging system prior to the 1966-67 income year is now able to review that decision. He may return to the averaging system provided that he makes the necessary election in respect of any one of the income years 1966-67 to 1969-70. In the year of re-entry the taxpayer will be treated for averaging purposes as though he had never withdrawn from the system. However, he will not have the right to withdraw again. The application of the averaging provisions is limited to that part of the taxable income which does not exceed \$16,000. When the taxable income does exceed \$16,000, the balance is taxed at ordinary rates applicable to that part. When the taxable income is less than \$16,000, the rate of tax for averaging purposes is limited to the rate on a taxable income of \$16,000.

The taxable income, including any abnormal receipts, of actors, artists, composers, inventors, etc. is taxed at the rate appropriate to the normal taxable income plus one-third of the abnormal receipts.

Interest derived from bonds, debentures, stocks or other securities issued after 1 January 1940 by the Commonwealth, together with interest on certain State semi-governmental loans issued free of State income tax, is subject to a rebate of 10 cents for each \$1 of interest included in the taxable income.

#### INCOME TAX—INDIVIDUALS: GENERAL RATES, 1953-54 TO 1967-68 INCOME YEARS

Total taxable income		1953-54		1954-55 to 1964-65(a)		1965-66 to 1967-68(b)	
Column 1	Column 2	Tax on amount in column 1	Tax on each \$ of balance of income	Tax on amount in column 1	Tax on each \$ of balance of income	Tax on amount in column 1	Tax on each \$ of balance of income
Exceeding	Not exceeding						
\$	\$	\$	cents	\$	cents	\$	cents
Nil	200	Nil	0.42	Nil	0.42	Nil	0.40
200	300	0.83	1.67	0.83	1.25	0.80	1.20
300	400	2.50	3.75	2.08	2.92	2.00	2.90
400	500	6.25	5.42	5.00	4.58	4.90	4.50
500	600	11.67	7.08	9.58	6.25	9.40	6.10
600	800	18.75	9.17	15.83	8.33	15.50	8.20
800	1,000	37.08	11.67	32.50	10.83	31.90	10.80
1,000	1,200	60.42	13.75	54.17	12.50	53.50	12.50
1,200	1,400	87.92	15.83	79.17	14.17	78.50	14.20
1,400	1,600	119.58	17.50	107.50	15.83	106.90	15.90
1,600	1,800	154.58	19.17	139.17	17.50	138.70	17.60
1,800	2,000	192.92	20.83	174.17	19.17	173.90	19.30
2,000	2,400	234.58	23.33	212.50	21.67	212.50	21.60
2,400	2,800	327.92	26.67	299.17	24.58	298.90	24.60
2,800	3,200	434.58	29.58	397.50	27.08	397.30	27.10
3,200	3,600	552.92	32.50	505.83	29.58	505.70	29.60
3,600	4,000	682.92	35.42	624.17	32.08	624.10	32.10
4,000	4,800	824.58	38.75	752.50	35.42	752.50	35.40
4,800	5,600	1,134.58	41.67	1,035.83	38.33	1,035.70	38.30
5,600	6,400	1,467.92	44.58	1,342.50	41.25	1,342.10	41.20
6,400	7,200	1,824.58	47.50	1,672.50	43.75	1,671.70	43.80
7,200	8,000	2,204.58	50.42	2,022.50	46.25	2,022.10	46.30
8,000	8,800	2,607.92	53.33	2,392.50	48.75	2,392.50	48.70
8,800	10,000	3,034.58	56.67	2,782.50	51.67	2,782.10	51.70
10,000	12,000	3,714.58	60.00	3,402.50	55.00	3,402.50	55.00
12,000	16,000	4,914.58	62.92	4,502.50	57.92	4,502.50	57.90
16,000	20,000	7,431.25	65.83	6,819.17	60.42	6,818.50	60.40
20,000	32,000	10,064.58	68.75	9,235.83	63.33	9,234.50	63.30
32,000	upwards	18,314.58	70.00	16,835.83	66.67	16,830.50	66.70

(a) For the 1959-60, 1961-62, 1962-63, and 1963-64 income years a rebate of 5 per cent was allowable on the tax calculated from this schedule. (b) Additional tax equal to 2½ per cent of the tax calculated from this schedule was also payable for these financial years.

#### Taxes on specified incomes

The following table shows the income tax payable by taxpayers, with various incomes and numbers of dependants, on income derived in the years 1960-61 to 1967-68.

**INCOME TAX ON SPECIFIED INCOMES, 1960-61 TO 1967-68 INCOME YEARS**  
(£)

Income(a)£	1961-62 and				1965-66 and	
	1960-61	1962-63	1963-64	1964-65	1966-67	1967-68

TAXPAYER WITH NO DEPENDANTS						
500 . . .	9.60	9.10	9.10	9.60	9.63	9.63
600 . . .	15.80	15.00	15.00	15.80	15.88	15.88
800 . . .	32.50	30.90	30.90	32.50	32.69	32.69
1,000 . . .	54.20	51.50	51.50	54.20	54.83	54.83
1,200 . . .	79.20	75.20	75.20	79.20	80.46	80.46
1,600 . . .	139.20	132.20	132.20	139.20	142.16	142.16
2,000 . . .	212.50	201.90	201.90	212.50	217.81	217.81
3,000 . . .	451.70	429.10	429.10	451.70	462.78	462.78
4,000 . . .	752.50	714.90	714.90	752.50	771.31	771.31
6,000 . . .	1,507.50	1,432.10	1,432.10	1,507.50	1,544.57	1,544.57
10,000 . . .	3,402.50	3,232.40	3,232.40	3,402.50	3,487.56	3,487.56

TAXPAYER WITH DEPENDENT WIFE						
500 . . .	1.00	1.00	..	..	..	..
600 . . .	2.50	2.40	..	..	..	..
800 . . .	10.50	10.00	10.00	10.50	10.50	9.07
1,000 . . .	25.30	24.00	24.00	25.30	25.45	23.27
1,200 . . .	44.80	42.60	42.60	44.80	45.31	42.43
1,600 . . .	95.30	90.50	90.50	95.30	97.04	93.25
2,000 . . .	159.10	151.10	151.10	159.10	162.72	158.02
3,000 . . .	376.40	357.60	357.60	376.40	385.53	378.97
4,000 . . .	660.70	627.70	627.70	660.70	677.20	668.60
6,000 . . .	1,389.50	1,320.00	1,320.00	1,389.50	1,423.78	1,412.80
10,000 . . .	3,254.70	3,092.00	3,092.00	3,254.70	3,335.99	3,322.21

TAXPAYER WITH DEPENDENT WIFE AND ONE CHILD						
500 . . .	..	..	..	..	..	..
600 . . .	..	..	..	..	..	..
800 . . .	3.00	2.90	..	..	..	..
1,000 . . .	11.60	11.00	11.00	11.60	11.63	8.71
1,200 . . .	26.80	25.50	25.50	26.80	26.97	22.61
1,600 . . .	70.70	67.20	67.20	70.70	71.74	65.08
2,000 . . .	128.40	122.00	122.00	128.40	131.06	122.61
3,000 . . .	331.60	315.00	315.00	331.60	339.65	326.54
4,000 . . .	604.00	573.80	573.80	604.00	619.06	603.29
6,000 . . .	1,316.40	1,250.60	1,250.60	1,316.40	1,348.94	1,328.54
10,000 . . .	3,160.70	3,002.70	3,002.70	3,160.70	3,239.55	3,212.00

TAXPAYER WITH DEPENDENT WIFE AND TWO CHILDREN						
500 . . .	..	..	..	..	..	..
600 . . .	..	..	..	..	..	..
800 . . .	..	..	..	..	..	..
1,000 . . .	5.10	4.80	..	..	..	..
1,200 . . .	16.00	15.20	15.20	16.00	16.04	11.12
1,600 . . .	54.40	51.70	51.70	54.40	55.08	46.42
2,000 . . .	107.80	102.40	102.40	107.80	109.88	98.49
3,000 . . .	299.70	284.70	284.70	299.70	306.87	289.54
4,000 . . .	565.60	537.30	537.30	565.60	579.62	555.95
6,000 . . .	1,266.60	1,203.30	1,203.30	1,266.60	1,297.90	1,267.29
10,000 . . .	3,093.50	2,938.80	2,938.80	3,093.50	3,170.66	3,129.32

(a) Income remaining after allowing all deductions other than deductions for dependants.

**Company income taxes**

For taxation purposes companies are divided into two main groups—private and public. Broadly, a private company is defined as a company in which all the issued shares are held by not more than twenty persons, or which is capable of being controlled by not more than seven persons, and which is not a company in which the public is substantially interested, or is a subsidiary of a public company. All other companies are regarded as public companies. Both private and public companies pay primary tax assessed on a taxable income ascertained on the same principles as for individuals.

Dividends received are assessable income; resident companies, however, receive a rebate at the average rate on the amount of dividends included in the taxable income, while this rebate is not allowed to non-resident companies.

**Rates of tax.** A private company incurs liability for additional tax on its undistributed income if it fails to make a sufficient distribution of income within a specified period after the close of the year of income. The tax is levied on the undistributed amount which, for practical purposes, is the taxable income less—(a) primary income tax payable; (b) retention allowance (i.e. the proportion of the reduced distributable income which a company may retain without incurring liability for undistributed income tax); and (c) certain dividends paid by the company.

The rates of primary tax for all companies and additional tax for private companies applicable to income years 1955–56 to 1966–67 are shown in the following table.

**RATES OF TAX: COMPANIES, 1955–56 TO 1966–67 INCOME YEARS**  
(Cents per \$)

Income years ended June	Resident private company			Resident public company(a)		Non-resident company	
	On taxable income		Additional tax on undistributed income	On taxable income		On dividends only	
	Up to \$10,000	On remainder		Up to \$10,000	On remainder	Up to \$10,000	On remainder
1956 . . . . .	25	35	50	35	40	30	40
1957 to 1959 . . . . .	22½	32½	50	32½	37½	27½	37½
1960 to 1963 . . . . .	25	35	50	35	40	30	40
1964 to 1967 . . . . .	27½	37½	50	37½	42½	32½	42½

(a) Excludes co-operative, non-profit and life insurance for which the rates of tax (in cents per \$) for 1966–67 were as under:

Type of company	Taxable income	
	Up to \$10,000	On remainder
Co-operative . . . . .	32½	42½
Non-profit—Friendly societies dispensaries . . . . .	32½	32½
Other . . . . .	32½	42½
Mutual life insurance . . . . .	27½	37½
Other life insurance—Mutual income . . . . .	27½	37½
Other income . . . . .	37½	42½

For 1966–67 where the taxable income of a non-profit company did not exceed \$1,188 the amount of tax payable was limited to half the amount by which the taxable income exceeded \$416.

For the income years 1952–53 to 1966–67 the retention allowance (*see above*) was the proportion of the reduced distributable income shown in the following table.

**RETENTION ALLOWANCE: PRIVATE COMPANIES**  
**1952–53 TO 1966–67 INCOME YEARS**  
(Per cent)

Reduced distributable income(a)	1952–53	1958–59	1962–63
	1957–58	1961–62	1966–67
First \$2,000 or part . . . . .	50	50	..
Next \$2,000 „ „ . . . . .	40	40	..
„ \$2,000 „ „ . . . . .	35	..	..
„ \$2,000 „ „ . . . . .	30	..	..
First \$10,000 „ „ . . . . .	..	..	50
Next \$10,000 „ „ . . . . .	..	..	45
Balance . . . . .	25	35	40

(a) Calculated by deducting from the taxable income the primary tax payable and the amount of all property income included in taxable income.

In addition to the foregoing proportions, 10 per cent of distributable income from property, except dividends from other private companies, is also allowed.

The additional tax on undistributed income is imposed at a flat rate of 50 cents in the dollar on the undistributed amount.

#### Income tax assessments

1965-66 *income year*. The following tables show, for the 1965-66 income year, the number of taxpayers, income, and net income tax assessed for individuals and resident and non-resident companies. For similar figures for the 1964-65 income year and further information of this nature see the annual bulletin *Commonwealth Taxation Assessments*.

### COMMONWEALTH INCOME TAX ASSESSMENTS(a): RESIDENT INDIVIDUALS BY GRADE OF INCOME AND BY STATE, ETC. OF ASSESSMENT (Income derived in the year 1965-66)

Grade of actual income(b)(\$) and State or Territory of assessment	Taxpayers			Actual income(b)	Taxable income(c)			Net tax assessed
	Males	Females	Total	Total	Salary and wages	Other income	Total	
	No.	No.	No.	\$'000	\$'000	\$'000	\$'000	\$'000
417- 599 . . . . .	46,031	95,645	141,676	72,390	57,744	11,569	69,313	1,589
600- 799 . . . . .	58,576	124,107	182,683	128,101	98,948	19,754	118,703	3,847
800- 999 . . . . .	73,040	141,917	214,957	193,848	148,467	27,735	176,202	7,826
1,000- 1,199 . . . . .	86,014	159,833	245,847	270,268	201,395	41,144	242,538	13,440
1,200- 1,399 . . . . .	91,850	167,516	259,366	337,455	250,341	49,442	299,783	19,810
1,400- 1,599 . . . . .	100,888	179,133	280,021	420,103	312,061	58,964	371,026	28,135
1,600- 1,799 . . . . .	113,979	158,893	272,872	463,551	338,246	65,947	404,193	34,171
1,800- 1,999 . . . . .	143,834	118,446	262,280	498,318	350,347	72,653	423,000	38,824
2,000- 2,199 . . . . .	190,685	89,641	280,326	588,823	406,905	79,216	486,120	47,834
2,200- 2,399 . . . . .	223,988	61,003	284,991	655,572	447,935	81,021	528,956	55,588
2,400- 2,599 . . . . .	244,035	44,092	288,127	719,954	488,592	83,659	572,251	63,715
2,600- 2,799 . . . . .	253,136	31,705	284,841	768,383	516,711	84,381	601,092	70,434
2,800- 2,999 . . . . .	235,542	24,589	260,131	754,106	500,828	83,766	584,594	72,227
3,000- 3,999 . . . . .	763,505	68,347	831,852	2,851,719	1,825,145	371,049	2,196,194	309,966
4,000- 5,999 . . . . .	426,979	46,024	473,003	2,235,370	1,243,229	488,970	1,732,199	314,647
6,000- 7,999 . . . . .	97,112	14,368	111,480	759,588	325,394	281,934	607,328	143,944
8,000- 9,999 . . . . .	36,383	6,047	42,430	376,287	130,653	180,321	310,974	88,221
10,000-19,999 . . . . .	39,907	6,319	46,226	602,495	153,055	365,333	518,389	191,563
20,000-29,999 . . . . .	4,588	714	5,302	125,278	24,473	87,714	112,187	53,912
30,000 and over . . . . .	1,831	310	2,141	96,071	17,413	68,667	86,080	48,562
Central Office . . . . .	8,834	6,245	15,079	100,233	21,598	63,799	85,397	28,837
New South Wales . . . . .	1,189,615	571,237	1,760,852	4,762,909	3,055,964	803,605	3,859,568	589,405
Victoria . . . . .	910,445	474,959	1,385,404	3,816,113	2,325,632	799,762	3,125,394	492,744
Queensland . . . . .	439,666	182,689	622,355	1,613,130	893,718	369,263	1,262,981	184,506
South Australia . . . . .	309,929	144,550	454,479	1,165,065	689,484	250,921	940,405	135,400
Western Australia . . . . .	231,248	99,805	331,053	902,118	502,880	223,938	726,818	110,387
Tasmania . . . . .	103,210	41,240	144,450	374,986	224,109	71,256	295,365	41,899
Northern Territory . . . . .	9,983	3,043	13,026	43,310	25,021	5,270	30,291	4,803
Australian Capital Territory . . . . .	28,973	14,881	43,854	139,816	99,478	15,425	114,903	20,274
Total, residents . . . . .	3,231,903	1,538,649	4,770,552	12,917,678	7,837,883	2,603,239	10,441,122	1,608,256
Total, non-residents . . . . .	690	262	952	3,600	2,103	1,265	3,368	696
Total, residents and non-residents . . . . .	3,232,593	1,538,911	4,771,504	12,921,278	7,839,986	2,604,504	10,444,490	1,608,952

(a) Assessments in respect of 1965-66 incomes issued to 30 September 1967. Assessments issued after that date are not included. (b) Actual income is defined briefly as 'Gross income including exempt income less expenditure incurred in gaining that income'. (c) Taxable income is the income remaining after deducting from assessable income all allowable deductions.

**COMMONWEALTH INCOME TAX ASSESSMENTS: RESIDENT AND NON-RESIDENT COMPANIES, BY GRADE OF INCOME AND STATE, ETC., OF ASSESSMENT**

Grade of taxable income(b) (\$) and State or Territory of assessment	Taxable				Non-taxable		
	Companies	Actual income (a)	Taxable income (b)	Net tax assessed (c)	Companies	Taxable income (b)(d)	Loss
<b>INCOME DERIVED IN THE YEAR 1964-65</b>							
	No.	\$'000	\$'000	\$'000	No.	\$'000	\$'000
Loss for year . . . . .	..	..	..	..	23,305	..	(e) 159,449
Nil . . . . .	..	..	..	..	13,162	..	..
1- 1,999 . . . . .	20,953	34,535	14,627	3,946	2,948	2,176	..
2,000- 9,999 . . . . .	25,576	163,920	139,032	36,298	3,125	15,660	..
10,000- 19,999 . . . . .	11,135	167,559	154,410	44,248	949	13,180	..
20,000- 39,999 . . . . .	5,948	178,982	165,435	51,507	544	15,193	..
40,000- 99,999 . . . . .	3,918	259,664	239,776	77,487	493	31,490	..
100,000- 199,999 . . . . .	1,531	228,574	215,003	68,663	219	30,479	..
200,000- 399,999 . . . . .	844	253,374	232,075	74,698	131	36,357	..
400,000- 999,999 . . . . .	521	337,644	317,994	98,360	61	33,846	..
1,000,000-1,999,999 . . . . .	149	222,663	209,447	67,456	17	21,440	..
2,000,000 and over . . . . .	153	1,134,040	840,595	264,436	5	23,996	..
Central Office . . . . .	3,611	1,427,188	1,074,496	356,496	1,317	20,548	(f) 29,123
New South Wales . . . . .	28,236	605,103	564,092	165,102	18,483	67,920	54,914
Victoria . . . . .	20,219	471,472	444,964	126,120	12,264	73,730	27,831
Queensland . . . . .	6,106	161,052	151,145	49,688	4,023	16,005	15,121
South Australia . . . . .	6,686	141,347	132,569	42,954	3,988	12,479	5,677
Western Australia . . . . .	2,697	82,836	74,503	25,140	1,902	2,630	6,613
Tasmania . . . . .	1,355	34,495	32,755	10,251	920	823	1,777
Northern Territory . . . . .	221	5,796	4,706	1,436	140	276	977
Australian Capital Territory . . . . .	1,597	51,667	49,164	9,912	1,922	29,406	17,416
Total . . . . .	70,728	2,980,956	2,528,395	787,099	44,959	223,817	159,449

**INCOME DERIVED IN THE YEAR 1965-66**

Loss for year . . . . .	..	..	..	..	28,407	..	(e) 193,680
Nil . . . . .	..	..	..	..	13,281	..	..
1- 1,999 . . . . .	22,377	23,232	15,259	4,108	3,053	2,209	..
2,000- 9,999 . . . . .	27,102	160,971	147,525	38,567	3,429	16,930	..
10,000- 19,999 . . . . .	11,267	168,911	156,001	45,061	1,004	14,047	..
20,000- 39,999 . . . . .	5,940	174,230	165,264	52,463	498	13,816	..
40,000- 99,999 . . . . .	3,833	250,883	235,281	78,636	290	17,639	..
100,000- 199,999 . . . . .	1,414	214,046	197,506	66,727	111	16,019	..
200,000- 399,999 . . . . .	756	223,500	209,779	69,192	44	12,207	..
400,000- 999,999 . . . . .	523	337,080	317,588	101,728	45	25,484	..
1,000,000-1,999,999 . . . . .	153	221,602	205,024	63,002	15	19,688	..
2,000,000 and over . . . . .	150	1,174,522	858,815	267,441	4	21,764	..
Central Office . . . . .	3,593	1,446,922	1,082,520	350,853	1,456	35,107	(f) 36,885
New South Wales . . . . .	29,425	587,616	556,909	170,136	19,898	42,407	70,660
Victoria . . . . .	20,803	438,735	417,157	123,174	13,914	34,683	33,362
Queensland . . . . .	6,536	156,490	147,420	50,790	4,742	7,996	24,061
South Australia . . . . .	6,778	124,777	118,565	37,090	4,775	11,112	8,711
Western Australia . . . . .	3,068	94,791	90,352	31,538	2,025	2,702	7,836
Tasmania . . . . .	1,445	34,569	33,123	10,337	950	1,235	2,410
Northern Territory . . . . .	261	5,895	4,978	1,597	170	124	1,146
Australian Capital Territory . . . . .	1,606	59,182	57,018	11,411	2,251	24,436	8,608
Total . . . . .	73,515	2,948,978	2,508,042	786,925	50,181	159,802	193,680

(a) Actual income is defined briefly as 'Gross income including exempt income less expenditure incurred in gaining that income'. (b) Taxable income is the income remaining after deducting from assessable income all allowable deductions. (c) Excludes additional tax levied on the undistributed income of private companies. (d) Net tax assessed is nil because of rebates. (e) This figure is not included in the total shown for taxable income. (f) Not included in figures shown in adjoining column.

*Income tax on residents, by grade of income.* Individual income taxes assessed on residents are distributed according to grades of actual income in the following table. The year shown in each case is the year of income of the taxpayer. Assessments issued after the normal assessing period are not included.



**COMMONWEALTH INCOME TAX ASSESSMENTS: RESIDENT INDIVIDUALS, BY  
GRADE OF ACTUAL INCOME(a)  
(Income years 1962-63 to 1965-66)**

Grade of actual income(a) (\$)	Income year							
	1962-63		1963-64		1964-65		1965-66	
	Tax- payers	Net tax assessed	Tax- payers	Net tax assessed	Tax- payers	Net tax assessed	Tax- payers	Net tax assessed
	No.	\$'000	No.	\$'000	No.	\$'000	No.	\$'000
210- 399	166,450	384	(b)	(b)	(b)	(b)	(b)	(b)
400- 599	187,461	1,458	138,394	1,231	137,122	1,296	141,676	1,589
600- 799	210,437	3,844	199,007	3,843	190,233	3,872	182,683	3,847
800- 999	238,236	7,618	227,856	7,619	221,616	7,878	214,957	7,826
1,000- 1,199	256,636	12,548	247,499	12,438	247,883	13,242	245,847	13,440
1,200- 1,399	289,893	19,850	275,192	19,435	259,250	19,403	259,366	19,810
1,400- 1,599	288,192	25,418	281,919	25,676	278,864	27,264	280,021	28,135
1,600- 1,799	290,223	30,678	276,321	30,431	266,670	32,210	272,872	34,171
1,800- 1,999	329,293	39,844	298,924	37,889	270,858	38,126	262,280	38,824
2,000- 2,199	348,614	48,676	325,933	47,038	291,532	47,004	280,326	47,834
2,200- 2,399	326,268	52,192	317,493	52,253	293,571	53,046	284,991	55,588
2,400- 2,599	281,785	51,808	290,118	54,852	290,225	59,929	288,127	63,715
2,600- 2,799	240,493	50,440	260,853	55,391	275,392	64,662	284,841	70,434
2,800- 2,999	189,299	45,146	215,722	51,851	248,244	65,743	260,131	72,227
3,000- 3,999	510,518	164,938	604,971	198,324	765,272	273,694	831,852	309,966
4,000- 5,999	261,794	160,056	321,603	195,496	403,473	260,996	473,003	314,647
6,000- 7,999	70,656	85,524	88,638	104,323	99,934	126,301	111,480	143,944
8,000- 9,999	29,680	57,974	37,764	70,930	40,478	82,261	42,430	88,221
10,000-19,999	32,382	126,102	43,394	165,453	43,479	174,880	46,226	191,563
20,000-29,999	3,780	35,418	5,174	48,617	4,894	48,492	5,302	53,912
30,000-59,999	1,393	23,778	1,933	34,220	1,750	32,937	1,892	35,784
60,000-99,999	168	5,786	220	7,869	200	7,541	189	7,836
100,000 and over	69	5,228	78	5,916	71	5,955	60	4,941
<b>Total</b>	<b>4,553,720</b>	<b>1,054,706</b>	<b>4,459,006</b>	<b>1,231,097</b>	<b>4,631,011</b>	<b>1,446,732</b>	<b>4,770,552</b>	<b>1,608,256</b>

(a) Actual income is defined briefly as 'Gross income including exempt income less expenditure incurred in gaining that income'. (b) Exemption \$416.

#### Yield of income taxes

*Income taxes collected.* The following table shows the amounts of taxes collected and the proportions of the several components in the years 1962-63 to 1966-67.

#### INCOME TAXES COLLECTED, 1962-63 TO 1966-67

Source of income tax	Collection year				
	1962-63	1963-64	1964-65	1965-66	1966-67
AMOUNTS COLLECTED (\$'000)					
Individuals—					
Instalments—salaries and wages	684,426	792,242	990,600	1,160,369	1,323,537
Direct cash payments	398,982	479,916	579,762	570,799	598,509
Companies	519,828	586,260	709,044	801,105	784,544
Superannuation funds	15	130	162	175	534
Dividend (withholding)	17,929	15,936	16,039	17,247	22,708
<b>Total</b>	<b>1,621,181</b>	<b>1,874,484</b>	<b>2,295,607</b>	<b>2,549,695</b>	<b>2,729,832</b>

## INCOME TAXES COLLECTED, 1962-63 TO 1966-67—continued

Source of income tax	Collection year				
	1962-63	1963-64	1964-65	1965-66	1966-67
PERCENTAGES					
Individuals—					
Instalments—salaries and wages . . . . .	42.22	42.26	43.15	45.51	48.48
Direct cash payments . . . . .	24.61	25.60	25.26	22.38	21.93
Companies . . . . .	32.06	31.28	30.89	31.42	28.74
Superannuation funds . . . . .	..	0.01	0.01	0.01	0.02
Dividend (withholding) . . . . .	1.10	0.85	0.70	0.68	0.83
<b>Total . . . . .</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>

*Income tax assessed.* The amounts of income tax covered by statistical analyses of assessments for recent years are shown in the following table. The amounts are shown under the year of income of the taxpayer. Tax is usually paid by companies in the year following the year of income. Individuals pay tax in the year of income, but there is usually an adjustment in the following year. Tax assessed after the close of the normal assessing period is not included.

## INCOME TAXES ASSESSED, 1961-62 TO 1965-66

(\$'000)

Tax	Income year—				
	1961-62	1962-63	1963-64	1964-65	1965-66
Individuals . . . . .	956,974	1,056,060	1,232,442	1,447,886	1,608,952
Companies—					
Primary tax . . . . .	536,336	599,972	715,938	787,099	786,925
Additional tax on undistributed income of private companies . . . . .	1,976	1,532	1,609	2,260	2,618
<b>Total . . . . .</b>	<b>1,495,286</b>	<b>1,657,564</b>	<b>1,949,989</b>	<b>2,237,245</b>	<b>2,398,495</b>

*Refunds of revenue.* Income tax collections, as previously shown, are net amounts after refunds of revenue made in the course of the year. Refunds are of two types—those charged to special appropriations under authority of the Income Tax Assessment Act and those charged to special appropriations under authority of the Audit Act. Income tax instalment refunds, by far the greatest part of income tax refunds, are made when the instalments deducted during the year exceed the tax assessed on incomes for that year. Refunds made from special appropriations under section 37A of the Audit Act include refunds of moneys paid to the revenue in error, refunds of tax overpaid, refunds due to the amendment of assessments, etc. Refunds of income tax during the collection years 1962-63 to 1966-67 were: 1962-63, \$236,626,000; 1963-64, \$242,422,000; 1964-65, \$264,366,000; 1965-66, \$305,830,000; and 1966-67, \$353,194,000.



## CHAPTER 20

# LOCAL GOVERNMENT

This chapter includes, in addition to information on the operation of local government authorities, information on the operation of certain semi-governmental authorities. The latter information is not comprehensive for this type of authority, and is included partly because of the association of the functions performed with those of local government authorities, and partly for convenience in preparation. Particulars of the activities of other semi-governmental authorities, e.g. transport, electricity and gas, and banking undertakings, for which only some financial statistics are given in this chapter, are included in the chapters relevant to those subjects.

### Coverage

#### Local government authorities

In each State of the Commonwealth there exists a system of local government whose powers and responsibilities are in general similar, and cover such matters as the construction and maintenance of roads, streets and bridges, water, sewerage and drainage systems, and health and sanitary services, the supervision of building, and the administration of regulations relating to items such as weights and measures, slaughtering, the registration of dogs, etc. In addition to these obligatory functions, there are also many which may be performed by a local government authority either with or without the consent of the ratepayers or the Governor-in-Council. These include transport facilities, electricity, gas, and other business undertakings, hospitals, charitable institutions, recreation grounds, parks, baths, libraries, museums, etc.

The system is based on the principle of a grant of specific powers by the State legislatures to the local authorities, their autonomy, however, being more or less limited by the provision for general supervision by a department of the central government or by the Governor-in-Council. Otherwise, within the scope of the Acts under which they are constituted or which they have to administer, they are responsible only to the ratepayers. While the broad pattern of local government throughout the States of Australia is similar, the range of activities, election of officers, methods of valuation and rating powers, etc. differ considerably.

The areas over which local government bodies, numbering 899, exercise general control, are known in New South Wales as cities, municipalities and shires; in Victoria as cities, towns, boroughs, and shires; in Queensland as cities, towns and shires; in South Australia as cities, corporate towns and district council areas; in Western Australia as cities, towns and shires; and in Tasmania as cities and municipalities. In New South Wales some local government authorities in an area have combined to provide services such as electricity, water, sewerage and drainage—e.g. the county councils. Within shires there are also some municipal units known as urban areas. Apart from the more thinly populated parts of New South Wales and South Australia, and the Commonwealth Territories (except for the City of Darwin), practically the whole of Australia comes within local government jurisdiction.

The financial statistics in the following section are classified under the headings of Ordinary Services and Business Undertakings. The former covers the obligatory and general functions referred to above. Business Undertakings include public utilities such as water supply, sewerage, electricity, gas, transport and hydraulic power undertakings, and other miscellaneous works such as abattoirs, quarries, ice works, cinemas, etc.

#### Semi-governmental authorities

In addition to local government authorities, a large number of authorities have been set up to control specific activities, which are often identical with some of those performed by either, or both of the other classes of public authority—central government and local government—and a complete picture of any field of activity for a State or Australia as a whole cannot be obtained without reference to each class operating in that particular field. These semi-governmental authorities differ primarily from local government authorities in that their operations are restricted to the specific activity for which they were constituted—e.g. roads and bridges, water and sewerage, electricity and irrigation, harbours, or tramways, etc.—i.e. each dispenses a specific service throughout an area as distinct from the general services of the local authority. In the sections which deal with debt, roads and bridges, water supply and sewerage, harbours, and fire brigades particulars are included of the more important of these authorities which operate within the range covered by this chapter.

**Roads, bridges, etc.**

The construction and maintenance of roads, bridges and ferries are generally part of the functions of local authorities, but in each State there exists a central road authority or a government department whose duties relate to the construction, reconstruction and maintenance of 'main' and 'developmental' roads, the distribution of funds to local bodies, and the supervision and co-ordination of road construction and policy throughout the State. Owing to difficulty in obtaining complete particulars of receipts and expenditure of the various local governing bodies in respect of roads under their control, the details of receipts and expenditure given on pages 820-27 are those of central governments only, relating either to the supervisory board or commission in the State or to direct activities of a department. However, estimates of the aggregate net expenditure of all public authorities concerned with roads and bridges in Australia are given on page 828 of that section. On pages 812-15 some information is given of the revenue and expenditure of local government authorities in respect of roads.

**Water supply and sewerage**

In the cities of Sydney, Melbourne and Perth the control of water supply and sewerage is in the hands of special boards, while in Adelaide these services are under the direct supervision of a government department. In most of the other cities and towns the municipal councils or, in some cases, water trusts are the controlling bodies, which either construct the works out of their own resources or take them over after they have been constructed by the government.

**Harbours**

The majority of the harbours in Australia are managed by boards, the members of which are either elected by persons interested, or appointed by the government. In some instances, however, they are directly controlled by the government.

**Fire brigades**

In all the States the management of fire brigades is undertaken by boards. These boards usually comprise members elected by the councils of municipalities and insurance companies within the districts placed under their jurisdiction, and one or more members appointed by the government. Occasionally volunteer or country fire brigades are represented.

## **Local government authorities**

**New South Wales**

For purposes of local government the whole of the Eastern and Central land divisions and more than two-thirds of the sparsely populated Western division have been divided into cities, municipalities (most principal towns) and shires (mainly large rural areas, some of which include important towns). At the end of 1967 the area incorporated was 272,000 square miles, or nearly nine-tenths of the total area of the State. All local government authorities in the State are subject to the general provisions of the Local Government Act. Municipalities and shires may combine to form county councils for the establishment and conduct of services of joint benefit, e.g. electricity, water, gas, abattoirs. At 31 December 1967 there were fifty-three county councils, including the Sydney County Council.

**Victoria**

Local government is established throughout the State, the various divisions being termed cities, towns, boroughs, or shires. The only unincorporated areas are French Island (41,600 acres) in Westernport Bay, Lady Julia Percy Island (653 acres) off Port Fairy, Bass Strait Islands (966 acres), part of Gippsland Lakes (81,920 acres), and Tower Hill (1,459 acres) adjacent to the Borough of Kororoit. Melbourne and Geelong were incorporated under special statutes prior to the establishment of a general system of local government, but are now subject to several provisions of the Local Government Act.

**Queensland**

The whole of the State (except certain islands along the coast, the Dawson Valley Irrigation Area and the Somerset Dam Area) is incorporated into cities, towns and shires under the Local Government Act (City of Brisbane Act in the case of Brisbane).

**South Australia**

The settled portion of South Australia is incorporated, being mostly under municipal corporations in the larger cities and towns and district councils in the agricultural areas.

**Western Australia**

Local government is established throughout the State, the divisions being cities, towns and shires.

**Tasmania**

The whole State is divided into municipal districts, Hobart and Launceston being incorporated as cities under separate Acts.

**Area, population, dwellings, and value of rateable property**

The area, population, dwellings, and value of rateable property in the incorporated areas of each State are shown for the year 1965-66 in the following table. The valuations relate to rateable property only and exclude government and other non-rateable property, whose value in the aggregate is considerable. In some cases councils rate on annual value, or unimproved capital value, or improved capital value, or partly on each of these bases of valuation. The amounts stated are the totals for the areas rated according to each basis of valuation. Particulars of population and dwellings are in accordance with the definition used in the 1966 census, and are compiled from information collected on the census schedules. For the purpose of the census a dwelling was defined as any habitation occupied by a household group living together as a domestic unit, whether comprising the whole or only part of a building. The term has, therefore, a very wide reference and includes, in addition to houses and flats, a great variety of dwellings ranging from a single-roomed shack to a multi-roomed hotel or institution. Unoccupied dwellings include vacant dwellings available for sale and renting, 'week-end' and holiday dwellings, and other dwellings temporarily unoccupied on the night of the Census. Dwellings being built are not included.

In the following table particulars of number, area, and value of rateable property refer to estimates made, where practicable, for the capital city statistical division and outside this division. Wherever the statistical boundary cuts across a local government area the estimates have involved either the inclusion or exclusion of the whole of the local government authority concerned in, or from, the capital city statistical division.

**LOCAL GOVERNMENT AUTHORITIES: AREA, POPULATION, DWELLINGS, AND  
VALUE OF RATEABLE PROPERTY, STATES, 1965-66**

Location	Number	Area	Popula- tion	Dwellings		Value of rateable property		
				Occupied	Unoccu- pied	Unim- proved capital value	Improved capital value	Annua value
		'000 acres	'000 (b)	No. (b)	No. (b)	\$'000	\$'000	\$'000
New South Wales(c)—								
Sydney Statistical Division	39	974	2,541	730,877	39,701	3,504,792	8,699,706	291,938
Other	185	173,383	1,681	458,069	61,480	1,596,728	n.a.	n.a.
<i>Total, New South Wales</i>	<i>224</i>	<i>174,357</i>	<i>4,223</i>	<i>1,188,946</i>	<i>101,181</i>	<i>5,101,520</i>	<i>n.a.</i>	<i>n.a.</i>
Victoria(d)—								
Melbourne Statistical Di- vision	55	1,933	2,231	626,343	35,445	n.a.	8,135,131	412,234
Other(e)	154	54,177	986	262,616	29,307	n.a.	3,581,798	181,017
<i>Total, Victoria</i>	<i>209</i>	<i>56,110</i>	<i>3,216</i>	<i>888,959</i>	<i>64,752</i>	<i>n.a.</i>	<i>11,716,929</i>	<i>593,250</i>
Queensland(a)—								
Brisbane Statistical Di- vision	n.a.	n.a.	778	215,668	10,777	n.a.	n.a.	n.a.
Other	n.a.	n.a.	880	232,752	30,946	n.a.	n.a.	n.a.
<i>Total, Queensland</i>	<i>131</i>	<i>426,226</i>	<i>1,658</i>	<i>448,420</i>	<i>41,723</i>	<i>1,110,145</i>	<i>n.a.</i>	<i>n.a.</i>
South Australia(a)—								
Adelaide Statistical Di- vision	31	573	771	217,590	12,089	n.a.	2,084,000	104,177
Other	111	36,454	306	81,662	12,502	n.a.	929,000	46,461
<i>Total, South Australia</i>	<i>142</i>	<i>37,028</i>	<i>1,077</i>	<i>299,252</i>	<i>24,591</i>	<i>n.a.</i>	<i>3,013,000</i>	<i>150,638</i>
Western Australia(a)—								
Perth Statistical Division	27	1,326	559	154,984	8,211	216,719	n.a.	25,295
Other	117	623,263	275	69,675	9,751	173,929	n.a.	4,783
<i>Total, Western Australia</i>	<i>144</i>	<i>624,589</i>	<i>834</i>	<i>224,659</i>	<i>17,962</i>	<i>390,648</i>	<i>n.a.</i>	<i>30,078</i>

For footnotes see next page.

**LOCAL GOVERNMENT AUTHORITIES: AREA, POPULATION, DWELLINGS, AND  
VALUE OF RATEABLE PROPERTY, STATES, 1965-66—continued**

Location	Number	Area	Popula- tion	Dwellings		Value of rateable property		
				Occupied	Unoccu- pied	Unim- proved capital value	Improved capital value	Annual value
		'000 acres	'000 (b)	No. (b)	No. (b)	\$'000	\$'000	\$'000
Tasmania(a)—								
Hobart Statistical Division .	5	392	141	37,947	2,836	154,791	361,056	30,677
Other . . . . .	44	16,493	229	61,418	7,964	162,943	532,295	43,767
Total, Tasmania . . . .	49	16,885	371	99,365	10,800	317,735	893,351	74,445

(a) Year ended 30 June 1966.  
(d) Year ended 30 September 1966.  
Commission.

(b) Particulars as at Census 30 June 1966.

(c) Year ended 31 December 1965.  
(e) Excludes Yallourn Works Area under the jurisdiction of the State Electricity

**Local government finances**

The following tables show the latest available financial statistics for local government authorities. The figures relate to the year 1965-66 except for New South Wales, where they relate to the year 1965. For further detail on local government finances see *State, Territory and Local Government Authorities' Finance and Government Securities*, Bulletin No. 5, 1966-67, issued by this Bureau.

*Ordinary services.* In the returns of revenue and expenditure in the following tables the proceeds from loans and expenditure thereof have been excluded. The financial operations of business undertakings controlled by the various local government authorities are given in the next paragraph. The profits resulting from the working of these undertakings, where taken into general revenue, have been included.

**LOCAL GOVERNMENT AUTHORITIES: ORDINARY SERVICES—REVENUE AND  
EXPENDITURE, STATES, 1965-66**

	N.S.W. (a)	Vic. (b)	Qld (c)	S.A. (c)	W.A. (c)	Tas. (c)	Total
<b>REVENUE (EXCLUDING LOAN RECEIPTS) (\$'000)</b>							
Taxation—							
Rates (net) . . . . .		71,901	41,398	20,412	13,677	7,348	
Penalties . . . . .		287	607	209	231		
Licences . . . . .		495					100
Total, taxation . . . . .		72,682	42,005	20,621	13,908	7,448	
Public works and services—							
Sanitary and garbage services .		3,130	7,216	290	1,203	426	
Council properties . . . . .	(d)	13,638	2,010	1,483	3,486	1,158	
Street construction . . . . .		5,940		4,344	1,997	151	
Other . . . . .		3,844	1,148	360	923	496	
Total, public works, etc. . . .		26,552	10,374	6,477	7,609	2,231	
Government grants—							
Roads . . . . .		733	4,801	(e) 8,016	7,214	1,390	
Other . . . . .		4,284	2,452	609	333	204	
Total, government grants . . .		5,016	7,253	8,625	7,547	1,595	
Profits from business undertakings		1,085		22			
Fees and fines . . . . .		1,027			234		
All other . . . . .		1,163	(f) 18,644	415	5,224	544	
Total revenue . . . . .		107,527	78,276	36,160	34,522	11,818	

For footnotes see next page.

NOTE. Figures for New South Wales and consequently for Total in the table above and in the tables on page 813 were not available when this section was sent for press. See Year Book No. 53 for corresponding detail for the previous year.

LOCAL GOVERNMENT AUTHORITIES: ORDINARY SERVICES—REVENUE AND EXPENDITURE, STATES, 1965-66—*continued*

	N.S.W. (a)	Vic. (b)	Qld (c)	S.A. (c)	W.A. (c)	Tas. (c)	Total
EXPENDITURE (EXCLUDING LOAN EXPENDITURE) (\$'000)							
General administration . . . . .	15,079	6,811	3,252	3,131	1,603		
Debt services excluding business undertakings—							
Interest . . . . .	6,462	8,659	1,730	2,245	1,033		
Redemption . . . . .	7,785	9,010	2,438	3,493	1,233		
Exchange . . . . .	..	202	..	..	..		
Other . . . . .	76	123	..	..	..		
Total, debt, etc. . . . .	14,323	17,994	4,168	5,738	2,267		
Public works and services—							
Roads, streets and bridges . . . . .	34,281	19,216	21,122	11,563	4,375		
Health administration . . . . .	1,124	..	648	617	213		
Sanitary and garbage services . . . . .	10,249	8,160	1,133	1,461	426		
Street lighting . . . . .	2,199	1,122	827	509	319		
Council properties . . . . .	(g)19,188	9,018	4,125	8,616	1,675		
Other . . . . .	4,372	738	712	2,958	44		
Total, public works, etc. . . . .	71,413	38,254	28,568	25,724	7,052		
Grants—							
Fire brigades . . . . .	1,615	536	291	335	141		
Hospitals and ambulances . . . . .	..	..	722	22	..		
Other charities . . . . .	277	..	8	..	..		
Other . . . . . (h)	(i)3,384	2,069	114	166	212		
Total, grants . . . . .	5,275	2,605	1,134	522	352		
All other . . . . .	3,251	(j)12,048	14	520	310		
Total expenditure . . . . .	109,342	77,713	37,136	35,635	11,585		

(a) Figures for New South Wales relate to the year ended 31 December 1965, and are on an income and expenditure basis as distinct from those of other States which are on a cash basis. (b) Year ended 30 September 1966. (c) Year ended 30 June 1966. (d) Includes \$6,664,000 plant hire. (e) Includes \$4,549,000 reimbursement from Highways Department. (f) Includes the following reimbursements: \$4,455,000 from Main Roads Department, \$1,677,000 from other State Government Departments, and \$5,880,000 from other sources. (g) Includes \$1,476,000 plant and equipment. (h) To Main Roads Department. (i) Includes \$1,727,000 to Country Roads Board. (j) Includes expenditure on work done for reimbursement: for Main Roads Department \$4,552,000; for other State Government Departments \$1,628,000; other \$5,552,000.

## LOCAL GOVERNMENT AUTHORITIES: ORDINARY SERVICES—REVENUE AND EXPENDITURE, STATES, 1962 TO 1966 (\$'000)

Year	N.S.W. (a)	Vic. (b)	Qld (c)	S.A. (c)	W.A. (c)	Tas. (c)	Total
Revenue(d)—							
1962 . . . . .	150,438	78,063	56,940	26,658	21,073	8,406	341,578
1963 . . . . .	159,998	83,941	62,668	27,589	25,356	9,796	369,349
1964 . . . . .	169,130	89,023	64,388	31,836	28,217	10,478	393,072
1965 . . . . .	187,689	100,129	69,339	32,360	35,112	10,930	435,559
1966 . . . . .	..	107,527	78,276	36,160	34,522	11,818	..
Expenditure(d)—							
1962 . . . . .	149,928	78,142	56,093	26,814	20,763	8,161	339,900
1963 . . . . .	159,515	83,714	61,901	27,341	25,071	9,434	366,975
1964 . . . . .	165,695	90,538	64,337	32,018	28,669	10,282	391,540
1965 . . . . .	181,265	100,031	70,730	33,147	31,813	11,278	428,264
1966 . . . . .	..	109,342	77,713	37,136	35,635	11,585	..

(a) Years ended previous 31 December. (b) Years ended 30 September. (c) Years ended 30 June. (d) Excludes loan receipts or expenditure.

*Business undertakings.* The tables following show particulars of the revenue and expenditure, other than loan, of business undertakings under the control of local government authorities. These particulars are not included in the foregoing tables.



**LOCAL GOVERNMENT AUTHORITIES: BUSINESS UNDERTAKINGS—REVENUE  
AND EXPENDITURE, STATES, 1965-66  
(\$'000)**

	<i>N.S.W. (a)</i>	<i>Vic. (b)</i>	<i>Qld (c)</i>	<i>S.A. (e)</i>	<i>W.A. (c)</i>	<i>Tas. (c)</i>	<i>Total</i>
<b>REVENUE (EXCLUDING LOAN RECEIPTS)</b>							
Water supply and sewerage—							
Rates	9,828		6,937	..	..	3,757	
Charges for services and sales of products	3,189	637	7,465	7	63	415	32,298
Other (including grants)	(d)3,110	21	1,406	..	..	907	5,443
<i>Total, water supply, etc.</i>	<i>16,126</i>	<i>658</i>	<i>15,808</i>	<i>7</i>	<i>63</i>	<i>5,078</i>	<i>37,741</i>
Electricity and gas—							
Rates	1,162		16	..	..	..	
Charges for services and sales of products	202,451	44,457	30,421	1,193	2,271	..	281,971
Other (including grants)	(d)6,907	308	3,409	193	..	..	10,816
<i>Total, electricity, etc.</i>	<i>210,520</i>	<i>44,764</i>	<i>33,846</i>	<i>1,386</i>	<i>2,271</i>	<i>..</i>	<i>292,787</i>
Railways, tramways and omnibuses—							
Charges for services and sales of products	..	..	7,785	..	..	..	7,785
Other (including grants)	..	..	312	..	..	..	312
<i>Total, railways, etc.</i>	<i>..</i>	<i>..</i>	<i>8,097</i>	<i>..</i>	<i>..</i>	<i>..</i>	<i>8,097</i>
Other—	(e)	(f)	(g)	(h)	(i)	(j)	
Rates	27	..	21	..	..	..	47
Charges for services and sales of products	14,538	2,107	1,493	387	251	264	19,041
Other (including grants)	98	74	149	71	..	235	628
<i>Total, other</i>	<i>14,663</i>	<i>2,182</i>	<i>1,663</i>	<i>459</i>	<i>251</i>	<i>499</i>	<i>19,716</i>
<b>Grand total</b>	<b>241,309</b>	<b>47,604</b>	<b>59,414</b>	<b>1,852</b>	<b>2,585</b>	<b>5,578</b>	<b>358,342</b>
<b>EXPENDITURE (EXCLUDING LOAN EXPENDITURE)</b>							
Water supply and sewerage—							
Working expenses	6,551	458	6,664	7	22	2,547	16,250
Depreciation	(k)352	54	..	..	..	299	299
Debt charges	6,117	148	5,793	..	48	2,424	14,531
Other (including transfers to general revenue and construction)	..	7	3,842	..	..	124	3,973
<i>Total, water supply, etc.</i>	<i>12,316</i>	<i>666</i>	<i>16,300</i>	<i>7</i>	<i>70</i>	<i>5,096</i>	<i>34,455</i>
Electricity and gas—							
Working expenses	170,471	41,247	24,434	1,133	1,640	..	238,925
Depreciation	4,432	1,153	..	..	286	..	5,872
Debt charges	24,832	1,618	6,718	77	346	..	33,592
Other (including transfers to general revenue and construction)	..	955	2,386	141	..	..	3,482
<i>Total, electricity, etc.</i>	<i>199,736</i>	<i>44,973</i>	<i>33,539</i>	<i>1,351</i>	<i>2,273</i>	<i>..</i>	<i>281,871</i>
Railways, tramways and omnibuses—							
Working expenses	..	..	8,092	..	..	..	8,092
Debt charges	..	..	917	..	..	..	917
Other (including transfers to general revenue and construction)	..	..	332	..	..	..	332
<i>Total, railways, etc.</i>	<i>..</i>	<i>..</i>	<i>9,340</i>	<i>..</i>	<i>..</i>	<i>..</i>	<i>9,340</i>
Other—	(e)	(f)	(g)	(h)	(i)	(j)	
Working expenses	13,319	1,686	643	433	196	324	16,600
Depreciation	142	103	..	..	..	..	245
Debt charges	955	261	120	..	..	63	1,400
Other (including transfers to general revenue and construction)	..	272	1,252	15	..	17	1,557
<i>Total, other</i>	<i>14,417</i>	<i>2,322</i>	<i>2,014</i>	<i>448</i>	<i>196</i>	<i>404</i>	<i>19,802</i>
<b>Grand total</b>	<b>226,468</b>	<b>47,962</b>	<b>61,193</b>	<b>1,806</b>	<b>2,539</b>	<b>5,500</b>	<b>345,468</b>

(a) Year ended 31 December 1965. (b) Year ended 30 September 1966. (c) Year ended 30 June 1966. (d) Includes Government grant: water supply and sewerage, \$2,165,000; electricity and gas, \$1,619,000; for part of cost of new works borne by Government. (e) Abattoirs. (f) Abattoirs, hydraulic power undertakings, quarries, iceworks, and reinforced concrete pipe and culvert works. (g) Off-street car parking, municipal markets, hostels, hotels and cinemas. (h) Quarries and hospitals. (i) Quarries, canteens and abattoirs. (j) Abattoirs. (k) Net balance after deducting charge for debt redemptions. The full amount of charge for debt redemption is included under debt charges.

**LOCAL GOVERNMENT AUTHORITIES: BUSINESS UNDERTAKINGS—REVENUE  
AND EXPENDITURE, STATES, 1962 TO 1966**  
(\\$'000)

<i>Year</i>	<i>N.S.W. (a)</i>	<i>Vic. (b)</i>	<i>Qld (c)</i>	<i>S.A. (c)</i>	<i>W.A. (c)</i>	<i>Tas. (c)</i>	<i>Total</i>
<b>Revenue(d)—</b>							
1962 . . .	175,489	35,424	35,718	1,311	1,536	3,691	253,170
1963 . . .	194,460	38,305	42,154	1,505	1,857	3,969	282,251
1964 . . .	212,020	40,067	50,563	1,889	2,142	4,314	310,995
1965 . . .	226,234	45,352	55,249	1,621	2,164	5,320	335,941
1966 . . .	241,309	47,604	59,414	1,852	2,585	5,578	358,342
<b>Expenditure(d)—</b>							
1962 . . .	167,923	35,353	35,452	1,297	1,422	3,618	245,064
1963 . . .	183,801	37,982	41,631	1,539	1,789	3,823	270,565
1964 . . .	199,171	39,883	50,167	1,745	1,949	4,372	297,288
1965 . . .	210,052	45,117	54,816	1,682	2,093	4,898	318,658
1966 . . .	226,468	47,962	61,193	1,806	2,539	5,500	345,468

(a) Years ended previous 31 December. (b) Years ended 30 September. (c) Years ended 30 June. (d) Excludes loan receipts or expenditure.

*Loan expenditure.* The tables following show particulars of loan expenditure on works connected with the ordinary services and the business undertakings of local government authorities.

**LOCAL GOVERNMENT AUTHORITIES: LOAN EXPENDITURE, STATES  
1965-66**  
(\\$'000)

	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>Total</i>
<b>Ordinary services—</b>							
Roads, bridges, streets, foot-paths, drainage, and sewerage . . . . .		8,819	23,148	4,323	1,910	1,854	
Council properties . . . . . (a)		(a)5,090		1,275	(a)3,198	(a)991	
Parks, gardens, and recreational reserves . . . . .		6,597	(a)6,603	592	1,742	612	
Other . . . . . (b)		963	1,208	29	293	198	
<i>Total, ordinary services . . . . .</i>		<i>21,468</i>	<i>30,959</i>	<i>6,219</i>	<i>7,143</i>	<i>3,655</i>	
<b>Business undertakings—</b>							
Water supply . . . . .		213	9,874	..	..	1,968	
Sewerage . . . . .		..	..	..	3	2,627	
Electricity and gas . . . . .		2,594	5,004	20	783	..	
Railways, tramways and omnibuses . . . . .		..	1,355	..	..	..	
Abattoirs . . . . .		742	..	..	..	93	
Other . . . . .		21	132	..	..	..	
<i>Total, business undertakings . . . . .</i>		<i>3,570</i>	<i>16,365</i>	<i>20</i>	<i>786</i>	<i>4,687</i>	
<b>Grand total . . . . .</b>		<b>25,038</b>	<b>47,324</b>	<b>6,239</b>	<b>7,929</b>	<b>8,342</b>	

(a) Includes plant. (b) Includes advances for homes.  
For years to which particulars relate see following table.

NOTE. Figures for New South Wales and consequently for Total in the table above and in the tables on pages 816-17 were not available when this section was sent for press. See Year Book No. 53 for corresponding detail for the previous year.

**LOCAL GOVERNMENT AUTHORITIES: LOAN EXPENDITURE  
STATES, 1962 TO 1966**

(\$'000)

<i>Year</i>	<i>N.S.W. (a)</i>	<i>Vic. (b)</i>	<i>Qld (c)</i>	<i>S.A. (c)</i>	<i>W.A. (c)</i>	<i>Tas. (c)</i>	<i>Total</i>
<b>Ordinary services—</b>							
1962 . . .	15,847	10,919	22,653	3,354	5,492	2,774	61,038
1963 . . .	19,856	12,478	25,974	4,977	6,836	3,862	73,982
1964 . . .	22,725	15,944	32,426	5,383	5,685	4,289	86,453
1965 . . .	25,645	19,151	30,900	5,692	5,849	3,453	90,689
1966 . . .		21,468	30,959	6,219	7,143	3,655	
<b>Business undertakings—</b>							
1962 . . .	28,256	3,605	15,133	43	311	2,884	50,232
1963 . . .	36,988	3,665	10,927	114	596	3,350	55,640
1964 . . .	34,142	3,513	12,434	94	513	3,142	53,839
1965 . . .	36,697	3,508	15,042	22	918	2,900	59,088
1966 . . .		3,570	16,365	20	786	4,687	

(a) Years ended previous 31 December. (b) Years ended 30 September. (c) Years ended 30 June.

**Local government and semi-governmental authorities' debt**

Statistics of local government and semi-governmental debt for 1961–62 to 1965–66 are given in the following paragraphs. The information covers all local government authorities (including New South Wales County Councils previously included with semi-governmental authorities) and those semi-governmental authorities responsible for the provision of the following services.

*New South Wales.* Water Supply, Sewerage and Drainage, Electricity and Gas Supply, Fire Brigades, Banking, Housing, Grain Elevators, Roads and Bridges, Marketing, Industry Assistance, General Works, and Miscellaneous.

*Victoria.* Water Supply and Sewerage, Irrigation and Drainage, Harbours, Tramways, Electricity and Gas Supply, Fire Brigades, Marketing (Buying and Selling), Industry Assistance, Grain Elevators, and Housing.

*Queensland.* Water Supply and Sewerage, Irrigation and Drainage, Harbours, Transport, Electricity Supply, Fire Brigades, University, Hospitals and Ambulances, Marketing (Buying and Selling and Agency), and Industry Assistance.

*South Australia.* Irrigation and Drainage, Tramways, Electricity Supply, Fire Brigades, Hospitals and Ambulances, Marketing (Agency), Industry Assistance, Banking, Housing, and Miscellaneous.

*Western Australia.* Water Supply and Sewerage, Harbours, Transport, Electricity Supply, Fire Brigades, Hospitals, Marketing (Agency), Housing, University of Western Australia, and Miscellaneous.

*Tasmania.* Harbours, Electricity Supply, Fire Brigades, Transport, Housing, and Water Supply.

A detailed list of the authorities included is shown in *State, Territory and Local Government Authorities' Finance and Government Securities*, Bulletin No. 5, 1966–67.

The following table provides a summary of new money loan raisings, provisions for debt redemption, debt outstanding and interest payable by local government and semi-governmental authorities for the year 1965–66. For greater detail see *State, Territory and Local Government Authorities' Finance and Government Securities*.

**LOCAL GOVERNMENT AND SEMI-GOVERNMENTAL AUTHORITIES: NEW MONEY  
LOAN RAISINGS, REDEMPTION, DEBT, AND INTEREST PAYABLE, STATES  
1965-66  
(\$'000)**

	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>Total</i>
<b>LOCAL GOVERNMENT AUTHORITIES</b>							
New money loan raisings—							
From government . . . . .	129	261	2,676	3,264		96	6,426
From public . . . . .	62,103	23,207	31,515	5,272	7,642	6,396	136,134
<i>Total loan raisings . . . . .</i>	<i>62,232</i>	<i>23,467</i>	<i>34,191</i>	<i>8,536</i>	<i>7,642</i>	<i>6,492</i>	<i>142,560</i>
Funds provided for redemption—							
Government loans . . . . .	1,030	141	1,942	1,129	3	35	4,281
Loans due to public . . . . .	26,883	11,297	13,866	1,330	3,768	1,892	59,035
<i>Total funds, redemptions . . . . .</i>	<i>27,913</i>	<i>11,439</i>	<i>15,808</i>	<i>2,459</i>	<i>3,771</i>	<i>1,927</i>	<i>63,317</i>
Accumulated sinking fund balance . . . . .	35,107	9,660	19,396	..	144	923	65,229
Debt—							
Due to government . . . . .	7,839	7,190	35,095	6,173	68	991	57,356
Due to banks (net overdraft) . . . . .	5,481	1,505			104		7,090
Due to public creditor(a) . . . . .	533,722	161,297	293,627	31,147	48,049	47,023	1,114,865
<i>Total debt(a) . . . . .</i>	<i>547,041</i>	<i>169,992</i>	<i>328,722</i>	<i>37,320</i>	<i>48,221</i>	<i>48,014</i>	<i>1,179,311</i>
Maturing overseas(a)(b) . . . . .	5,000	..	4,686	..	..	..	9,686
Annual interest payable(a) . . . . .	(c)	9,044	17,578	1,927	2,670	2,592	
<b>SEMI-GOVERNMENTAL AND OTHER PUBLIC AUTHORITIES</b>							
New money loan raisings—							
From government . . . . .	32,150	45,614	2,021	27,944	13,835	19,980	141,543
From public . . . . .	44,839	93,794	28,834	11,684	11,434	3,698	194,283
<i>Total loan raisings . . . . .</i>	<i>76,989</i>	<i>139,408</i>	<i>30,855</i>	<i>39,628</i>	<i>25,269</i>	<i>23,678</i>	<i>335,826</i>
Funds provided for redemption—							
Government loans . . . . .	6,763	6,096	1,405	4,119	2,503	2,625	23,511
Loans due to public . . . . .	14,697	13,768	9,937	575	2,033	1,374	42,383
<i>Total funds, redemptions . . . . .</i>	<i>21,459</i>	<i>19,863</i>	<i>11,342</i>	<i>4,694</i>	<i>4,536</i>	<i>3,999</i>	<i>65,894</i>
Accumulated sinking fund balance . . . . .	88,121	42,504	19,388	2,317	7,278	3,276	162,884
Debt—							
Due to government . . . . .	518,212	636,664	58,185	363,146	232,946	267,969	2,077,121
Due to banks (net overdraft) . . . . .		604		40	8		652
Due to public creditor(a) . . . . .	560,517	1,399,825	264,230	124,916	78,853	52,397	2,480,739
<i>Total debt(a) . . . . .</i>	<i>1,078,729</i>	<i>2,037,093</i>	<i>322,415</i>	<i>488,102</i>	<i>311,807</i>	<i>320,366</i>	<i>4,558,512</i>
Maturing overseas(a)(b) . . . . .	5,000	7,858	..	..	..	..	12,858
Annual interest payable(a) . . . . .	(c)	100,238	16,895	23,052	13,893	15,051	

(a) Includes debt or interest payable in London and New York. Debt in London is payable in £ sterling which have been converted at the I.M.F. rate of £\$1 to \$A2.50; New York debt is payable in U.S. dollars which have been converted at the I.M.F. rate of \$US1.12 to \$A1. (b) Included in debt figures above. (c) Excludes amounts of annual interest payable on net overdraft—New South Wales.

NOTE. The considerable changes in the figures for New South Wales in the table above when compared with figures in previous issues are due to the transfer of New South Wales County Councils from the semi-governmental division to that of local government authorities (see previous page).

In the table above and the following table debt includes all liabilities for which arrangements have been made for repayment over a period of one year or more, and net overdrafts. Interest capitalised and amounts due for the capital cost of assets or for services rendered which are to be repaid over a period of one year or more are included. Current liabilities, such as interest accrued (but not capitalised), trade creditors, amounts held in trust, and other debts which are to be repaid in less than one year are not included. Net overdraft is the gross overdraft of all funds less all bank credit balances (including fixed deposits) which do not form part of a sinking fund to repay a loan. New loans raised during the year include new loan liabilities incurred during the year, loans raised from the public to repay indebtedness to the Government, and interest capitalised. Loans raised and redeemed within the year, increases in overdrafts, and loans raised for conversion or redemption of

existing debt are excluded. Funds provided for redemption include instalments of principal repaid and amounts credited to sinking funds established for the purpose of repaying the debt on maturity. Amounts provided for redemption from loans raised for that purpose are excluded.

**LOCAL GOVERNMENT AND SEMI-GOVERNMENTAL AUTHORITIES: NEW MONEY  
LOAN RAISINGS, REDEMPTION AND DEBT, AUSTRALIA, 1961-62 TO 1965-66**  
(\$'000)

	1961-62 (a)	1962-63 (a)	1963-64 (a)	1964-65 (a)	1965-66
<b>LOCAL GOVERNMENT AUTHORITIES</b>					
New money loan raisings—					
From government . . . . .	5,043	5,588	6,865	3,945	6,426
From public . . . . .	114,859	131,451	137,652	136,762	136,134
<i>Total loan raisings</i> . . . . .	<i>119,902</i>	<i>137,040</i>	<i>144,517</i>	<i>140,708</i>	<i>142,560</i>
Funds provided for redemption—					
Government loans . . . . .	4,458	4,646	4,812	4,278	4,281
Loans due to public . . . . .	38,174	44,485	49,107	56,189	59,035
<i>Total funds, redemptions</i> . . . . .	<i>42,632</i>	<i>49,131</i>	<i>53,919</i>	<i>60,467</i>	<i>63,317</i>
Accumulated sinking fund balance . . . . .	55,599	57,483	58,678	59,498	65,229
Debt—					
Due to government . . . . .	53,172	53,694	55,783	55,301	57,356
Due to banks (net overdraft) . . . . .	9,911	6,825	2,678	4,245	7,090
Due to public creditor(b) . . . . .	782,205	865,512	950,633	1,031,737	1,114,865
<i>Total debt(b)</i> . . . . .	<i>845,289</i>	<i>926,031</i>	<i>1,009,095</i>	<i>1,091,284</i>	<i>1,179,311</i>
Maturing overseas(b)(c) . . . . .	18,143	15,757	15,400	10,043	9,686
<b>SEMI-GOVERNMENTAL AND OTHER PUBLIC AUTHORITIES</b>					
New money loan raisings—					
From government . . . . .	124,687	131,250	148,180	142,567	141,543
From public . . . . .	157,204	190,761	191,075	197,772	194,283
<i>Total loan raisings</i> . . . . .	<i>281,891</i>	<i>322,011</i>	<i>339,255</i>	<i>340,339</i>	<i>335,826</i>
Funds provided for redemption—					
Government loans . . . . .	16,239	16,547	18,411	20,374	23,511
Loans due to public . . . . .	30,260	36,599	33,643	39,996	42,383
<i>Total funds, redemptions</i> . . . . .	<i>46,499</i>	<i>53,146</i>	<i>52,054</i>	<i>60,370</i>	<i>65,894</i>
Accumulated sinking fund balance . . . . .	107,999	118,563	131,630	144,988	162,884
Debt—					
Due to government . . . . .	1,563,206	1,696,591	1,826,624	1,949,339	2,077,121
Due to banks (net overdraft) . . . . .	3,162	2,233	1,318	1,125	652
Due to public creditor(b) . . . . .	1,789,840	1,963,466	2,139,601	2,311,289	2,480,739
<i>Total debt(b)</i> . . . . .	<i>3,356,208</i>	<i>3,662,290</i>	<i>3,967,543</i>	<i>4,261,752</i>	<i>4,558,512</i>
Maturing overseas(b)(c) . . . . .	15,766	15,744	15,722	14,718	12,858

(a) Figures have been revised consequent on the transfer of New South Wales County Councils from the semi-governmental division to that of local government authorities (see page 816). (b) See footnote (a) page 817. (c) Included in debt figures above.

## Roads and bridges

### Commonwealth Government grants

The following table shows the allocations to the States under the several Commonwealth Aid Roads Acts for road construction, maintenance, repair and other works connected with transport for each of the years 1962-63 to 1966-67. After 1 July 1959, when the *Commonwealth Aid Roads Act 1959* came into operation, the Commonwealth made separate provision for expenditure on strategic roads and the promotion of road safety practices. See also the chapter Public Finance, and Finance bulletins.

**ROAD CONSTRUCTION, MAINTENANCE, ETC.: GRANTS UNDER THE  
COMMONWEALTH AID ROADS ACTS, STATES, 1962-63 TO 1966-67  
(\$'000)**

<i>Year</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>Total</i>
1962-63 . . .	29,880	21,754	19,592	12,400	18,974	5,400	108,000
1963-64 . . .	32,442	22,824	21,070	13,338	20,526	5,800	116,000
1964-65 . . .	36,346	25,576	23,670	14,902	23,006	6,500	130,000
1965-66 . . .	39,191	27,508	25,538	16,024	24,739	7,000	140,000
1966-67 . . .	41,744	29,443	27,415	17,222	26,676	7,500	150,000

### New South Wales

Main roads administration is organised as a separate department under the control of a Commissioner. The activities of the Department of Main Roads include works on main, developmental, secondary and tourist roads throughout the State, all roads in the unincorporated portion of the Western Division, and certain associated works, principally bridges and vehicular ferries, constructed and maintained from government funds. The Department of Main Roads co-operates with the municipal and shire councils in the work of constructing and maintaining the main roads system. Public roads may be proclaimed (*see* page 430) by the Governor as main roads on the recommendation of the Commissioner for Main Roads.

In the County of Cumberland, which for the purposes of the Main Roads Act is deemed to include the City of Blue Mountains and small sections of other councils' areas on the boundary of the County of Cumberland, the full cost of main road and bridge construction, half the cost of secondary roads, and a proportion (in general, up to half) of the cost of tourist roads are met from the funds of the Department of Main Roads. The Councils do not contribute directly to the cost of these works but are required to pay a levy of 0.2083 cents in the \$ on the unimproved capital value of rateable property within Council's area or at a uniform percentage determined annually by the Commissioner of between ten per cent and fifteen per cent of Council's total rate income, whichever is the less. In the former case the rate payable in respect of lands used principally for primary production is half the rate levied on other lands.

In country districts the Department meets the full cost of road and bridge works on State highways, the full cost of bridge construction works and three-quarters of the cost of road construction and road and bridge maintenance works on trunk roads, three-quarters of the cost of bridge construction works and two-thirds of the cost of road construction and road and bridge maintenance works on ordinary main roads, and, in most cases, up to half the cost of works on tourist roads. The cost of constructing developmental roads and works is borne in full by the Department of Main Roads, but local Councils are required to maintain them in a satisfactory condition. In December 1965 a toll work comprising the first stage of the proposed Sydney to Newcastle Expressway was opened for traffic. The toll work at present extends from the Hawkesbury River to Calga, a distance of 9.2 miles. Tolls imposed on vehicles using the toll work will be used to cover the costs of construction and maintenance work.

*Length of roads.* The total length of proclaimed roads (*see* page 430) in New South Wales at 30 June 1967 was 25,498 miles classified as: State highways, 6,548 miles; trunk roads, 4,232 miles; ordinary main roads, 11,629 miles; secondary roads, 157 miles; developmental roads, 2,736 miles; and tourist roads, 196 miles. The length of main roads (highways, trunk and ordinary main roads) maintained by the Department of Main Roads at 30 June 1967 was 6,268 miles (28 per cent) while the length maintained by Councils was 16,141 miles (72 per cent). These figures exclude secondary, developmental and tourist roads, and unclassified roads in the Western Division of the State. In the area outside the County of Cumberland (the metropolis and adjoining areas) the proportions of main roads maintained by the Department and Councils respectively were: State highways 80 per cent, 20 per cent; and trunk and ordinary main roads, 4 per cent, 96 per cent. Unclassified roads in the Western Division of the State, totalling 1,198 miles, were maintained by the Department, while developmental roads, totalling 2,736 miles, were maintained by Councils. In the County of Cumberland the proportions of main roads maintained by the Department and Councils respectively were: State highways, 98 per cent, 2 per cent; and ordinary main roads, 56 per cent, 44 per cent. Secondary roads totalling 157 miles were maintained by Councils. Of the 196 miles of tourist roads throughout the State 177 miles (90 per cent) were maintained by Councils and 19 miles (10 per cent) by the Department. In 1966 the total length of all roads in New South Wales was estimated at 131,299 miles. The lengths of roads, according to their surface, were as follows: bitumen or concrete, 28,621 miles; gravel or stone, 44,645 miles; formed only, 26,944 miles; cleared only, 31,089 miles.

*Department of Main Roads—operations.* Progress has continued with the implementation of the Department's plan for main roads development in the County of Cumberland. Most of the Department's proposals have been incorporated in the County of Cumberland Planning Scheme approved by Parliament under the Local Government (Amendment) Act, 1951. The Department's proposals for the development of the main roads system in Newcastle and the surrounding districts have been largely incorporated in the Northumberland County District Planning Scheme, and some sections of the system have been constructed. With some modifications, the Department's proposals for the planning of the main roads in the Wollongong-Port Kembla district have been incorporated in the planning scheme prepared by the Illawarra Planning Authority. The Commissioner for Main Roads is a member of the State Planning Authority which was established in June 1964 to co-ordinate these and other planning schemes throughout the State.

During 1966-67, 70 new bridges, including 13 major bridges, were constructed. In addition, 79 concrete box culverts each having a waterway width of twenty feet or more were completed. At 30 June 1967 there were 74 bridges (including 18 major bridges) and 52 concrete box culverts under construction.

*Department of Main Roads—revenue and expenditure.* The funds of the Department of Main Roads are derived principally from motor vehicle taxation, charges on heavy commercial goods vehicles under the Road Maintenance (Contribution) Act, 1958-1964, grants under Commonwealth Aid Roads Act (see page 819 and the chapter Public Finance), other grants from the State or Commonwealth Governments, and proceeds of a levy on municipal and shire councils in the County of Cumberland in accordance with the Main Roads Act, 1924-1965. The State Government also makes repayable advances for Main Roads Department works, and since 1963 the Commissioner for Main Roads has had the power (with the approval of the Governor on the recommendation of the Treasurer) to borrow moneys.

**DEPARTMENT OF MAIN ROADS, NEW SOUTH WALES: REVENUE  
AND EXPENDITURE, 1962-63 TO 1966-67**  
(\$'000)

	1962-63	1963-64	1964-65	1965-66	1966-67
<b>REVENUE(a)</b>					
Motor vehicle taxation, registration and licence fees . . . . .	30,327	38,682	41,059	42,471	42,897
Commonwealth Aid Roads Acts . . . . .	19,080	20,617	22,934	24,648	26,313
State and Commonwealth grants . . . . .	475	197	70	35	63
Contributions by other departments and bodies . . . . .	342	326	97	377	893
Local authorities' contributions—					
Under Section 11 of Main Roads Act . . . . .	4,506	5,273	5,768	6,418	7,600
Other . . . . .	229	490	91	157	250
Sydney-Newcastle Expressway Toll . . . . .				356	706
Other . . . . .	277	343	531	539	564
<b>Total . . . . .</b>	<b>55,234</b>	<b>65,929</b>	<b>70,549</b>	<b>75,001</b>	<b>79,285</b>
<b>EXPENDITURE(b)</b>					
Roads and bridges—					
Construction . . . . .	38,000	48,199	56,153	61,714	62,590
Maintenance . . . . .	12,661	16,209	16,514	15,813	17,677
Administration . . . . .	2,632	2,820	3,425	3,757	4,296
Interest, exchange, etc., on debt . . . . .	566	986	1,237	1,609	1,856
Other(c) . . . . .	1,242	1,376	1,125	1,467	1,753
<b>Total . . . . .</b>	<b>55,100</b>	<b>69,589</b>	<b>78,454</b>	<b>84,360</b>	<b>88,172</b>

(a) Excludes repayable advances by the State Government and private loans (\$1,780,000 in 1962-63, \$4,020,000 in 1963-64, \$7,500,000 in 1964-65, \$5,005,000 in 1965-66, and \$6,500,000 in 1966-67), and transfers from Sydney Harbour Bridge Account for Expressway construction (\$4,162,000 in 1962-63, \$3,078,000 in 1963-64, \$2,360,000 in 1964-65, \$4,750,000 in 1965-66, and \$3,743,241 in 1966-67). Expenditure from these amounts is fully reflected in Expenditure.  
(b) Excludes debt redemption (\$114,176 in 1962-63, \$123,992 in 1963-64, \$209,588 in 1964-65, \$441,368 in 1965-66, and \$346,449 in 1966-67) and repayment of government advances (\$120,000 in 1962-63 and in 1963-64, \$1,020,000 in 1964-65, and \$200,000 in 1965-66 and in 1966-67).  
(c) Mainly purchase of assets not subject to annual depreciation charge. The purchase of other assets is omitted here because the depreciation charge for them is reflected each year in 'Roads and bridges'.

Figures shown on page 820 represent the aggregate revenue and expenditure of five funds: the Country of Cumberland Main Roads General and Special Purposes Funds, the Country Main Roads General and Special Purposes Funds, and the Developmental Roads Fund.

*Sydney Harbour Bridge.* The Sydney Harbour Bridge was opened for traffic on 19 March 1932. The main span is 1,650 feet and clearance for shipping 170 feet from high water level. The deck, 160 feet wide, carries a roadway of eight traffic lanes and two railway tracks, and there is also a footway on each side. The capital cost of the bridge and associated roadways to 30 June 1967 was \$29,572,000, but this amount will be reduced slightly on completion of the disposal of the remaining surpluses unmed property. The portion met from repayable loan funds, \$26,242,000, is repayable from toll income. Income for 1966-67 amounted to \$4,295,000, including road tolls, \$3,878,000; railway passenger tolls, \$280,000; and omnibus passenger tolls, \$29,000. Expenditure amounted to \$2,892,000, including interest, exchange, flotation expenses, etc., \$856,000; sinking fund, \$339,000; maintenance, \$584,000. The accumulated surpluses of the Bridge Account have been used to finance conversion of tram tracks to roadway on, and the construction of expressway-type approaches to, the bridge. From 1957-58 to 1966-67 a total of \$2,011,000 was expended on tram track conversion and \$24,197,000 on the bridge expressway-type approaches. The account showed a deficiency of \$1,890,000 at 30 June 1967. During 1966-67, 38,150,816 road vehicles (excluding omnibuses and exempt vehicles), 25,246,439 rail travellers and 13,338,995 omnibus travellers crossed the bridge, contributing respectively 92 per cent, 7 per cent, and 1 per cent of the total toll revenue.

### Victoria

With the object of improving the main roads of the State, the Country Roads Board was established by legislation passed in 1912. The principal duties of the Board are to determine which roads should be declared in the various classifications; to supervise the construction, reconstruction and maintenance of these roads; to inquire into the State's resources in road materials and the most effective methods of road construction and maintenance; and to recommend deviations in existing roads or the construction of new roads in order to facilitate communications or to improve the conditions of traffic.

*Length of roads.* The total length of *declared roads* (see page 430) by the Country Roads Board in Victoria at 30 June 1967 was 14,499 miles, classified as follows: State highways, 4,460 miles; main roads, 9,093 miles; by-pass roads, 40 miles; tourist roads, 445 miles; forest roads, 461 miles. The length of the surface sealed (bitumen or concrete) included in the foregoing mileage was 12,748 miles or 88 per cent of the total. In addition to the 14,499 miles of classified roads, there were approximately 86,500 miles of unclassified roads at 30 June 1967. The *total length of roads and streets* in Victoria at 30 June 1967 is estimated as: bitumen or concrete, 28,220 miles; gravel or stone, 29,692 miles; formed only, 20,775 miles; cleared only, 22,277 miles; total, 100,964 miles.

*Country Roads Board—operations.* During 1966-67, 2,044 miles of declared roads under the Board's control were treated with bitumen. In addition, 1,050 miles of undeclared roads, for which the Board contributed funds, were similarly treated. The total length of bitumen treatment carried out in 1966-67 was 3,214 miles (including 120 miles for other authorities). Of the work on the roads under the Board's control in 1966-67, 843 miles related to State highways and by-pass roads. During 1966-67, 179 bridge projects of an estimated total value of \$5,240,000 were initiated. Of these, 109, estimated to cost \$1,514,000, were under municipal supervision.

*Country Roads Board—receipts and payments.* The funds of the Country Roads Board are derived principally from motor registration fees, two-thirds of additional registration fees (charged on initial registration or transfer), a proportion of drivers' licence fees, fines, payments by the Commonwealth Government under the Commonwealth Aid Roads Acts, roads charges under the Commercial Goods Vehicles Act, and repayments by municipalities. As from 1 July 1964 proceeds from fines are paid to consolidated revenue, but an equivalent amount to replace them is made available to the Board from the loan fund. In addition, loans have been authorised from time to time under the Country Roads Acts for permanent works on main and developmental roads, State highways, tourists' roads and forest roads, while the State Government has provided, free of repayment, loan moneys for restoration of flood and bush fire damage. During 1966-67 loan receipts and payments each amounted to \$834,000. The total loan expenditure to 30 June 1967 was \$34,861,195. This figure does not include loan expenditure from the Developmental Roads Loan Account, a fund which was created for the purpose of constructing and maintaining subsidiary or developmental roads. Loan money raised on this account was exhausted at 30 June 1937, the total expenditure at that date being \$12,851,516. In 1966-67 \$3,512,000 was allocated to the Board for expenditure on certain special road projects. This was part of the revenue raised by the increase in motor registration fees under the *Roads (Special Projects) Act 1965*.



**COUNTRY ROADS BOARD, VICTORIA: RECEIPTS AND PAYMENTS**  
**1962-63 TO 1966-67**  
**(\$'000)**

	1962-63	1963-64	1964-65	1965-66	1966-67
<b>RECEIPTS</b>					
Motor Car Act—registration and licence fees (less cost of collection) . . . . .	21,366	23,427	23,378	24,690	25,866
Municipalities' payments . . . . .	1,764	1,579	1,690	1,691	1,824
Commonwealth Aid Roads Acts . . . . .	21,351	22,431	25,182	27,175	29,050
Roads (Special Projects) Fund . . . . .	..	..	..	1,654	3,311
Loans from State Government . . . . .	602	666	762	1,020	834
Road charges, Commercial Goods Vehicles Act . . . . .	4,919	5,638	5,926	6,379	6,732
Public Works Loan Application Act . . . . .	..	..	700	768	715
Other . . . . .	168	223	889	971	464
<b>Total . . . . .</b>	<b>50,169</b>	<b>53,964</b>	<b>58,527</b>	<b>64,348</b>	<b>68,796</b>
<b>PAYMENTS</b>					
Construction and maintenance of roads and bridges—					
State highways . . . . .	13,210	19,151	17,081	17,704	19,674
Main roads . . . . .	13,496	14,889	15,189	16,569	16,765
By-pass roads . . . . .	863	2,641	4,854	3,745	5,172
Tourist roads . . . . .	939	1,425	1,422	1,510	2,312
Forest roads . . . . .	553	742	714	699	737
Unclassified roads . . . . .	9,668	10,107	11,131	12,709	12,798
Other . . . . .	139	87	167	140	45
Plant purchase . . . . .	1,832	1,193	697	1,149	1,388
Interest, debt redemption, etc. . . . .	1,931	1,950	1,988	2,056	2,140
Office building, Kew—capital cost . . . . .	542	378	71	12	31
Statutory payment to—					
Tourists' Resorts Fund . . . . .	395	427	469	468	494
Transport Regulation Board . . . . .	..	..	..	178	383
Administration and other . . . . .	3,813	3,769	4,744	6,339	5,637
<b>Total . . . . .</b>	<b>47,378</b>	<b>56,758</b>	<b>58,525</b>	<b>63,278</b>	<b>67,575</b>

*Melbourne and Metropolitan Board of Works.* Since assuming responsibility for carrying-out planning scheme proposals relating to metropolitan highways and bridges, a tentative construction programme of urgent highway works throughout the metropolitan area of Melbourne has been adopted. Expenditure on these projects up to 30 June 1967 was \$13.7m. Of this amount, \$8.7m was financed from the proceeds of the Board's Metropolitan Improvement Rate and \$5.0m was contributed by the Treasurer of Victoria from the Roads (Special Projects) Fund.

*Level crossings.* In 1954-55 the Level Crossings Fund was created under the *Country Roads and Level Crossings Funds' Act* 1954 to finance (a) the elimination of level crossings or the provision of alternative routes to enable road traffic to avoid level crossings; (b) the provision of lights, signs, and lighting at, and the improvement of approaches to, level crossings; and (c) generally, the reduction of danger at level crossings. The Act provides for the payment into the Fund of one-third of all moneys received by way of additional motor registration fees and money provided under any other Act. The amount available for expenditure in 1966-67 was \$793,452, consisting entirely of receipts from owners' certificates. Expenditure from the Fund amounted to \$611,628, of which \$397,141 was incurred by the Railways Department and \$214,487 by the Country Roads Board, leaving a balance carried forward of \$1,203,123.

**Queensland**

The Department of Main Roads was constituted in February 1951, with the Commissioner of Main Roads as its permanent head. The duties of the Commissioner are to carry out surveys and investigations necessary to determine State highways, main developmental, and secondary roads; and the responsibility for building and maintaining these declared roads is largely that of the Commissioner. Roads of purely local importance are constructed and maintained by local authorities. In many cases construction is financed by the State Government by means of Treasury loans. Other roads may be built by the Public Estate Improvement Branch of the Lands Department in order to open up areas of previously inaccessible or undeveloped country.

*Length of roads.* The total length of declared roads (see page 430) in Queensland at 30 June 1967 was 24,629 miles; comprising State highways, 6,254 miles; main roads, 5,151 miles; developmental roads, 4,391 miles; and secondary roads, 8,833 miles. By the amendments to the Main Roads Act published in the Government Gazette of 6 April 1959, mining access, farmers' and tourist roads became secondary roads, and the provisions relating to the declaration of tourist tracks were repealed. The total length of roads and streets in Queensland at 30 June 1967 was: bitumen or concrete, 16,876 miles; gravel or stone, 19,290 miles; formed only, 41,701 miles; cleared only, 43,591 miles; total, 121,458 miles.

*Department of Main Roads—operations.* During 1965–66 the Department completed 1,026 miles of roads, including new construction and stage construction. Bridges of all types to a length of 9,691 linear feet were constructed, bringing the total constructed by the Department at 30 June 1966 to 256,859 feet. In addition, at 30 June 1966, 6,316 feet were under construction.

*Department of Main Roads—receipts and payments.* The funds of the Department of Main Roads are obtained chiefly from motor vehicle registration and collections, fees, etc. under the Transport Acts, contributions under the Commonwealth Aid Roads Acts, and loans, grants and advances from the State Government. The total receipts and payments during each of the years 1961–62 to 1965–66 are shown below.

**DEPARTMENT OF MAIN ROADS, QUEENSLAND: RECEIPTS AND PAYMENTS**  
**1961-62 TO 1965-66**  
 (\$'000)

	1961-62	1962-63	1963-64	1964-65	1965-66
<b>RECEIPTS</b>					
Motor vehicle registration, Transport Acts collections, fees, etc. . . . .	11,627	12,339	13,664	15,531	15,704
Loans from State Government . . . . .	1,820	1,668	1,046	1,039	1,330
Grants from State Government . . . . .	..	104	260	..	586
Roads (Contribution to Maintenance) Act . . . . .	1,818	2,201	2,558	3,027	3,142
Commonwealth Aid Roads and Works Acts . . . . .	19,203	20,854	24,877	27,919	29,188
Maintenance repayments—local authorities . . . . .	1,494	1,555	1,586	1,125	1,125
Hire, rent, sales of plant, etc. . . . .	2,571	2,966	3,322	3,704	3,449
Other . . . . .	1,217	1,275	2,126	2,043	2,066
<b>Total . . . . .</b>	<b>39,750</b>	<b>42,962</b>	<b>49,439</b>	<b>54,388</b>	<b>56,590</b>
<b>PAYMENTS</b>					
Permanent road works and surveys(a) . . . . .	26,371	28,847	34,345	39,993	35,356
Maintenance of roads . . . . .	5,758	5,939	6,507	6,466	6,876
Plant, machinery, buildings, etc. (including plant maintenance) . . . . .	3,039	2,573	3,351	3,735	4,418
Loans—					
Interest . . . . .	168	120	132	203	276
Redemption . . . . .	644	650	666	697	432
Administration and other . . . . .	3,575	4,063	4,828	5,618	7,104
<b>Total . . . . .</b>	<b>39,554</b>	<b>42,192</b>	<b>49,829</b>	<b>56,712</b>	<b>54,462</b>

(a) Includes grants to local authorities for road purposes.

### South Australia

The Highways and Local Government Department is administered by the Commissioner of Highways, who is empowered, subject to the approval of the Minister of Roads, to undertake the construction, maintenance and protection of the principal roads of the State, allocate grants to councils for roadworks and supervise the expenditure of these grants, and assist Councils to purchase road-making plant and to defray the cost of roadworks. In addition, the Commissioner advises Councils on technical questions concerning the construction, maintenance or repair of roads. Funds of the Department are derived mainly from the Highways Fund, into which are paid the proceeds from motor vehicle registration and drivers' licences (less cost of collection), appropriations from loan funds, repayments of advances made to Councils, and contributions by the Municipal Tramways Trust, and from contributions under the Commonwealth Aid Roads Acts.

*Length of roads.* In South Australia there are only two classifications of roads. These are main roads proclaimed (*see* page 430) under the provisions of the Highways Act and all other roads, commonly designated district roads. At 30 June 1967 there were 8,193 miles of *proclaimed main roads* and approximately 66,853 miles of district roads, including roads and tracks outside local government areas, totalling 75,046 miles. *Total lengths of roads*, classified by surface, were estimated to be: bitumen or concrete, 8,220 miles; gravel or stone, 15,758 miles; formed only, 10,515 miles; unformed, 40,553 miles.

*State Highways and Local Government Department—receipts and payments.* The following table shows particulars of receipts and payments, during the years 1962–1963 to 1966–67, of funds controlled by the Highways and Local Government Department.

#### HIGHWAYS AND LOCAL GOVERNMENT DEPARTMENT, SOUTH AUSTRALIA RECEIPTS AND PAYMENTS, 1962-63 TO 1966-67 (\$'000)

	1962-63	1963-64	1964-65	1965-66	1966-67
RECEIPTS					
Motor vehicles registration, licences, fees . . . . .	9,074	9,978	10,729	11,206	11,504
Commonwealth Aid Roads Acts . . . . .	12,400	13,338	14,903	16,024	17,223
Loans from State Government . . . . .	580	950	..	..	..
Other(a) . . . . .	1,166	1,210	2,785	3,340	3,498
<b>Total . . . . .</b>	<b>23,220</b>	<b>25,476</b>	<b>28,417</b>	<b>30,570</b>	<b>32,225</b>
PAYMENTS					
Construction and reconstruction of roads and bridges(b) . . . . .	15,358	19,517	18,409	20,912	22,834
Maintenance(a)(b) . . . . .	4,976	5,583	5,278	5,375	6,000
Recoups to Consolidated Revenue Fund—interest, debt redemption and exchange . . . . .	486	513	1,164	1,167	514
Advances to local and semi-governmental authorities . . . . .	1,162	1,650	1,126	1,376	1,091
Repayments to Revenue under Section 31 (a), Highways Act . . . . .	..	..	..	..	1,000
Stores, plant, machinery, suspense accounts, etc.(c) . . . . .	—144	538	918	1,214	1,792
<b>Total . . . . .</b>	<b>21,838</b>	<b>27,801</b>	<b>26,895</b>	<b>30,044</b>	<b>33,231</b>

(a) Includes reimbursement works for Commonwealth Government. (b) Includes administration expenses.  
(c) Represents gross repayments less recoveries by charges to works on account of depreciation and materials used.

### Western Australia

Work connected with road construction and maintenance and associated projects in Western Australia is undertaken by the State Government, through the Main Roads Department, and by local government authorities throughout the State. The Department operates under the *Main Roads Act, 1930–1967*, and is administered by a Commissioner of Main Roads responsible to the Minister

for Works. The Act makes provision for public roads in the categories of main roads, controlled-access roads and developmental roads (*see* page 430). An additional category, that of important secondary roads, is used by the Department in determining its works programme. Within its own district each local government authority is responsible for the provision and upkeep of roads other than those provided by the Main Roads Department. In addition, the local authority is required by the Main Roads Act to maintain any developmental road situated in its district.

*Length of roads.* The total length of constructed roads for which financial provision was made by the Main Roads Department at 30 June 1967 was: main roads, 3,435 miles, including seven miles of controlled-access roads; important secondary roads, 7,958 miles; and developmental roads, 43,930 miles. In addition, there were 74 miles gazetted as controlled-access roadway as yet not constructed. The total length of roads and streets in Western Australia at 30 June 1967 was made up as follows: bitumen or concrete, 13,806 miles; gravel or stone, 23,193 miles; formed only, 45,746 miles; cleared only, 26,362 miles; total, 109,107 miles.

*Main Roads Department—operations.* During the year 1966–67 the activities of the Department included clearing, 2,393 miles; forming, 3,697 miles; gravelling, 2,334 miles; reconditioning, 6,421 miles; and stabilising, 58 miles. In addition, 1,464 miles were primed or sealed (including widening). New and replacement bridges constructed totalled 43, while 13 bridges were widened.

*Main Roads Department—receipts and payments.* The funds of the Main Roads Department are derived principally from allocations made under the *Commonwealth Aid Roads Act 1964*. In addition, financial assistance was given by the Commonwealth Government to the extent of \$1,500,000 in 1966–67 for the improvement of roads used for the transport of beef cattle in the Kimberley District. For the six-year period ended 30 June 1967 additional grants totalling \$8,400,000 were received from Commonwealth funds and were matched by a corresponding State contribution. Proposals for further assistance by the Commonwealth indicate that \$9,500,000 will be made available for Beef Cattle Roads in a seven-year period commencing on 1 July 1967. Other sources of income include overload permit fees, one-half of the net amount of traffic fees collected in the Metropolitan Traffic Area, and an allocation from drivers' licence fees. Further moneys for expenditure on road maintenance are available under the *Road Maintenance (Contribution) Act 1965*, administered by the Commissioner of Transport. (Outside the Metropolitan Traffic Area motor vehicle licence fees are collected and retained by the local authorities with the provision that from 1 January 1965 they are required to contribute to the Central Road Trust Fund the amount of their annual vehicle licence collections which exceeds that of the base year 1958–59. Such amount is reimbursed together with an addition of 75 per cent from Commonwealth matching grants.) Receipts and payments for the years 1962–63 to 1966–67 are shown in the following table.

**MAIN ROADS DEPARTMENT, WESTERN AUSTRALIA: RECEIPTS AND  
PAYMENTS, 1962-63 TO 1966-67**

(\$'000)

	1962-63	1963-64	1964-65	1965-66	1966-67
RECEIPTS					
Motor vehicle registration, licence fees, etc.	2,014	2,335	3,370	4,054	3,820
Commonwealth Aid Roads Acts . . . . .	16,256	16,987	21,945	22,618	23,475
Commonwealth Aid Roads Acts—matching grants . . . . .	2,000	2,460	..	463	763
Western Australia Grant (Beef Cattle Roads) Act . . . . .	1,400	1,500	1,500	1,500	1,500
Road Maintenance (Contribution) Act . . . . .	..	..	..	392	2,540
Recoups from other authorities . . . . .	740	1,124	1,455	917	1,821
Other . . . . .	14	71	52	(a)2,024	176
<b>Total . . . . .</b>	<b>(b)22,424</b>	<b>(c)24,477</b>	<b>28,322</b>	<b>31,968</b>	<b>34,095</b>

For footnotes *see* next page.

MAIN ROADS DEPARTMENT, WESTERN AUSTRALIA: RECEIPTS AND  
PAYMENTS, 1962-63 TO 1966-67—*continued*  
(\$'000)

	1962-63	1963-64	1964-65	1965-66	1966-67
PAYMENTS					
Construction and reconstruction of roads and bridges(d) . . . . .	14,534	13,872	18,110	21,012	26,009
Maintenance of roads and bridges(d) . . . . .	2,015	2,561	2,196	1,856	3,010
Grants to local authorities, etc. . . . .	2,546	2,940	2,939	3,501	3,518
Transfer to State Consolidated Revenue . . . . .	140	140	195	253	258
Plant, machinery, etc. . . . .	971	1,146	1,587	1,709	1,789
Other(d) . . . . .	876	1,405	1,530	1,861	1,678
Total . . . . .	21,082	(e)22,064	(f)26,557	30,192	36,262

(a) Includes \$1,896,000 transferred from an Overhaul Account previously administered by the Public Works Department.  
(b) Excludes \$1,400,000 advance from State Treasury. (c) Excludes \$1,000,000 advance from State Treasury.  
(d) Includes administration and expenditure on hire and maintenance of road construction plant, etc., and on purchase of materials. (e) Excludes \$1,400,000 refund of advance from State Treasury. (f) Excludes \$1,000,000 refund of advance from State Treasury.

### Tasmania

Under the *Road Construction (Transfer of Functions) Act 1951*, which came into operation on 1 July 1951, the control of the construction and maintenance of roads and certain road making plant was vested in the Minister for Lands and Works. Works authorised by the Minister in respect of roads classified as State highways, tourist and developmental roads are constructed by the Department of Public Works and financed from the State Highways Trust Fund, into which are paid the proceeds from Commonwealth Aid Roads grants, motor vehicle registration fees and taxes, licence fees for drivers and public transport, and other moneys made available by Parliament. In addition, provision was made under the Road Construction (Transfer of Functions) Act for certain works authorised by the Transport Commission to be carried out and constructed by the Department. The expenditure by the Public Works Department during 1966-67 on the construction and maintenance of roads, tracks and bridges amounted to \$13,805,005 of which \$10,774,406 was charged to road funds, \$18,104 to revenue, \$1,721,593 to loan, and \$1,290,902 to other funds. Except in special cases, municipal councils bear the cost of maintaining country roads and a proportion of the cost of main and secondary roads.

*Length of roads.* The length of *classified roads* (see page 430) at 30 June 1967 was 2,252 miles, comprising State highways, 1,205 miles; main roads, 659 miles; secondary roads, 197 miles; tourist roads, 47 miles; and other roads, 144 miles. The mileages of sealed (bitumen or concrete) roads and their proportions to the respective totals were: State highways, 986 miles (82 per cent); main roads, 442 miles (67 per cent); secondary, tourist and other roads, 120 miles (31 per cent). The total length of classified sealed roads was 1,548 miles (69 per cent). The total length of local authorities roads at 30 June 1967 was 8,923 miles, comprising bitumen or concrete, 1,514 miles (17 per cent); gravel or stone, 6,046 miles (68 per cent); formed only or cleared only, 1,362 miles (15 per cent). Roads of other authorities (Hydro-Electric Commission, Forestry Commission and the sawmilling industry) totalled 1,985 miles.

The *total length of all roads* in Tasmania at 30 June 1967 was 13,195 miles, comprising bitumen or concrete 3,170 miles (24 per cent); gravel or stone 8,657 miles (66 per cent); formed only or cleared only, 1,368 miles (10 per cent).

*Combined road funds—receipts and payments.* The table following shows particulars of the receipts and payments of the combined Road Funds for the years 1962-63 to 1966-67.

**ROAD FUNDS, TASMANIA: RECEIPTS AND PAYMENTS, 1962-63 TO 1966-67**  
(\$'000)

	1962-63	1963-64	1964-65	1965-66	1966-67
<b>RECEIPTS</b>					
Motor vehicle taxation and registration, licences, fees, fines, etc.	2,833	3,019	3,153	3,425	3,961
Commonwealth Aid Roads and Works Acts	5,400	5,800	6,500	7,000	7,500
Recoups from local authorities, etc.	19	14	16	18	38
State Loan Fund	3,854	4,761	3,468	4,446	1,693
Hire of plant and workshop charges	2,949	3,165	3,329	3,732	3,824
Other	(a)682	(a)465	(a)1,295	220	262
<b>Total</b>	<b>15,737</b>	<b>17,224</b>	<b>17,761</b>	<b>18,842</b>	<b>17,279</b>
<b>PAYMENTS</b>					
Construction and reconstruction of roads and bridges.	9,801	11,239	11,420	11,591	9,445
Maintenance of roads and bridges	2,567	2,586	2,552	3,141	3,167
Other works connected with transport	46	72	76	62	45
Grants to local authorities	(b)50	33	15	35	37
Purchase, maintenance and operation of plant	3,070	3,231	3,402	3,751	3,884
Other	147	220	383	300	759
<b>Total</b>	<b>15,682</b>	<b>17,382</b>	<b>17,848</b>	<b>18,881</b>	<b>17,337</b>

(a) Includes Commonwealth Employment Stimulation Grant (\$507,554 in 1962-63, \$15,302 in 1963-64, and \$14,946 in 1964-65). (b) Includes Commonwealth Employment Stimulation Grant (\$22,260).

### Summary of roads open for general traffic

The tables showing road lengths in the several States and Territories classified according to class of road and surface of road formerly included in this section have been transferred to Chapter 12, Transport, Communication, and Travel.

### Aggregate net expenditure on roads and bridges in Australia

In most States there are three classes of authorities concerned with roads and bridges, the State Government, the central road authority, and numerous local government bodies. The Commonwealth Government, in addition to the grants it makes to the States for road purposes, is concerned with roads in the Northern Territory and the Australian Capital Territory and roads of access to Commonwealth property in the various States. Some information relating to Commonwealth grants to the States for road purposes and particulars of the expenditure on roads and bridges by local government bodies and the central road authorities are given in preceding sections of this chapter.

Most of these authorities may expend money directly on road construction or indirectly by means of grants and payments to other authorities. These indirect payments, if included in an aggregate, would duplicate expenditure; this, together with the fact that some authorities are unable to supply separate information concerning their road expenditure, makes it difficult to compile precise statistics of aggregate expenditure on roads and bridges.

The information in the following table, which is partly estimated and which excludes the main indirect payments, provides an approximate measure of the aggregate net expenditure by the three classes of authorities mentioned above on roads and bridges in Australia during each of the years ended 30 June 1963 to 1967. Expenditure on roads by those authorities whose primary activity is directed towards functions other than roads, e.g. electricity, forestry, housing, etc., authorities, is not included. The figures cover expenditure on the construction, reconstruction and maintenance of roads and bridges, and direct administration but not debt charges. Because of the difficulties associated with the indirect payments mentioned above, it is not possible to give separate net details for each authority.

**PUBLIC AUTHORITY NET EXPENDITURE ON ROADS AND BRIDGES  
STATES AND TERRITORIES, 1962-63 TO 1966-67**  
(\$ million)

<i>Year</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T. and A.C.T.</i>	<i>Aust.</i>
1962-63 . . .	108	77	55	30	26	17	10	324
1963-64 . . .	127	89	65	35	27	18	9	370
1964-65 . . .	142	94	71	35	32	17	10	402
1965-66 . . .	156	101	71	39	37	21	15	440
1966-67 . . .	162	109	79	46	43	20	13	472

### Water supply, sewerage and drainage

The information in this section relates primarily to the metropolitan areas and provincial cities and towns. For information on water supply and irrigation in rural areas see the chapter Water Conservation and Irrigation.

#### New South Wales

The two largest domestic water supply and sewerage systems are controlled by statutory boards each consisting of a president and a vice-president appointed by the State Government, and five members elected by local councils. These are (a) the Metropolitan Water, Sewerage and Drainage Board, which administers the systems in the County of Cumberland, i.e. in Sydney and in the surrounding districts, and, in addition, has jurisdiction over territory extending along the South Coast beyond Wollongong to Lake Illawarra, Shellharbour and Kiama, and (b) the Hunter District Water Board serving the Newcastle-Maitland-Cessnock areas. At Broken Hill and Cobar similar boards include representatives of the mining companies. Other systems, apart from irrigation projects and water storage systems administered by the State Government, are controlled by county, municipal or shire councils.

*Metropolitan and Hunter District water supply (to 30 June 1967).* The storage reservoirs of the metropolitan system with a combined available capacity of 574,335 million gallons, drain catchment areas of 3,860 square miles (Warragamba, 3,480 square miles, Upper Nepean, 347 square miles, and Woronora, 33 square miles). The development of a water supply system on the Warragamba River was completed with the official opening of the Warragamba Dam in October 1960. This dam, constructed in concrete, has a storage capacity of 452,505 million gallons. Its safe net draught is estimated to be 274 million gallons a day. A hydro-electric power station at the dam generated 341 million kWh in 1963-64, but, because of dry conditions, only 47 million kWh in 1966-67. At 30 June 1967 there were 172 service reservoirs in use with a combined capacity of 701 million gallons. Rating for water for 1966-67 was 3.75 cents in the \$ of 'assessed annual value'. The payment of this rate entitled the user to an amount of water calculated at 1,000 gallons per 30 cents. For water in excess of this allowance a further charge of 30 cents per 1,000 gallons was made.

The water supply of the *Hunter District system* is drawn principally from three sources: the Chichester Reservoir, with a storage capacity of about 5,000 million gallons and draining a catchment of 76 square miles, the Tomago Sandbeds, which extend northerly along the coast towards Port Stephens, and the Grahamstown Water Supply Scheme which is still being developed. Another source of supply is provided by the Nelson Bay-Anna Bay Scheme. Service reservoirs and tanks distributed throughout the water supply district have a total storage capacity of 125 million gallons. Water rates were calculated in 1966-67 at the rate of 6.9792 cents in the \$ of 'assessed annual value'. The payment of this rate entitled the user to an amount of water calculated at 1,000 gallons per 27.5 cents. For water in excess of this allowance a further charge of 27.5 cents per 1,000 gallons was made.

The following tables show, for the Metropolitan and Hunter District systems, the number of properties, the estimated population supplied, and other details.

**METROPOLITAN WATER SUPPLY(a), NEW SOUTH WALES  
SERVICES, 1962-63 TO 1966-67**

Year	Improved properties for which water mains available	Esti- mated popu- lation supplied	Average daily con- sumption	Total con- sumption for the year	Average daily consumption		Length of mains	Number of meters
					Per property	Per head of estimated popu- lation		
						gallons		
		'000	mill gal	mill gal	gallons	gallons	miles	
1962-63	653,674	2,544	234	85,282	357	92	7,173	438,585
1963-64	669,948	2,600	255	93,211	381	98	7,397	457,215
1964-65	693,185	2,660	290	105,892	418	109	7,649	479,321
1965-66	712,059	2,723	230	83,802	323	84	7,972	495,850
1966-67	735,360	2,756	234	85,383	318	85	8,105	515,653

(a) County of Cumberland, City of Greater Wollongong, Shellharbour and Kiama Municipalities, and parts of Colo and Wollondilly Shires.

**HUNTER DISTRICT WATER SUPPLY(a): SERVICES  
1962-63 TO 1966-67**

Year	Properties supplied	Estimated population supplied	Average daily con- sumption	Total con- sumption for year	Average daily consumption		Length of mains
					Per property	Per head of estimated population	
						gallons	
			mill gal	mill gal	gallons	gallons	miles
1962-63	89,283	301,580	36.6	13,352	410	121	1,551
1963-64	91,616	309,609	36.4	13,336	398	118	1,590
1964-65	93,646	316,625	41.5	15,139	443	131	1,623
1965-66	94,779	320,451	32.8	11,970	346	102	1,673
1966-67	96,755	327,514	31.6	11,521	326	96	1,702

(a) Newcastle, Maitland and Cessnock areas.

*Metropolitan and Hunter District sewerage and drainage system (to 30 June 1967).* The metropolitan system serving Sydney and suburbs comprises 3 major sewerage systems and 7 minor systems, consisting of 6 outfalls discharging directly into the Pacific Ocean and 4 treatment works. In addition, 8 centres outside the metropolitan area (Bellambi, Camden, Campbelltown, St Mary's, Port Kembla, Richmond, Warragamba township, and Wollongong) are served by local treatment works. Storm-water drainage channels under the control of the Metropolitan Water, Sewerage and Drainage Board at 30 June 1967 were 182 miles long. Sewerage rating for 1966-67 was 3.95 cents in the \$ of 'assessed annual value', and drainage rating 0.52 cents in the \$.

The main sewerage system of the Hunter District serves the City of Newcastle and discharges into the Pacific Ocean at Burwood Beach. There are also local treatment works at Maitland, Cessnock and some of the outlying districts. Sewerage rates for 1966-67 were 4.7917 cents in the \$ of 'assessed annual value', and drainage rates (on certain areas served) 0.5208 cents in the \$.

The following table gives details of sewerage services and stormwater drains of the Metropolitan system.



**METROPOLITAN SEWERAGE AND DRAINAGE(a)  
NEW SOUTH WALES: SERVICES, 1963 TO 1967**

30 June—	Improved properties for which sewerage available	Estimated population served	Length of sewers	Length of stormwater channels
		'000	miles	miles
1963 . . .	451,997	1,780	4,763	179
1964 . . .	475,735	1,870	5,074	180
1965 . . .	501,389	1,930	5,328	179
1966 . . .	524,225	2,000	5,585	181
1967 . . .	547,630	2,052	5,881	182

(a) County of Cumberland, City of Greater Wollongong, Shellharbour and Kiama Municipalities, and parts of Colo and Wollondilly Shires.

At 30 June 1967, 73,711 premises had been connected to the Hunter District Water Board's sewerage system (Newcastle-Maitland-Cessnock areas). The total length of sewers under the Board's control was 1,059 miles, and the length of drains was 52 miles.

*Metropolitan and Hunter District systems' finances.* The following table shows the debt, revenue and expenditure of the Metropolitan Water, Sewerage and Drainage Board and the Hunter District Water Board for each of the services of water supply, sewerage and drainage during 1966-67, and for the three services combined for the years 1962-63 to 1966-67.

**METROPOLITAN AND HUNTER DISTRICT WATER SUPPLY, SEWERAGE  
AND DRAINAGE, NEW SOUTH WALES: FINANCES, 1962-63 TO 1966-67  
(\$'000)**

Year	Capital debt at 30 June	Revenue	Expenditure			Total	Surplus (+) or deficit (-)
			Working expenses (a)	Interest and exchange	Debt redemp- tion		
METROPOLITAN(b)							
1966-67—							
Water . . .	303,513	35,749	15,830	14,281	5,630	35,741	+ 8
Sewerage . . .	203,469	25,566	12,088	9,556	3,920	25,564	+ 2
Drainage . . .	6,834	1,386	996	294	86	1,376	+ 9
Total, 1966-67.	513,816	62,701	28,914	24,132	9,635	62,681	+ 20
1965-66.	475,200	58,092	27,169	22,166	8,743	58,078	+ 14
1964-65.	440,941	54,890	26,846	20,166	7,861	54,873	+ 17
1963-64.	407,205	50,860	25,133	18,549	7,145	50,827	+ 33
1962-63.	375,776	44,191	20,970	16,838	6,355	44,162	+ 29
HUNTER DISTRICT(c)							
1966-67—							
Water . . .	58,875	5,301	2,291	2,350	546	5,187	+ 114
Sewerage . . .	19,590	2,484	1,403	864	211	2,478	+ 7
Drainage . . .	792	143	93	41	7	141	+ 2
Total, 1966-67.	79,257	7,928	3,786	3,254	765	7,805	+ 122
1965-66.	74,274	7,804	3,469	3,442	861	7,772	+ 32
1964-65.	69,778	6,508	3,099	2,808	701	6,607	- 99
1963-64.	65,254	6,205	2,890	2,653	648	6,191	+ 14
1962-63.	59,931	5,813	2,640	2,431	722	5,794	+ 19

(a) Includes provision for renewals, long service leave, etc. (b) County of Cumberland, City of Greater Wollongong, Shellharbour and Kiama Municipalities, and parts of Colo and Wollondilly Shires. (c) Newcastle-Maitland-Cessnock areas.

*Local government country water supply and sewerage systems.* At 31 December 1965, country water supply services were conducted or under construction by 48 municipalities, 88 shires and 5 county councils, and country sewerage services by 50 municipalities and 41 shires. The capital indebtedness of these schemes was \$87,619,000 at 31 December 1965, namely \$60,841,000 for water and \$26,777,000 for sewerage. Debt of the municipalities amounted to \$41,558,000, shires to \$34,626,000, and county councils to \$11,435,000. Government advances amounting to \$834,400 are included in these figures. Aggregate income and expenditure amounted to \$15,838,000 and \$12,308,000, respectively, in 1965.

*Other country water supply and sewerage systems.* The water supply and sewerage services for Broken Hill are operated by a statutory board, the Broken Hill Water Board. Its capital indebtedness at 31 December 1966 was \$6,345,000. In 1966, income (excluding subsidies, State Government \$191,000 and mining companies \$516,000) amounted to \$697,000 and expenditure (excluding debt redemption \$273,000) amounted to \$1,125,000. The Cobar Water Board was constituted in February 1964. At 31 December 1966 its capital indebtedness was \$2,447,000. The following country water supply systems—South-West Tablelands, Junee, and Fish River—are administered by the Department of Public Works. These supply water in bulk to municipalities and shires, the Electricity Commission of New South Wales, and other large consumers. Only a small quantity is sold direct to private consumers. The capital indebtedness of these systems was \$15,053,000 at 31 December 1966. The Mulwala Water Supply and Sewerage Service was constructed as an urgent war-time work for the Commonwealth, and the Bethungra Water Supply System is administered by the Department of Public Works in conjunction with the Junee supply.

## Victoria

*Melbourne and Metropolitan Board of Works.* The Board consists of a Chairman and fifty-two Commissioners elected to represent the municipalities which lie wholly or partly within the metropolitan area. The principal functions of the Board are: to control and manage the metropolitan water supply system; to provide the metropolitan area with an efficient main and general sewerage system; to deal with main drains and main drainage works; to control and manage the rivers, creeks and watercourses within the metropolitan area; and to carry out the functions of a permanent planning authority.

*Metropolitan water supply.* There are 6 storage reservoirs serving the metropolitan area—Yan Yean, 7,233 million gallons (available for consumption, 6,649 million gallons); Toorourrong, 60 million gallons; Maroondah, 6,289 million gallons (4,870 million gallons); O'Shannassy, 930 million gallons; Silvan, 8,853 million gallons (8,823 million gallons); and Upper Yarra, 45,400 million gallons (44,120 million gallons); total 68,765 million gallons (65,452 million gallons). Service reservoirs number 45, with a total capacity of 366 million gallons. The water rate levied by the Board in 1966–67 was 2.5 cents in the \$ on the net annual value of the properties served. The charge for water consumed in excess of the quantity which, at 20 cents per 1,000 gallons, would equal the assessed water rates on each property, was 20 cents per 1,000 gallons. The following table shows particulars of Melbourne metropolitan water supply services for the years 1962–63 to 1966–67.

MELBOURNE WATER SUPPLY: SERVICES, 1962-63 TO 1966-67

Year	Number of houses supplied	Estimated population supplied	Average daily consumption	Total consumption for the year	Average daily consumption		Length of aqueducts, etc. mains and reticulation	Number of meters
					Per house	Per head of estimated population		
		'000	mill gal	mill gal	gallons	gallons	miles	
1962–63	547,123	1,981	151.3	55,225	277	76.4	5,622	460,866
1963–64	572,431	2,072	162.9	59,621	285	78.6	5,882	485,856
1964–65	595,727	2,157	168.2	61,409	282	78.0	6,098	511,077
1965–66	612,844	2,218	178.7	65,218	292	80.5	6,280	536,093
1966–67	626,690	2,269	188.5	68,815	301	83.1	6,517	559,713

*Metropolitan sewerage and drainage.* Particulars of sewerage and drainage services for 1962–63 to 1966–67 are shown on the next page. The rate levied in 1966–67 for sewerage was 4.375 cents in the \$ on the net annual value of the property served. The drainage rate was 0.625 cents in the \$.

## MELBOURNE SEWERAGE AND DRAINAGE: SERVICES, 1962-63 TO 1966-67

Year	Number of houses for which sewers are provided	Estimated population for which sewers are provided	Average daily pumping	Total sewage pumped for the year	Average daily pumping		Length of sewers, etc.	Length of main drains
					Per house	Per head of estimated population		
		'000	mill gal	mill gal	gallons	gallons	miles	miles
1962-63	422,899	1,402	84.9	30,997	200.8	60.6	3,769	205
1963-64	443,291	1,446	89.7	32,833	202.4	62.0	3,932	211
1964-65	453,078	1,491	93.6	34,152	206.5	62.8	4,113	218
1965-66	467,705	1,599	94.6	34,545	202.4	59.2	4,311	229
1966-67	484,798	1,629	98.1	35,793	202.3	60.2	4,554	233

The metropolitan sewerage system consists of the main system (serving an area of 106,196 acres) and 6 subsidiary systems—the Sunshine system (serving an area of 3,138 acres), the Laverton system (serving an area of 290 acres), the Kew system (serving an area of 112 acres), the South-eastern system (serving an area of 4,145 acres in Cheltenham, Parkdale, Mentone, and Mordialloc), Watsonia system (serving an area of 188 acres), and the Maribyrnong system (serving an area of 182 acres). The Board of Works Farm, 26,809 acres in extent and situated about twenty-four miles south-west of Melbourne beyond the township Werribee, serves to purify and dispose of approximately ninety-eight per cent of the sewage flow of the metropolis before its discharge into Port Philip Bay. The total capital cost (less depreciation) of the farm to 30 June 1967 was \$10,311,898. Revenue during 1966-67 amounted to \$534,024, cost of sewage disposal to \$634,430, trading expenses to \$310,189, interest to \$555,997, and net cost of sewage purification to \$966,592. These financial particulars are included in the sewerage items of the summary below.

*Melbourne and Metropolitan Board of Works' finances.* The following table provides for the year 1965-66 a summary of the financial operations of the water supply, sewerage and drainage services conducted by the Melbourne and Metropolitan Board of Works, and of the combined services for the years 1962-63 to 1966-67.

**MELBOURNE AND METROPOLITAN BOARD OF WORKS: FINANCES**  
1962-63 TO 1966-67  
(\$'000)

Service, etc.	Capital cost of works and buildings at 30 June (a)	Revenue	Expenditure			Total	Surplus (+) or deficit (-)
			Working expenses	Interest and exchange	Debt redemption		
Water . . . .	153,983	14,559	4,659	7,945	..	12,604	+1,955
Sewerage . . . .	177,941	15,365	4,528	8,702	..	13,230	+2,135
Drainage . . . .	31,436	2,187	640	1,187	..	1,827	+360
General(b) . . . .	12,911	..	2,506	..	2,552	5,058	-5,058
<b>Total—1966-67</b> . . . .	<b>376,271</b>	<b>32,111</b>	<b>12,333</b>	<b>17,834</b>	<b>2,552</b>	<b>32,719</b>	<b>-608</b>
1965-66 . . . .	345,210	30,165	11,362	16,526	2,274	30,162	+3
1964-65 . . . .	314,972	25,307	9,308	14,856	1,960	26,124	-817
1963-64 . . . .	286,566	24,373	9,315	13,342	1,693	24,350	+23
1962-63 . . . .	258,428	23,429	10,068	11,840	1,494	23,403	+26

(a) Total loan indebtedness—1966-67, \$352,044,107.  
over services.

(b) Statutory and general expenditure not distributed

*State Rivers and Water Supply Commission.* Water supply and conservation throughout Victoria (except for the area controlled by the Melbourne and Metropolitan Board of Works) is under the jurisdiction of the State Rivers and Water Supply Commission. The events leading to the establishment of the Commission, and its works in the spheres of irrigation, domestic and stock water supply to farms, drainage, flood protection, and river improvements, are described in the chapter Water Conservation and Irrigation. This section is therefore confined to the Commission's functions in connection with urban water supply and sewerage.

*Extra-metropolitan water supply.* At 30 June 1967 the Commission provided a reticulated water supply from its own works to 144 cities and towns having a combined population of 210,000 persons. The principal systems operated by the Commission serve part of the Mornington Peninsula—Dandenong area (about 99,000 people supplied); Bendigo, Castlemaine, etc. (58,000); and about 8,400 people in the Western District. In addition, 13,000 persons in a number of towns in the Bellarine Peninsula receive supply through a Commission-operated distributory system from headworks controlled by the Geelong Waterworks and Sewerage Trust. The Bendigo-Castlemaine supply also provides for the irrigation of 11,000 acres as well as urban requirements in the area. Outside these areas the Commission supplies mainly small towns in the north of the State in areas where it also supplies farms with water for irrigation or domestic and stock purposes. Capital expenditure by the Commission on urban water supply at 30 June 1967 was divided between the several systems as follows: Mornington Peninsula, \$26,395,000; Bendigo-Castlemaine, \$13,705,000 (includes the cost of supplying a comparatively large rural system with water for irrigation, stock and domestic purposes); Bellarine Peninsula, \$3,165,000; Otway System (Western District), \$2,835,000; other, \$2,580,000; total, \$48,680,000. This expenditure is net of redemption payments and includes expenditure on Lake Eppalock and Tarago Reservoir not yet charged to the water users. In addition to the towns supplied by the Commission there are some 640,000 people in 238 cities and towns throughout the State who get a reticulated water supply from works operated by local authorities.

All these authorities operate under the supervision of the State Rivers and Water Supply Commission, largely because the Government subsidises their capital expenditure. Most new works are financed from Government loan funds, but the Geelong Trust and in recent years some other local authorities borrowed money privately. In most cases the local authority controls both headworks and distribution system, but several towns draw their water from the State Rivers and Water Supply Commission and are concerned only with reticulation of the water. Together, therefore, the Commission and local authorities supply 382 urban centres containing some 850,000 people. Very few towns of any importance are now without reticulated water supply. The following table presents the financial position in respect of Government loan funds expended on town water supply at 30 June 1967.

**TOWN WATER SUPPLY, VICTORIA: CAPITAL LIABILITY**  
30 JUNE 1967  
(\$'000)

	<i>Water supply provided by—</i>			<i>Total</i>
	<i>Local authorities</i>	<i>State Rivers and Water Supply Commission</i>		
Government advances . . .	56,700	49,200		105,900
Less redemption . . .	4,400	500		4,900
<b>Government advances outstanding . . .</b>	<b>52,300</b>	<b>48,700</b>		<b>101,000</b>
Borne by State . . .	10,500	22,400		32,900
Borne locally . . .	41,800	26,300		68,100

In addition, nearly \$19,000,000 has been borrowed locally, mainly by the Geelong Waterworks and Sewerage Trust.

The proportion of loan capital borne by the State is much higher in the case of Commission undertakings than for towns supplied by local authorities. This is because most Commission undertakings have been developmental in nature. Besides meeting interest on capital borne by it, the State pays the difference between three per cent and the actual rate paid on practically all the capital carried locally. The total annual subsidy on country town water supply is currently about \$2,800,000.

*Extra-metropolitan sewerage systems.* With the exception of the town of Eildon, whose sewerage system is controlled directly by the State Rivers and Water Supply Commission, the construction and management of sewerage works in Victoria's country cities and towns are the responsibility of local authorities supervised by the Commission. Except for the Geelong Waterworks and Sewerage Trust and the Latrobe Valley Water and Sewerage Board, which have special Acts dealing with their

activities, all sewerage authorities operate under the Sewerage Districts Act. At 30 June 1967 there were 62 cities and towns with sewerage systems in operation. These contained about 562,000 persons, nearly half the total number of residents outside the metropolitan area.

Expenditure on sewerage in Victorian country towns at 30 June 1967 was approximately \$66,500,000, of which some \$52,000,000 had been advanced by private lenders. The annual States subsidy on country sewerage in Victoria is currently about \$1,445,000, provided mainly in the form of subsidies on interest rates paid along the same lines as for town water supply. Comparatively little capital is borne directly by the State.

*Geelong Waterworks and Sewerage Trust.* The Geelong Waterworks and Sewerage Trust was constituted in 1908 and reconstituted under the *Geelong Waterworks and Sewerage Act* 1909. It was further reconstituted in September 1950 to include a government nominee (chairman). An amendment in 1966 reduced the number of commissioners from seven to six. The amount of loan money which may be raised is limited to \$24,000,000 for water supply undertakings and \$10,000,000 for sewerage undertakings. The population supplied is estimated by the Trust at 112,528 persons. This and other general information relates to 30 June 1967.

The *Geelong water supply scheme* comprises two systems for gathering and storing water, the water in both systems being brought over fifty miles to Geelong. There are 7 storage reservoirs and 11 service basins whose total storage capacity is 13,448 million gallons. The length of water mains and reticulation is 564.1 miles. The total expenditure on water supply to 30 June 1967 was \$16,968,372. General fund expenditure for 1966-67 comprised \$456,280 for working expenses and \$1,096,674 for interest, redemption and reserves, while revenue amounted to \$1,551,296. The sinking fund appropriations at June 1967 amounted to \$1,062,282. The replacement and contingencies reserve amounted to \$1,131,191. There is a water rate of 6 cents in the \$ (with minima of \$1 for vacant land and \$2 for tenements) on the net annual value of rateable properties.

The *Geelong sewerage scheme* consists of a main outfall sewer to the ocean and 326.2 miles of main and reticulation sewers. The sewerage area is 11,851 acres, and the number of buildings connected within the sewered areas is 27,689. The total expenditure on sewerage works to 30 June 1967 was \$11,008,149. The revenue in 1966-67 amounted to \$867,480, and the general fund expenditure comprised \$272,194 on working expenses and \$590,299 on interest, redemption, and reserves. Sinking fund appropriations at 30 June 1967 were \$576,470. Replacement and contingencies reserve amounted to \$1,185,147. A general rate, 5.5 cents in the \$, is levied on the net annual value of rateable properties.

Under the *Barwon River Improvement Act* 1939 a portion of the Barwon River is vested in the Geelong Waterworks and Sewerage Trust. General maintenance and improvement of the surrounding area is financed by the levying of an improvement rate of 0.25 cents in the \$ on the net annual value of all lands within the drainage area. The revenue for 1966-67 amounted to \$49,708.

*The Ballarat Water Commissioners and the Ballarat Sewerage Authority.* The body known as the Ballarat Water Commissioners was constituted on 1 July 1880 and the Ballarat Sewerage Authority on 30 November 1920. The members of the Water Commissioners constitute the Sewerage Authority. General and financial information given herein relates to the year ended 31 December 1967.

The *Ballarat water supply district* comprises an area of about 62 square miles, containing a population of about 62,000. The total storage capacity of the 7 reservoirs is 5,435 million gallons and the catchment area is 24,182 acres. The capital cost of construction of the waterworks was \$6,145,428 to 31 December 1967. The liabilities amounted to \$3,784,318 at 31 December 1967, including loans due to the Government totalling \$3,520,026. The revenue for the year 1967, including transfer from reserve funds, was \$612,218. Working expenses during 1967 amounted to \$265,088 and interest and other charges to \$360,813. A water rate of 3.2 cents in the \$ on the net annual valuation is levied, with a minimum charge of \$4 per annum on any rateable property; water by measure, 14 cents per 1,000 gallons.

The *Ballarat sewerage district* comprises the City of Ballarat, the Borough of Sebastopol, and parts of the Shires of Ballarat, Bungaree and Grenville. There are more than 204 miles of sewers. The capital cost of sewerage construction works to 31 December 1967 was \$5,012,519. Two hundred and eighty-two sewered areas had been declared as at 31 December 1967. Assessments in the sewerage district numbered 20,459, while those in sewered areas numbered 17,847. There were 15,557 buildings connected. The scheme is financed by debenture-issue loans from various financial institutions. The liabilities on account of loans secured for construction at 31 December 1967 amounted to \$4,209,484; redemption payments at that date totalled \$888,342. House connections financed by the Authority numbered 4,447. Revenue during 1967 amounted to \$477,320, and expenditure, which included \$210,072 for interest and redemption, was \$455,430. A sewerage rate of 4.2 cents in the \$ on the net annual valuation is levied, with a minimum charge of \$8 on any rateable property. The charge for trade wastes is 10 cents per 1,000 gallons.

*Latrobe Valley Water and Sewerage Board.* The Latrobe Valley Water and Sewerage Board was constituted on 1 July 1954. The Board consists of seven members, namely: two Government nominees (one of whom is Manager and also Board Chairman), three members elected by water supply, sewerage and river improvement authorities within the Latrobe Valley, and one representative each of the State Electricity Commission of Victoria and the Gas and Fuel Corporation of Victoria.

The Board is empowered to construct *water supply works within the Latrobe Valley*, but at present its main construction activities are confined to the central industrialised areas and the new township of Churchill. The total capital cost of construction of the waterworks was \$11,154,281 to 30 June 1967. Liabilities amounted to \$11,794,853, including loans due to the Government totalling \$11,146,609. Revenue for the year was \$730,689. Expenditure during 1966-67 amounted to \$602,536, including interest amounting to \$333,543. The Board does not strike a rate, but supplies consumers including local water supply authorities, by measure. The quantity supplied during the year ended 30 June 1967 was 11,249 million gallons.

The *Latrobe Valley sewerage system* consists of a main outfall sewer, about 52 miles in length, to convey wastes to an area where they are disposed of on land for agricultural purposes. Wastes conveyed consist mainly of industrial wastes, such as paper wastes and gasification wastes, together with small quantities of domestic sewage. The capital cost of the sewerage construction works to 30 June 1967 was \$6,381,340. Liabilities amounted to \$7,050,345, including loans due to the Government totalling \$5,836,750. Revenue in 1966-67 was \$303,394 and expenditure totalled \$393,732, including \$111,949 interest payments. No sewerage rate is levied, but a charge is made by measure for wastes both from industries and public authorities.

*Other sewerage authorities.* At 30 June 1967, 83 other sewerage authorities had been constituted under the provision of the Sewerage Districts Acts, and systems were in operation in 59 districts.

#### Queensland

*Brisbane City Council (to 30 June 1967).* This organisation conducts the water supply and sewerage systems of the City of Brisbane, and also supplies, in bulk, the whole of the water used by the City of Ipswich and a portion of that used by the City of Redcliffe and Albert Shire Council. Redcliffe supplements its supply from that of the Pine Rivers Shire Council, while Albert also draws on its own reservoirs.

Storage facilities for *Brisbane water supply* comprise the following (available capacities are shown in parentheses): Somerset Reservoir, 200,000 million gallons (67,500 million gallons); Lake Manchester, 5,800 million gallons (5,700 million gallons); Brisbane River, Mount Crosby Weir, 540 million gallons (500 million gallons); Pure Water Reservoir, Holt's Hill, 11 million gallons (11 million gallons); Enoggera Reservoir, 1,000 million gallons (600 million gallons); Gold Creek Reservoir, 407 million gallons (400 million gallons). There are 22 service reservoirs with a capacity of approximately 52 million gallons. The Somerset reservoir is a dual purpose project with a designed total holding capacity of 200,000 million gallons, 67,500 million gallons to be for water storage and 132,500 million gallons for flood mitigation. Water rating for the year ended 30 June 1967 was 1.25 cents in the \$ on the unimproved valuation of all rateable land, with a minimum charge of \$30 for the year for each assessment. The following table is a summary of operations of the complete Brisbane City Council system (Brisbane, Ipswich, Redcliffe, and portion of Albert Shire) for the years 1962-63 to 1966-67.

BRISBANE WATER SUPPLY(a): SERVICES, 1962-63 TO 1966-67

Year	Services connected	Estimated population supplied	Average daily consumption	Total consumption for the year	Average daily consumption		Length of trunk and reticulation mains
					Per service	Per head of estimated population	
			mill gal	mill gal	gallons	gallons	miles
1962-63	182,804	665,479	48.3	17,644	264	72.6	2,378
1963-64	188,032	685,223	51.2	18,696	272	74.8	2,410
1964-65	193,471	703,258	61.4	22,409	317	87.3	2,564
1965-66	197,707	722,970	67.6	24,668	342	93.5	2,666
1966-67	202,886	740,332	66.1	24,110	326	89.2	2,735

(a) Includes Ipswich, Redcliffe and portion of Albert Shire.

The sewage treatment works of the *Brisbane sewerage scheme* is situated at Luggage Point at the entrance to the Brisbane River. Sewerage rating for the year ended 30 June 1967 was 1.4 cents in the \$ on the unimproved valuation of each portion of land, with a minimum charge of \$30 for the year. The following table is a summary of operations of the Brisbane sewerage scheme for the years 1962-63 to 1966-67.

BRISBANE SEWERAGE: SERVICES, 1962-63 TO 1966-67

Year	Premises connected	Estimated population served	Total sewage pumped for the year	Length of main, branch, reticulation, etc. sewers
			mill gal	miles
1962-63 . .	71,754	265,490	6,851	944
1963-64 . .	75,964	281,067	7,211	1,042
1964-65 . .	84,390	312,243	7,190	1,222
1965-66 . .	90,940	336,478	8,821	1,341
1966-67 . .	102,062	377,629	9,042	1,472

*Brisbane City Council water supply and sewerage systems—finances.* The following table shows particulars of the finances of the water supply and sewerage undertakings of the Brisbane City Council for the years 1962-63 to 1966-67.

BRISBANE WATER SUPPLY AND SEWERAGE: FINANCES, 1962-63 TO 1966-67  
(\$'000)

Service and year	Gross capital cost to 30 June	Revenue	Expenditure		Total (a)	Surplus (+) or deficit (-)
			Working expenses	Interest, redemption, etc. charges		
Water supply—						
1962-63 . .	43,059	5,650	2,334	2,168	5,218	+ 432
1963-64 . .	46,175	5,989	2,492	2,330	5,318	+ 670
1964-65 . .	49,768	7,030	2,827	2,436	5,889	+ 1,141
1965-66 . .	54,635	8,365	3,069	2,503	8,471	- 106
1966-67 . .	59,947	8,977	3,414	2,630	8,803	+ 174
Sewerage—						
1962-63 . .	39,854	2,525	592	1,304	2,336	+ 189
1963-64 . .	45,439	2,763	651	1,550	2,571	+ 192
1964-65 . .	50,184	3,664	803	1,705	3,434	+ 230
1965-66 . .	55,858	4,829	882	1,829	4,172	+ 657
1966-67 . .	61,517	5,535	1,024	1,966	4,709	+ 826

(a) Total, including other expenditure.

*Country towns.* In addition to the City of Brisbane, there were at 30 June 1966, 207 cities and towns in Queensland provided with water supply systems controlled by municipal and shire councils. At 30 June 1966 there were 48 cities or towns in addition to Brisbane with sewerage systems. The receipts (other than loan and loan subsidy) of water undertakings controlled by the cities and towns referred to above amounted to \$7,443,172 in 1965-66. Expenditure amounted to \$7,829,064, including \$3,244,018 for debt charges. In addition, expenditure from loans and loan subsidy amounted to \$7,484,866. Finances of sewerage undertakings are incorporated in council general funds and are not available separately.

#### South Australia

The water supply and sewerage systems in this State were constructed mainly, and are maintained, by the Engineering and Water Supply Department, under the control of the Minister of Works. Works controlled by the Department are the Adelaide, Barossa, Beetaloo, Bundaleer, Moorook, Tod River, Warren, Yorke Peninsula, and other country water districts systems, the Morgan-Whyalla water supply system, the metropolitan and country sewerage systems, the

Metropolitan Flood Waters Scheme, and works on the River Murray constructed under the River Murray Waters Agreement. Several water supply schemes on the Murray River are operated by the Department of Lands in conjunction with its irrigation works, and supplies to Woomera and Leigh Creek coalfield are controlled by the operating authorities. The following tables show particulars of metropolitan and country waterworks combined.

**WATERWORKS, SOUTH AUSTRALIA: SERVICES, 1962-63 TO 1966-67**

Year	Assessments(a)		Area of districts supplied (a)	Capacity of reservoirs, tanks, etc.	Length of mains	Number of meters
	Number	Annual value				
		\$'000	'000 acres	mill gal	miles	
1962-63 . . . . .	357,342	92,737	13,287	45,062	9,996	262,571
1963-64 . . . . .	365,579	104,159	13,373	45,173	10,469	278,183
1964-65 . . . . .	376,425	109,651	13,524	45,179	10,748	292,212
1965-66 . . . . .	390,045	127,599	13,849	45,189	11,091	303,288
1966-67 . . . . .	404,013	137,002	13,887	45,193	11,287	312,535

(a) Excludes Morgan-Whyalla Water Supply—water sold by measure.

**WATERWORKS, SOUTH AUSTRALIA: FINANCES, 1962-63 TO 1966-67**  
(\\$'000)

Year	Invested capital at 30 June (a)	Revenue	Expenditure			
			Working expenses (b)	Interest	Total	Deficit
1962-63 . . . . .	161,817	9,903	7,975	6,395	14,370	4,467
1963-64 . . . . .	172,583	11,103	7,752	6,960	14,711	3,608
1964-65 . . . . .	189,205	11,955	8,475	7,694	16,169	4,214
1965-66 . . . . .	201,828	13,393	9,845	8,376	18,221	4,828
1966-67 . . . . .	213,768	15,674	9,959	8,937	18,896	3,222

(a) After deduction of depreciation. (b) Includes debt redemption.

*Adelaide waterworks.* At 30 June 1967 the Adelaide waterworks supplied districts covering 375 square miles of the metropolis and extending to near country areas. The capacity of reservoirs and storage tanks was 36,531 million gallons and there were 3,383 miles of metropolitan mains. Water is also drawn from the 11,300 million gallon reservoir at South Para in the Barossa Water District. The Mannum-Adelaide pipeline conveys water from the River Murray to Adelaide at a rate of up to 66 million gallons a day. Water is delivered to a terminal storage near Adelaide and hence to the metropolitan distribution system or alternatively it can be delivered into metropolitan reservoirs on the River Torrens or to reservoirs on the River Onkaparinga by further pumping. The pipeline supplements the Warren system and other country areas.

**ADELAIDE WATERWORKS: FINANCES, 1962-63 TO 1966-67**  
(\\$'000)

Year	Invested capital at 30 June (a)	Revenue	Expenditure				Surplus (+) or deficit (-)
			Working expenses (b)	Interest	Total		
1962-63 . . . . .	83,461	6,874	4,143	3,380	7,522	-	649
1963-64 . . . . .	86,692	7,796	3,861	3,610	7,471	+	326
1964-65 . . . . .	92,872	8,417	4,222	3,907	8,129	+	289
1965-66 . . . . .	98,056	9,521	5,292	4,248	9,540	-	19
1966-67 . . . . .	104,067	11,083	5,142	4,500	9,642	+	1,441

(a) After deduction of depreciation. (b) Includes debt redemption.



*Adelaide metropolitan sewerage system.* The Adelaide metropolitan sewerage system, comprising the Adelaide, Glenelg, Port Adelaide, Christies Beach, and Salisbury-Elizabeth areas of 184 square miles in all, includes treatment works at Glenelg, Port Adelaide, Bolivar, and Christies Beach. Financial and other particulars for 1962-63 to 1966-67 are shown hereunder.

**ADELAIDE METROPOLITAN SEWERAGE: SUMMARY, 1962-63 TO 1966-67**

Year	Length of sewers	Number of con- nections	Invested capital at 30 June (a)	Expenditure				
				Revenue	Working expenses (b)	Interest	Total	Surplus
	miles		\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
1962-63 . . .	1,714	186,143	33,510	4,689	2,002	1,151	3,153	1,536
1963-64 . . .	1,774	194,889	38,996	5,239	2,201	1,265	3,466	1,774
1964-65 . . .	1,854	204,128	47,127	5,513	2,363	1,380	3,743	1,769
1965-66 . . .	1,952	213,375	56,235	6,386	2,614	1,561	4,175	2,211
1966-67 . . .	2,039	220,799	66,158	6,804	2,880	2,195	5,075	1,729

(a) After deduction of depreciation.

(b) Includes debt redemption.

*Country sewerage schemes.* Sewerage schemes are operating at Port Lincoln, Naracoorte, Mount Gambier, Lobethal, Gumeracha, Nangwarry, Mount Burr, Myponga, and Angaston. At Port Lincoln and Mount Gambier the sewers discharge to ocean outfalls, and treatment works are used on the other systems. There are 181 miles of sewers and 7,814 connections in the country systems. A sewerage scheme for Whyalla is under construction and operating in part.

*Country water supply.* Water districts systems at 30 June 1967 comprised an area of 13,600,558 acres. Supply came from reservoirs having a total capacity of 20,959 million gallons, from the River Murray, and from underground sources. Apart from local supplies, water from the River Murray comes from branches of the Mannum-Adelaide main and from the Morgan-Whyalla main. The principal areas of underground supplies are in the south-east of the State, where water from the Murray Basin can be had at moderate depths or from lakes, and from sand beds on Eyre Peninsula. In the year 1966-67 supplies made to Mount Gambier, Naracoorte and other towns amounted to 1,163 million gallons, and the Uley-Wanilla, Lincoln and Poldas Basins contributed 763 million gallons to the Tod River Water District.

**COUNTRY WATERWORKS, SOUTH AUSTRALIA: FINANCES, 1962-63 TO 1966-67**  
(\$'000)

Year	Invested capital at 30 June (a)	Revenue	Expenditure			
			Working expenses (b)	Interest	Total	Deficit
1962-63 . . .	78,356	3,030	3,833	3,015	6,848	3,818
1963-64 . . .	85,892	3,307	3,891	3,350	7,241	3,934
1964-65 . . .	96,333	3,538	4,253	3,787	8,040	4,502
1965-66 . . .	103,772	3,872	4,553	4,128	8,681	4,809
1966-67 . . .	109,701	4,591	4,817	4,437	9,254	4,663

(a) After deduction of depreciation.

(b) Includes debt redemption.

*Morgan-Whyalla water supply scheme.* This scheme, which has 223 miles of main via Port Augusta and 176 miles of main via the Spencer Gulf undersea crossing, was officially opened on 31 March 1944, the capital invested to 30 June 1967 being \$31,619,615. Particulars of the scheme, where applicable, are included in the tables of the combined waterworks, page 837. Apart from supplying Whyalla, the mains have been used to allow expansion of reservoir supplies in the northern agricultural area of the State, and to meet new demands caused by industrial growth at Whyalla. During 1966-67 water used from the scheme amounted to 4,977 million gallons.

#### Western Australia

The principal water supply systems of Western Australia are under the control of two State authorities, the Metropolitan Water Supply, Sewerage and Drainage Board and the Department of Public Works and Water Supply. The Metropolitan Water Supply, Sewerage and Drainage

Board is constituted under the provisions of the *Metropolitan Water Supply, Sewerage, and Drainage Act* 1909-1965 and consists of seven members appointed by the Governor. The area which constitutes the territory administered by the Board encompasses approximately 1,270 square miles and extends from Perth southward to Rockingham and Serpentine, northward to Sorrento, and eastward to Greenmount and Kalamunda. The Department of Public Works and Water Supply controls the Goldfields and Agricultural Water Supply and the Great Southern Towns Water Supply as well as ninety-one local water supplies (*see also* the chapter Water Conservation and Irrigation). Five independent town schemes are controlled by local Water Boards in country areas, and individual water supplies serve railways, timber mill towns, isolated mines, pastoral properties, stock routes, and agricultural areas, mainly from dams, tanks, wells and bores.

*Metropolitan water supply, sewerage and drainage.* The sources of the metropolitan water supply are Serpentine Reservoir and Serpentine Pipehead Reservoir, Canning Reservoir, Wungong Brook Diversion Weir, Churchman Brook Reservoir, and Victoria Reservoir. The largest of these sources are the Serpentine Reservoir and the Canning Reservoir. Serpentine Reservoir is constructed of rolled earth fill, and the embankment rises 171 feet above the stream bed, the length at the crest being 1,390 feet. Its capacity is 39,000 million gallons, and the area of the catchment is 245 square miles. Canning Reservoir, with an estimated catchment area of 302 square miles, has a storage capacity of 20,550 million gallons retained by a concrete wall 218 feet high and 1,534 feet long at the crest. Water from storages on the Darling Range is conveyed to service reservoirs to serve the City of Perth and the metropolitan area. A limited quantity of water is drawn from Mundaring Weir to serve the Kalamunda area and sections of Greenmount, and to meet the peak demands of summer consumption supplies are supplemented from artesian bores, which can provide a daily maximum of 15 million gallons. The amount of bore water used is rarely more than 10 per cent of the metropolitan consumption and is usually considerably less.

The following table shows particulars of the *metropolitan water supply services* for 1962-63 to 1966-67.

**METROPOLITAN WATER SUPPLY, WESTERN AUSTRALIA: SERVICES  
1962-63 TO 1966-67**

Year	Number of services (a)	Average daily consumption mill gal	Total consumption for year mill gal	Average daily consumption per service (b) gallons	Length of mains miles	Number of meters
1962-63 . . .	142,246	47.1	17,214	336	2,278	123,364
1963-64 . . .	149,033	53.2	19,454	362	2,411	130,480
1964-65 . . .	154,051	55.7	20,339	367	2,526	135,471
1965-66 . . .	158,675	59.5	21,707	375	2,654	139,435
1966-67 . . .	164,782	70.8	25,843	430	2,798	146,028

(a) Figures relate to 30 June. (b) Calculated from averages for the year.

Water rating for 1966-67 was 5 cents in the \$ on annual valuation on land used for residential purposes and 7.5 cents in the \$ on annual valuation on land not so used.

Some particulars of the *metropolitan sewerage and main drainage services* for 1962-63 to 1966-67 are shown in the following table.

**METROPOLITAN SEWERAGE AND MAIN DRAINAGE  
WESTERN AUSTRALIA: SERVICES  
1962-63 TO 1966-67**

Year	Services	Length of sewers miles	Length of main drains miles
1962-63 . . . . .	68,223	751	81
1963-64 . . . . .	68,958	769	94
1964-65 . . . . .	69,553	777	100
1965-66 . . . . .	70,283	816	102
1966-67 . . . . .	71,188	848	109

Sewerage rating for 1966-67 was 8.75 cents in the \$ on annual valuation, while metropolitan main drainage rating was 2.25 cents in the \$.

*Metropolitan Water Supply, Sewerage and Drainage Board—finances.* The following table shows particulars of the finances of the Western Australian Metropolitan Water Supply, Sewerage and Drainage Board.

**METROPOLITAN WATER SUPPLY, SEWERAGE AND MAIN DRAINAGE**  
**WESTERN AUSTRALIA: FINANCES, 1962-63 TO 1966-67**  
 (\$'000)

Service and year	Capital cost to 30 June	Revenue	Expenditure		Total	Surplus (+) or deficit (-)
			Working expenses	Interest and debt redemption		
Water supply—						
1962-63 . . .	48,489	3,705	1,505	2,175	3,680	+ 25
1963-64 . . .	51,482	4,175	1,583	2,502	4,084	+ 91
1964-65 . . .	54,334	4,370	1,653	2,641	4,294	+ 76
1965-66 . . .	58,336	4,861	1,815	3,018	4,833	+ 28
1966-67 . . .	62,137	5,551	2,307	3,061	5,368	+ 183
Sewerage—						
1962-63 . . .	18,119	2,261	1,102	1,019	2,120	+ 141
1963-64 . . .	19,851	2,323	1,214	1,015	2,229	+ 93
1964-65 . . .	22,050	2,426	1,272	1,053	2,325	+ 101
1965-66 . . .	24,243	2,823	1,336	1,176	2,512	+ 310
1966-67 . . .	26,737	3,000	1,622	1,340	2,961	+ 38
Main drainage—						
1962-63 . . .	4,383	296	151	200	351	- 54
1963-64 . . .	4,998	310	153	217	370	- 60
1964-65 . . .	5,641	342	191	238	429	- 87
1965-66 . . .	6,344	418	245	275	520	- 102
1966-67 . . .	6,956	629	298	319	617	+ 12

*Country water supplies.* Information concerning country water supplies is included in the chapter Water Conservation and Irrigation.

#### Tasmania

*Waterworks.* At the end of 1966-67 there were 104 municipally operated waterworks in Tasmania. The capacity of the reservoirs was approximately 2,903 million gallons, the estimated population served was 322,000, and the number of properties served was approximately 103,000. The North Esk Regional Water Supply Scheme is operated by the Rivers and Water Supply Commission as a State concern, supplying bulk water to the municipalities of St Leonards, George Town, Lilydale, and portion of Westbury. This scheme also supplies water to industries situated near the Tamar River. Also vested in the Commission is the West Tamar Water Supply Scheme which serves the Municipality of Beaconsfield, and is operated by the Beaconsfield Council as the agent of the Commission. The over-all control of water supply in the greater Hobart area, comprising the municipalities of Hobart, Clarence, Glenorchy, and Kingborough, is vested in the Metropolitan Water Board, but the municipalities retain primary responsibility for reticulation. The Board has constructed a large bulk supply at Bryn Estyn, near New Norfolk, which supplies bulk water from the Derwent River to the metropolitan area and has a pipeline capacity of 20 million gallons a day. In addition, the Board also controls the Southern Regional Water Supply Scheme, which supplies water to Hobart's eastern shore. In addition to supplying the metropolitan area, the Board extended its service to supply the towns of Cambridge, Midway Point, Sorell, and Seven Mile Beach, and it is planned to take it to the towns of Rokeby, Lauderdale, Margate, Snug, and Howden in due course. The Board has at present under construction a storage at Risdon Brook with a capacity of 800 million gallons and estimated to cost \$2½ million. This work is expected to be completed during 1967-68.\*

*Sewerage.* At the end of 1966-67 there were 27 municipal sewerage schemes in operation in Tasmania. They served an estimated population of 218,000 and the number of tenements served was approximately 67,300.

\* Completed February 1968.

### Northern Territory

Information relating to water supply in the Northern Territory may be found in the chapter Water Conservation and Irrigation.

### Australian Capital Territory

The water supply, sewerage and drainage systems in the Australian Capital Territory are under the control of the Commonwealth Department of Works. The sources of the water supply are: Cotter Dam (capacity 967 million gallons) and Bendora Dam (2,360 million gallons). Nine pumps are capable of pumping approximately 35.6 million gallons daily to 17 major reservoirs. The total population served in the Australian Capital Territory, which during 1966-67 consumed 5,156.4 million gallons of water, was 103,100 (at 30 June 1967). In addition, the Canberra water supply system supplied 405.7 million gallons of water to Queanbeyan, New South Wales. The total number of water meters at 30 June 1967 was 25,557 and the total length of water lines was 475.5 miles. The sewerage system for Canberra and suburbs consists of a treatment works, 399.7 miles of sewerage reticulation, and 6½ miles of rising mains (at 30 June 1967). There were also 421.2 miles of stormwater drains.

## Harbour boards and trusts

The number and net tonnage of vessels which entered the major ports in each State during the years 1965-66 and 1966-67 are shown in Chapter 12, Transport, Communication and Travel (*see* page 398). Particulars of overseas and interstate cargo discharged and shipped are shown on page 400 of the same chapter.

### New South Wales

*Maritime Services Board of New South Wales.* The Maritime Services Board of New South Wales is a corporate body of seven commissioners comprising three full-time members and four part-time members representing shipping and other maritime interests. The Board was constituted on 1 February 1936, under the Maritime Services Act, 1935, to co-ordinate the port and navigation services of the State, which had previously been administered by the Sydney Harbour Trust and by the State Department of Navigation. The Board exercises general control over intra-state shipping, including the survey and certification of vessels, the licensing of harbour craft, and the examination and issue of certificates to officers. It is responsible for the provision of pilotage services, lights, beacons, buoys, and other port facilities, imposes and collects rates and charges on goods and vessels, and is vested with the general control and management of the navigable waters and ports within the State. At the ports of Sydney, Newcastle and Botany Bay the Board is also responsible for the provision of adequate wharfage and channels and carries out all construction, maintenance and dredging work. All revenue earned by the Board at the ports of Sydney, Newcastle and Botany Bay, with the exception of that earned from pilotage and navigational services, is credited to the Maritime Services Board Fund, and all revenue expenditure incurred at the three ports is drawn from that fund. The following table shows particulars of the finances of the Board in respect of the ports of Sydney, Newcastle and Botany Bay.

MARITIME SERVICES BOARD FUND: FINANCES OF THE PORTS OF SYDNEY,  
NEWCASTLE AND BOTANY BAY, 1962-63 TO 1966-67  
(\$'000)

Year	Revenue				Expenditure(a)			
	Wharfage and tranship- ment rates	Tonnage rates and berthing charges	Other charges	Total	Adminis- tration and main- tenance	Interest, debt redem- ption, exchange, etc.	Total	Surplus
1962-63	9,693	1,581	2,438	13,712	7,543	6,056	13,599	113
1963-64	10,838	1,755	2,933	15,526	7,864	7,567	15,431	95
1964-65	11,594	1,858	3,565	17,017	9,109	7,835	16,945	72
1965-66	10,711	1,832	3,980	16,523	9,512	6,916	16,428	95
1966-67	11,501	1,895	4,282	17,678	9,476	8,113	17,589	89

(a) Excludes capital expenditure but includes transfers to the Renewals Fund Reserve Account (\$3,091,000 in 1962-63, \$4,778,000 in 1963-64, \$5,080,000 in 1964-65, \$3,060,000 in 1965-66 and \$3,975,000 in 1966-67).

*Port of Sydney.* The entrance to Sydney Harbour, the principal port of New South Wales, is nearly a mile wide, and the depth of its navigable channel is not less than 80 feet. Between the entrance, known as 'The Heads', and the Harbour proper, a distance of four miles, there are two separate channels, each 700 feet wide, the Western Channel not less than 45 feet deep (low water ordinary spring tide) and the Eastern Channel 42 feet deep. The foreshores, which have been reduced by reclamations, are 152 miles in length, and the total area of the port is 13,600 acres, or 21 square miles, of which about one-half has a depth of 30 feet or more at low water ordinary spring tide. The mean range of tides is 3 feet 6 inches.

The wharves are situated close to the business centre of the city, about four or five miles from the Heads. At 30 June 1967 there were 5 dolphin berths 3,350 feet long, and 89 effective commercial cargo berths, with a total length of 43,652 feet, controlled by the Board. Accommodation for harbour craft amounts to 1,915 feet, while the length of other berths, including oil and private wharves, totals 23,050 feet. Depth of water at wharves is up to 36 feet. Special facilities for the storage and handling of products such as wheat, wool, coal, etc. are provided, and modern plant has been installed for replenishing ships' bunkers with oil or coal. Docking facilities are available for large vessels and the Captain Cook Graving Dock ranks among the largest graving docks in the world, being 1,139 feet by 147 feet 7½ inches with a depth of 45 feet 2 inches over the sill at high water. There are also several smaller dry docks and floating docks in the port.

*Port of Newcastle.* As from 1 May 1961 the Maritime Services Board of New South Wales became the single authority for the port of Newcastle. An Advisory Committee consisting of eight members, appointed by the Governor, assists the Board in matters associated with the operation of the port. It is primarily a coal-loading port, and the proximity to the coal fields has led to the establishment of important industries, including iron and steel works, in the district. Facilities are available for the shipment of wool, wheat and frozen meat, and a wharf is available for timber.

The area used by shipping is about 570 acres, excluding the entrance to the harbour and the inner basin, which together cover an area of 162 acres. The width of the harbour at the entrance is 1,200 feet, and the navigable channel, with a depth of 36 feet at low water, is 500 feet wide. Wharfage accommodation amounts to approximately 16,000 feet, including about 3,000 feet of privately owned wharfage. There are also two dolphin berths available for tie-up purposes. A floating dock of 15,000 tons capacity is available at the port and a coal loading plant capable of loading at the rate of 2,000 tons an hour is now operating. The bulk berth which recently became operative at Walsh Island is equipped with two grab unloaders each with a nominal capacity of 650 tons an hour.

*Botany Bay.* The Maritime Services Board of New South Wales is the administrative and controlling authority. The port is primarily a discharging centre for the oil refinery at Kurnell, near Sydney, and two berths are available as well as tanker mooring buoys. The entrance to the Bay is approximately one and a quarter miles wide, with a minimum depth of about 37 feet in the dredged swinging basin.

*Port Kembla.* As from 3 May 1948 the Maritime Services Board assumed the administration and navigational control of Port Kembla, which had previously been administered by the New South Wales Department of Public Works. This Department, however, continues to be the constructing authority in respect of works, dredging and maintenance. An Advisory Committee consisting of nine members, appointed by the Governor, has been formed to assist the Board in the operation of the port. It has an area of approximately 340 acres, with depths ranging from 20 to 50 feet (low water ordinary spring tide), and wharfage accommodation totalling 8,000 feet has been provided for large ocean-going vessels. No cargo sheds are available, as the nature of trade at the port does not call for the provision of sheltered storage accommodation at the berths. It is the port of the southern coalfields and for the expanding industrial area in and about Wollongong. The developmental programme for Port Kembla includes the construction of an inner harbour to provide wharfage for the steelworks in addition to modern general cargo berths. The first stage has been completed and a coal loading plant capable of loading at the rate of 2,000 tons an hour is now available. Present accommodation is 2,140 feet of wharfage, with 36 feet (low water ordinary spring tide) of water alongside. Width in the entrance to the inner harbour basin is 400 feet.

*Other ports.* In addition to the ports of Sydney, Newcastle, Port Kembla, and Botany Bay, the Board controls 29 outports along the coastline of 609 miles. The shipping trade of these outports is relatively small.

*Port charges.* The port charges payable in respect of shipping and ships' cargoes in New South Wales are imposed by the Commonwealth Government in terms of the Lighthouses Act and the Navigation Act, and by the State authorities under the Navigation Act of New South Wales, the Harbour and Tonnage Rates Act, and the Sydney Harbour Trust Act. Since 1 February 1936 the State enactments have been administered by the Maritime Services Board. The gross collections

by the State authorities amounted to \$24,615,000 in 1966-67. This figure includes the revenue for the ports of Sydney, Newcastle and Botany Bay (see table on page 841) and State navigation service collections, \$6,938,000 in 1966-67.

### Victoria

*Melbourne Harbor Trust.* Information regarding the origin and constitution of this Trust, which controls the port of Melbourne, appears in Official Year Book No. 12, pages 970-2. The port of Melbourne comes under the control of the Melbourne Harbor Trust Commissioners, an independent autonomous statutory organisation, with a full-time chairman and five part-time commissioners with specialised knowledge of the requirements of exporters, primary producers, shipowners, importers, and of all aspects of port labour. The area of water and land under the control of the Trust is ten and a half square miles, with sheds available for cargo in transit totalling 22,928 feet in length and covering an area of about 43 acres. Three of the largest transit sheds on the Australian coast are in operation at Appleton Dock. The sheds are 600 feet long by 150 feet wide, each with a cargo stacking area of 81,000 square feet. The berths are used for conventional general cargo trade as well as the unit-load container handling for general cargo in the overseas trade. The total length of wharves, piers and jetties in the port is 61,550 feet, covering an area of about 59 acres with 56,940 feet of effective berthing space.

In line with world-wide changes in cargo handling methods, current planning and construction in the Port of Melbourne are almost exclusively devoted to facilities catering for container ships and cargo as well as for the multi-purpose unit-load container conventional ships and cargo. Three major projects were well advanced during 1967, including the Port's first overseas container terminal, Swanson Dock, where 1,050 ft of concrete wharf apron has been completed with 14 acres stacking area behind the berth to be ready for the first container ships from the United Kingdom calling early in 1969. Two roll-on roll-off container unit-load berths are also under construction, one at North Wharf for the trans-Tasman trade to New Zealand, having a 830 ft wharf apron and 3.3 acre stacking area behind the berth and a third berth at the River Entrance Docks, with a 590 ft wharf apron and additional 11.3 acre stacking area for the eastern seaboard trade. The depth of water (low water ordinary spring tide) from the main channels to the principal wharves is 31 to 39 feet. The following table shows particulars of the financial operations of the Trust.

MELBOURNE HARBOR TRUST: FINANCES, 1963 TO 1967  
(\$'000)

Year	Gross loan indebtedness at 31 December	Revenue		Expenditure			Total	Surplus (+) or deficit (-)
		Wharfage and tonnage rates	Total	Operation, administration and maintenance	Interest, debt redemption, exchange, etc.	General reserve, depreciation, renewals and insurance account		
1963 . .	29,835	5,459	8,969	5,391	1,918	1,546	8,855	+114
1964 . .	29,773	7,145	11,312	6,687	2,632	1,812	11,131	+181
1965 . .	30,473	7,058	11,434	6,451	2,393	2,382	11,226	+208
1966 . .	32,229	6,393	10,695	6,235	1,712	2,583	10,530	+165
1967 . .	34,484	6,692	11,322	6,441	2,142	2,567	11,150	+172

*Geelong Harbor Trust.* The Geelong Harbor Trust, constituted in 1905, is under the control of three Commissioners appointed from time to time by the Governor-in-Council. At the end of 1967 there were 18 effective berths in the port, plus 2 berths at the Commonwealth Explosives Pier, Point Wilson, owned and operated by the Commonwealth. The construction of a modern dry bulk berth with an initial discharge rate of 1,000 tons an hour commenced in 1967, but the 4 seven and a half ton cranes to operate on this berth have in the meantime commenced to operate on the adjacent Kings Wharf. The Trust operates its own towage fleet of seven tugs, the largest of 1,900 b.h.p. Eight berths have a depth of 36 feet at low water; all other berths (except Commonwealth Explosives Pier,

Point Wilson and Point Henry Pier, 30 feet) have a depth of 32 feet at low water. Revenue for the year 1966 was \$3,439,550, and expenditure from revenue totalled \$2,131,547. At 31 December 1966 the value of the Trust's fixed assets was \$23,119,594 and loans outstanding amounted to \$7,527,663.

*Portland Harbor Trust.* Portland provides unimpeded access for large ocean-going vessels right to the entrance of the 250-acre harbour basin. A Board of three commissioners controlling the port is a corporate body appointed on a part-time basis and nominated to represent interests concerned with port operating activities.

Construction of an all-weather deep sea port at Portland with a low water depth of 36 feet was completed to operational standards during 1960. A new oil tanker berth was commissioned during 1963 and the completion of a 1.25 million bushel bulk grain terminal in 1965 provides in-transit storage for grain awaiting overseas shipment.

Main construction work carried out during 1966-67 was concentrated on the development of a new bulk shipping berth and the reclamation of a 23-acre industrial site for the establishment of a \$7 million fertiliser complex. The majority of the new industrial site has been reclaimed by the Trust from the sea. The new bulk berth has been designed primarily to handle imports associated with the manufacture of fertiliser.

Operating revenue for the year ended 30 June 1967 was \$531,730 and revenue expenditure was \$329,692. The value of the Trust's fixed assets, less depreciation, was \$17,559,554 at 30 June 1967, and loans and advances outstanding amounted to \$18,021,806.

### Queensland

The ports of Queensland, except Brisbane and certain minor ports, are administered by harbour boards with members representing the towns and districts served by the ports. Brisbane and the minor ports are controlled by the State Treasury through the Department of Harbours and Marine, which supervises the engineering activities of the other ports.

*Brisbane.* Brisbane, in its dredged and improved river, accommodates comfortably the largest vessels in the Australian trade. The main centres for shipping, although further downstream than formerly because of the increasing size of vessels, are still within easy access of the city. Adequate dry-docking facilities are available. The finances of Brisbane Harbour for the years 1961-62 to 1965-66 are shown below.

BRISBANE HARBOUR: FINANCES, 1961-62 TO 1965-66  
(\$'000)

Year	Loan indebtedness at 30 June	Receipts		Payments	
		Harbour dues	Total	Working expenses (a)	Total
1961-62 . .	5,431	1,485	2,168	1,256	1,698
1962-63 . .	5,296	1,640	2,514	1,774	2,146
1963-64 . .	5,032	1,859	2,500	3,346	3,837
1964-65 . .	4,912	2,125	2,796	2,305	2,646
1965-66 . .	4,787	2,094	3,121	2,157	2,498

(a) Excludes interest and redemption included in total.

In addition to Brisbane harbour, the Department of Harbours and Marine also controls the Brisbane Dry Dock, the Cairncross Dock, and 10 smaller harbours not administered by harbour boards.

*Harbour boards.* Harbour boards control the ports of Bowen, Bundaberg, Cairns, Gladstone, Mackay, Rockhampton, and Townsville. Finances for each port for the year ended 30 June 1966 are shown on page 845, together with a summary for the years ended 30 June 1962 to 1966.

**HARBOUR BOARDS, QUEENSLAND: FINANCES, 1961-62 TO 1965-66**  
(\$'000)

<i>Harbour board</i>	<i>Loan indebtedness at 30 June</i>	<i>Revenue</i>		<i>Expenditure (excluding loan)</i>		<i>Surplus (+) or deficit (-)</i>
		<i>Wharfage and harbour dues</i>	<i>Total</i>	<i>Working expenses</i>	<i>Total including interest and redemption (a)</i>	
Bowen . . .	534	15	27	23	33	- 6
Bundaberg . . .	6,296	373	1,831	235	1,999	- 168
Cairns . . .	7,033	525	1,173	399	1,126	+ 47
Gladstone . . .	6,259	355	3,141	151	2,806	+ 335
Mackay . . .	4,158	466	1,371	510	1,246	+ 125
Rockhampton . . .	2,758	67	114	45	124	- 10
Townsville . . .	8,399	723	1,205	427	1,755	- 550
<b>Total, 1965-66 .</b>	<b>35,436</b>	<b>2,524</b>	<b>8,862</b>	<b>1,792</b>	<b>9,088</b>	<b>- 226</b>
1964-65 .	33,824	2,412	6,337	1,398	6,169	+ 168
1963-64 .	28,369	2,329	5,419	1,362	5,402	+ 17
1962-63 .	22,619	2,179	4,119	1,203	3,731	+ 388
1961-62 .	19,682	1,883	3,571	997	3,248	+ 322

(a) Includes expenditure on capital works from accumulated revenue.

### South Australia

*Department of Marine and Harbours.* All South Australian harbours are controlled by the Department of Marine and Harbours, which is responsible to the Minister of Marine for the discharge of its duties and functions. The most important ports are the 5 deep-sea ports of Port Adelaide, Port Pirie, Wallaroo, Port Lincoln, and Thevenard. In South Australia there are also 8 privately-owned and operated ports. The principal of these are Whyalla, Ardrossan, Rapid Bay, and Proper Bay (Broken Hill Pty Co. Ltd), Port Augusta (Commonwealth Railways) and Port Stanvac (Petroleum Refineries (Aust.) Pty Ltd). Maximum depths of water (low water) at the wharves of the main ports range from 27 feet at Port Pirie to 35 feet at Port Adelaide. The following table shows the finances of the Department for 1962-63 to 1966-67.

**DEPARTMENT OF MARINE AND HARBORS, SOUTH AUSTRALIA: FINANCES**  
**1962-63 TO 1966-67**  
(\$'000)

<i>Year</i>	<i>Capital at 30 June</i>	<i>Revenue</i>	<i>Expenditure from revenue</i>			<i>Surplus</i>
			<i>Working expenses</i>	<i>Interest</i>	<i>Total</i>	
1962-63 . . .	38,968	5,098	3,344	1,531	4,876	222
1963-64 . . .	40,996	6,114	3,591	1,581	5,172	942
1964-65 . . .	42,474	6,201	3,908	1,679	5,587	614
1965-66 . . .	44,316	6,194	3,941	1,734	5,675	519
1966-67 . . .	45,560	6,734	4,019	1,808	5,827	907

### Western Australia

*Fremantle Port Authority.* The Port of Fremantle is operated and controlled by the Fremantle Port Authority, a body corporate administered by a Board of five commissioners appointed triennially by the Governor. The port covers an extensive water area of some 180 square miles and comprises an inner and an outer harbour. The inner harbour includes 18 deep-water land-backed berths, providing more than 703,850 square feet of covered storage space and 11,148 feet of wharf berth accommodation. All inner harbour berths are dredged to a low water depth of 36 feet. The outer



harbour includes 3 main anchorages, Gage Roads, Owen Anchorage and Cockburn Sound. Deep-water jetties, including the oil refinery jetty in Cockburn Sound, are available in the outer harbour. Ocean-going deep draft ships enter the Sound by means of a channel dredged through Success and Parmelia Banks to a low water depth of 45 feet and a bottom width of 500 feet. In the outer harbour there are 3 tanker berths each with a low water depth of 44 feet at the Kwinana oil refinery, 1 berth at the nearby steelworks jetty with a low water depth of 36 feet, and 1 berth at the alumina works jetty with a low water depth of 40 feet. There is also a special berth for the handling of explosives. Gross earnings for 1966-67 amounted to \$8,045,470, working expenses to \$6,348,683, interest charges on loan capital \$788,834, sinking fund contributions \$212,757, and capital and other funds employed totalled \$19,065,460.

*Albany Harbour Board.* The Albany Harbour is controlled by a board of five members appointed by the Government. The depth of water in the entrance channel is 33 feet, at one arm of the jetty 31 feet and at the other arm 33 feet. In the approaches to wharf berths the depth is 33 feet. Berthing accommodation totals 3,615 feet, comprising 1,115 feet at the wharf berths and 2,500 feet at the Deepwater Jetty. Gross earnings for the year 1966-67 amounted to \$432,206, working expenses \$184,555, interest and sinking fund charges \$218,446, and capital account totalled \$3,828,070.

*Bunbury Harbour Board.* The Bunbury Harbour is controlled by a board of five members appointed by the Government. The depth of water in the harbour is 30 feet and berthing accommodation is 4,808 feet. Gross earnings for the year 1966-67 amounted to \$708,306, working expenses \$274,116, interest on loan capital \$291,693, and capital account totalled \$6,434,267.

*Other ports.* The following ports are controlled by the State Government Harbour and Light Department: Broome, Busselton, Carnarvon, Derby, Esperance, Geraldton, Onslow, Point Samson, Port Hedland, and Wyndham. Ports privately controlled comprise Yampi and Dampier, both operated by iron ore mining companies, and Exmouth, the port serving the communications installation at North West Cape. A private buoyed sea terminal is operated at Barrow Island for the shipment of crude oil, and private interests ship salt at Useless Loop in Shark Bay.

### Tasmania

There are 8 marine boards and 1 harbour trust in Tasmania. The marine boards control the ports of Hobart, Launceston, Stanley (Circular Head), Burnie and Wynyard (Table Cape), Devonport and Ulverstone, Strahan, Currie (King Island), and Whitemark (Flinders Island), and the harbour trust controls the port of Smithton. Hobart, Launceston, Burnie and Devonport are the principal ports in Tasmania. In addition to their interstate and intra-state traffic, there is also considerable overseas shipping. Depths of water at wharves vary, in general, between 16 and 40 feet.

#### MARINE BOARDS AND HARBOUR TRUST, TASMANIA: FINANCES 1964-65 TO 1966-67 (\$'000)

Authority	Loan indebtedness at 30 June (a)	Receipts (revenue account)		Expenditure (revenue account)		Surplus (+) or deficit (-)
		Wharfage charges	Total	Loan charges	Total	
Hobart . . . . .	2,559	861	1,610	294	1,352	+257
Launceston . . . . .	2,995	675	1,804	259	2,012	-208
Devonport . . . . .	4,734	559	863	396	773	+91
Burnie . . . . .	9,740	717	1,211	660	1,057	+153
Circular Head . . . . .	215	13	32	22	37	-5
King Island . . . . .	92	38	48	9	42	+6
Strahan . . . . .	25	32	41	4	41	..
Flinders Island . . . . .	2	15	18	1	17	..
Smithton . . . . .	..	..	1	..	2	..
<b>Total, 1966-67</b>	<b>20,361</b>	<b>2,910</b>	<b>5,628</b>	<b>1,646</b>	<b>5,333</b>	<b>+295</b>
1965-66	18,622	2,674	5,541	1,504	5,147	+394
1964-65	17,099	2,542	5,062	1,302	5,015	+47

(a) The total of new loans raised during 1966-67 was \$2,310,000, of which Hobart raised \$200,000, Launceston \$200,000, Devonport \$750,000, Burnie \$1,100,000, and Circular Head \$60,000.

## Fire brigades

### New South Wales

A Board of Fire Commissioners, consisting of five members, one appointed by the State Government (President) and one each representing insurance companies, local government authorities, volunteer firemen, and permanent firemen, operates under the Fire Brigades Act, 1909–1965, and 159 fire districts had been constituted at the end of 1966. The cost of maintenance of fire brigades is borne in proportions of local councils and the Government each one-eighth, and the insurance companies three-quarters. The Board's borrowing power is limited to \$2,000,000.

At 31 December 1966 the actual strength of the Fire Brigade throughout the fire districts of New South Wales was 443 officers and 1,300 permanent and 2,664 volunteer firemen. Corresponding figures for the Sydney Fire District were 364, 1,157 and 312. The revenue for the year 1966 was \$8,712,000, as follows; from the Government \$1,074,000; municipalities and shires, \$1,074,000; fire insurance companies and firms, \$6,446,000; and from other sources, \$116,000. The disbursements for the year were \$8,561,000. The Board of Fire Commissioners provides the fire protection services for Canberra, in the Australian Capital Territory, and the cost of these services is reimbursed by the Commonwealth Government.

Under the Bush Fires Act, 1949–1965 a Bush Fire Fighting Fund exists from which finance is provided for the prevention and fighting of bush fires. Contributions to the Fund by the Government, councils and insurance companies are in the proportion of one-quarter, one-quarter and one-half, respectively. At 30 June 1967 Volunteer Brigades equipped by means of this fund numbered 2,500 with an active membership of about 100,000 persons. The approved expenditure from the Fund for equipment, up to 30 June 1968, amounted to \$9,140,000.

### Victoria

In Victoria, fire brigades are controlled by the Metropolitan Fire Brigades Board consisting of ten members, including an employees' representative, and the Country Fire Authority consisting of eleven members.

*Metropolitan Fire Brigades Board.* The Metropolitan Fire Brigades Board receives contributions from the municipalities and the insurance companies in the proportion of one-third and two-thirds respectively. On 30 June 1967 the Board had under its control 45 stations, 1,124 permanent staff, 224 special service and clerical, etc. staff, and 12 part-time firemen. The total receipts for 1966–67 were \$6,066,301, comprising contributions \$5,202,000, receipts for services \$514,537, and interest and sundries \$349,764. The expenditure was \$6,153,060.

*Country Fire Authority.* This authority is responsible for the prevention and suppression of fires in the 'country area of Victoria', which embraces the whole of the State outside the Metropolitan Fire District, excluding State forests and certain Crown lands. The country area has been divided into twenty-five fire control regions, four of which (Ballarat, Bendigo, Geelong and the Dandenong, Chelsea and Frankston areas) are wholly urban and the remainder mixed urban and rural. The Country Fire Authority receives contributions in the proportion of two-thirds from insurance companies and one-third from the Treasury. At 30 June 1967 the Country Fire Authority Act applied to 192 insurance companies and 208 urban and 1,051 rural fire brigades. The effective registered strength of the brigades was 114,730 members. Income for the year 1966–67 amounted to \$2,580,753. Total expenditure other than loan amounted to \$2,344,496.

### Queensland

Fire districts are constituted under 'The Fire Brigades Acts, 1964 to 1966'. For each district, there must be a Fire Brigades Board consisting of seven members, and the cost of maintenance of each brigade is proportioned as follows: Treasury one-eighth, insurance companies three-quarters, and local authorities one-eighth. The insurance companies' contribution is paid to the State Government and thence to fire brigades.

At 30 June 1966 there were 84 Fire Brigade Boards. The number of stations was 167 and full-time staff numbered 984, including 48 administrative, 228 officers and 708 firemen. Volunteers numbered 89. Part-time staff numbered 1,222 including 84 administrative, 126 officers and 1,012 firemen. The total revenue for the year 1965–66 was \$3,939,353, received mainly from the following sources: Government \$535,068, local authorities \$535,068, insurance companies \$2,675,441. Loan receipts (Government and other) were \$403,837. The total expenditure for the year was \$4,056,339, the chief items being salaries and wages \$2,812,694, and interest and redemption of loans \$485,686.

### South Australia

The Fire Brigades Act, 1936–1958 provides for a board of five members, that the expenses and maintenance of brigades are defrayed in the proportion of two-ninths by the Treasury, five-ninths by insurance companies and two-ninths by the municipalities concerned, and that when the Treasury proportion exceeds its statutory contribution of approximately \$27,000, the excess is borne five-sevenths by insurance companies and two-sevenths by the municipalities. At 30 June 1967 there were altogether 36 fire brigade stations, of which 12 were metropolitan and 24 country.

The strength of the permanent staff at 30 June 1967 was 511, including 387 officers and men, 90 country auxiliary firemen and 34 other employees (including maintenance workers). The total revenue for the year 1966–67 was \$1,524,963, including contributions of \$1,291,320 made up as follows: insurance companies \$776,992, Treasury \$203,531 and municipalities \$310,797. The Treasury contribution includes a special grant of \$176,199.

### Western Australia

By the provisions of the *Fire Brigades Act, 1942–1966* certain local government areas are constituted fire districts under the control of the Western Australian Fire Brigades Board. There were 57 fire districts at 30 September 1967. The contribution to the Board is made in the proportion of 16 per cent from the Government, 20 per cent from local government authorities, and 64 per cent from insurance companies. The number of local government authorities and insurance companies who contributed numbered 74 and 166 respectively. The brigades throughout the State controlled by the Western Australian Fire Brigades Board at 30 September 1967 numbered 76, with a staff of 1,759 including 339 permanent officers and firemen and 1,420 volunteer brigade officers and firemen. The revenue for the year ended 30 September 1967 was \$1,881,752 and the expenditure \$1,877,001.

Under the *Bush Fires Act, 1954–1965* a Bush Fires Board, consisting of thirteen members, six of whom are nominated by the Country Shire Councils' Association, was set up to advise the Minister for Lands on bush fire control. The Act also provides for the registration of bush fire control officers, who numbered 2,141 at 30 June 1967, and the establishment of bush fire brigades, 903 at 30 June 1967. Many individual brigades are large organisations with numerous self-contained sections.

### Tasmania

The *Fire Brigades Act 1945* provided for the creation of the Fire Brigades Commission of Tasmania to co-ordinate the activities of existing fire brigade boards, while leaving the responsibility for individual control and management with the boards. The Commission consists of two persons nominated by the Minister, one person elected by the City or Municipal Councils' representatives and three persons elected by the insurance representatives of the Fire Brigades Boards. Contributions towards the cost of operations are on the basis of one-quarter each from the Treasury and the municipalities and one-half from the insurance companies concerned. The cost for the year 1966–67 amounted to \$631,905. There were, at 30 June 1967, 23 boards controlling 35 stations, and their aggregate staffs numbered 555 (officers and firemen), including 137 permanent firemen, 388 part-time firemen and 30 volunteers; the volunteers all operate under the Hobart Board in the forested and mountainous Fern Tree area.

## CHAPTER 21

### RURAL INDUSTRY

This chapter is divided into four major parts:

Introduction, dealing with the disposal of Crown lands, closer settlement and war service settlement and general rural activity in Australia;

Agricultural production;

Pastoral production; and

Other rural industries, which includes the dairying, poultry and bee industries.

For greater detail on the subjects dealt with in this chapter see the annual bulletins *Rural Industries*, *Value of Production*, and *Manufacturing Commodities* (regarding butter, cheese, etc., factories) issued by this Bureau. Current information on commodities produced is obtainable in the *Quarterly Summary of Australian Statistics*, *Monthly Review of Business Statistics*, *Monthly Bulletin of Production Statistics*, and *Digest of Current Economic Statistics* (monthly). The series of bulletins *Classification of Rural Holdings by Size and Type of Activity* (see page 853) shows particulars of rural holdings classified by size, nature and area of crops, and numbers of livestock, and also according to main type of activity. The mimeographed annual *Report on Food Production and the Apparent Consumption of Foodstuffs and Nutrients in Australia* contains details of the production and utilisation of foodstuffs. The following mimeographed publications also contain considerable detail on the particular subjects dealt with.

**General.** *Value of Production and Indexes of Price and Quantum of Farm Production* (annual), *Value of Primary Production (Preliminary Statement)* (annual), *Value of Primary Production (Preliminary Estimates)* (annual), *Farm Machinery on Rural Holdings* (annual), *Tractors on Rural Holdings, 31 March 1966* (detailed information, triennial), *New Tractors: Receipts, Sales and Stocks* (quarterly), and *New Agricultural Machinery* (quarterly).

**Agricultural production.** *Rural Land Use and Crop Production* (annual), *Agricultural Statistics (Preliminary Statement)* (annual), *The Wheat Industry* (two a year), *The Fruit Growing Industry* (annual), and *Fruit Statistics (Preliminary Statement)* (annual).

**Pastoral production.** *Livestock Statistics* (annual), *Livestock Numbers* (annual), *The Meat Industry* (monthly), *Wool Production* (annual), and *Wool Production and Utilisation* (annual).

**Other rural production.** *The Dairying Industry* (monthly and half-yearly), *Livestock Statistics* (annual), *Livestock Numbers* (annual), *Manufacturing Industries No. 20.—Bacon Curing and No. 21.—Butter, Cheese and Condensed, Concentrated, etc., Milk* (annual), *Production Summaries No. 36 —Preserved Milk Products* and *No. 55.—Butter and Cheese* (monthly), and *Bee-farming* (annual).

Detailed particulars of the early development of various aspects of Australian rural industry are given in previous issues of the Year Book up to No. 53 (see, for example No. 53, pages 885, 888, 891–2).

Throughout this chapter yearly periods for area and production of crops relate to years ended 31 March. Other periods in respect of e.g. factory and trade statistics relate to years ended 30 June.

### INTRODUCTION

#### Disposal of Crown lands

##### Land legislation and tenures

The following sections contain figures showing the extent of the different land tenures in the several States and Territories, classified under broad headings indicating the nature of the tenure, together with some general descriptive matter. Information in greater detail, descriptions of the land tenure systems of the several States and the internal Territories, and conspectuses of land legislation in force and of the systems of land tenure were provided in Year Book No. 48 and previous issues (see also Year Book No. 50, page 85 and List of Special Articles, etc. preceding General Index to this Volume).

**Free grants and reservations**

Provision exists in all States except Tasmania for the disposal of Crown lands for public purposes by free grants, and in all States for the temporary and or permanent reservation of Crown lands for public purposes. In the Northern Territory any Crown lands not subject to any right of, or contract for, purchase may be resumed for public purposes, and the whole or any portion of the lands resumed may be reserved for that purpose. In the Australian Capital Territory, under the *Seat of Government (Administration) Act* 1910, Crown lands may not be sold or disposed of for any estate in freehold except in pursuance of some contract entered into before the commencement of the Act.

**AREAS OF CROWN LANDS RESERVED: STATES AND TERRITORIES, 1963 TO 1967**

('000 acres)

Year	N.S.W. (a)	Vic. (b)	Qld (b)	S.A. (a)	W.A. (a)	Tas. (a)	N.T. (a)	Total (c)
1963 . .	15,958	8,801	25,053	22,754	74,353	3,994	59,663	210,576
1964 . .	15,931	8,847	25,234	22,764	76,450	4,098	60,903	214,227
1965 . .	15,943	8,861	25,451	22,802	78,088	4,116	60,903	216,164
1966 . .	15,937	8,874	25,662	22,878	78,226	4,191	60,922	216,690
1967 . .	15,875		27,240	22,878	80,491	4,274	60,974	

(a) At 30 June.

(b) At 31 December.

(c) Excludes the Australian Capital Territory.

The purposes for which areas were reserved are given hereunder for the latest years available as set out in the table above.

*New South Wales.* For travelling stock, 4,952,430 acres; forest reserves, 1,460,408 acres; water and camping reserves, 757,784 acres; mining reserves, 1,032,923 acres; recreation and parks, 767,127 acres; other reserves, 6,904,248 acres; total, 15,874,920 acres.

*Victoria.* For roads, 1,700,048 acres; water reserves, 314,145 acres; forest and timber reserves, 5,754,446 acres; mallee reserves, 410,000 acres; other reserves, 695,678 acres; total, 8,874,317 acres.

*Queensland.* For timber reserves, 1,912,799 acres; State forests and national parks, 9,171,211 acres; Aboriginal reserves, 6,642,371 acres; streets, surveyed roads and stock routes, 4,085,415 acres; general reserves, 5,427,928 acres; total, 27,239,724 acres.

*South Australia.* Total area of surveyed roads, railways and other reserves, 22,877,721 acres, including 18,833,822 acres set apart as Aboriginal reserves.

*Western Australia.* For State forests, 4,448,682 acres; timber reserves, 1,860,176 acres; other reserves 74,182,072 acres; total, 80,490,930 acres.

*Tasmania.* For forest reserves, 3,690,000 acres; national parks, 584,000 acres; total, 4,274,000 acres.

*Northern Territory.* For Aboriginal, defence and public requirements, 60,973,772 acres.

**Conditional and unconditional purchases of freehold**

Crown lands in the States may be disposed of by unconditional purchase at public auction or by certain other forms of purchase (for details see Year Book No. 48, pages 91-2). Conditional purchases of various types may also be made. In the Northern Territory only 0.1 per cent of the total area is alienated, the remainder being held under lease or licence, or reserved for various purposes or unoccupied. In the Australian Capital Territory about 14 per cent of the area is alienated or in process of alienation in consequence of contracts existing prior to the establishment of the Territory.

**Leases and licences**

Well over half the area of the States of New South Wales and South Australia and of the Northern Territory and more than four-fifths of that of Queensland are occupied under some form of lease or licence. In Victoria, only about one-tenth of the area is leased or licensed, more than half being alienated; in Western Australia, more than one-third is leased or licensed, most of the remainder being unoccupied; in Tasmania about one-thirteenth is leased or licensed, while about half the area of the State is occupied by the Crown or unoccupied, and the remainder alienated. Areas leased or licensed in the States are held under Crown lands Acts, closer settlement Acts, mining Acts, etc., and in the Territories under various Ordinances.

*Land Acts and Ordinances.* The types of lease and licence which obtain under land legislation cover a wide range, and vary with each State or Territory. The following are examples: grazing or pastoral, settlement and closer settlement, settlement purchase, conditional and unconditional purchase, perpetual and Crown; however, the variations of these forms and the special forms of lease and licence

which exist would extend this list considerably. Details of the various types in existence are given in Year Book No. 48, pages 93-4, and some detail is included in the tables on pages 878-81 of Year Book No. 53.

**AREAS OCCUPIED UNDER LEASE OR LICENCE OTHER THAN MINING AND  
FORESTRY: STATES AND TERRITORIES, 1963 TO 1967**  
(<sup>'000 acres</sup>)

Year	N.S.W. (a)	Vic. (b)	Qld (b)	S.A. (a)	W.A. (a)	Tas. (a)	N.T. (a) (c)	A.C.T. (a) (c)	Total
1963	110,066	5,936	364,140	146,807	243,976	1,032	178,017	289	1,050,263
1964	111,386	6,147	367,209	146,382	242,309	1,062	191,436	285	1,066,216
1965	111,567	6,263	365,318	147,661	241,911	984	191,840	282	1,065,826
1966	111,262	(d)6,269	362,866	150,422	241,662	933	190,688	279	1,064,381
1967	111,300		359,152	149,192	244,715	915	194,543	262	

(a) Year ended 30 June. (b) Year ended 31 December. (c) Leases and licences for all purposes. (d) Includes 79,000 acres of reserved Crown lands held under grazing licences.

### Closer settlement and war service settlement

#### Closer settlement

Particulars of the methods of acquisition and disposal of land for the closer settlement of civilians and returned service personnel (1914-18 War) in the several States are given in issues of the Year Book up to No. 22 (*see* No. 22, pages 163-9), and the results of the operations of the several schemes have appeared in subsequent issues in considerable detail. However, the amalgamation in some States of closer settlement records with those of other authorities has since made it impossible to obtain up-to-date figures for those States and for Australia as a whole. Page 96 of Year Book No. 48 contains particulars as at 30 June 1960 of the areas and costs for those States for which separate information is available.

#### War Service Land Settlement Scheme

The War Service Land Settlement Scheme provides for the settlement on the land of eligible ex-servicemen from the 1939-45 War and the Korea-Malaya operations. Finance for capital expenditure under the scheme in South Australia, Western Australia and Tasmania and for special loans to New South Wales and Victoria is provided through Loan (War Service Land Settlement) Acts. Finance for other aspects of the scheme in all States is provided by annual parliamentary appropriation. The *States Grants (War Service Land Settlement) Act* 1952 provides that the responsible Commonwealth Minister may make grants of financial assistance to the States under such terms as he may from time to time determine.

New South Wales, Victoria and Queensland agreed, at the inception of the scheme, to find their own finance for the acquisition and development of properties. In 1954 Queensland abandoned the scheme and made available for general settlement all unallotted lands held under it. Detailed information about the agreements and the methods of operation and administration of the scheme are contained in earlier Year Books (*see* List of Special Articles, etc., preceding General Index to this volume).

#### WAR SERVICE LAND SETTLEMENT: SUMMARY, STATES, TO 30 JUNE 1967

State	Land acquired	Farms allotted		Farms in course of development		Other
		No.	acres	No.	acres	
New South Wales	9,094,021	3,047	9,094,021	..	..	..
Victoria	1,181,599	3,048	1,181,599	..	..	..
Queensland	398,524	470	218,640	..	..	(a)179,884
South Australia	755,873	1,021	690,225	..	..	(b)65,648
Western Australia	2,053,972	1,010	1,905,475	..	..	(b)148,497
Tasmania	449,629	552	439,745	..	..	(b)9,884
Total	13,933,618	9,148	13,529,705	..	..	403,913

(a) War Service Land Settlement was discontinued in 1954, and unallotted lands were made available for general settlement. (b) Includes land disposed of outside the scheme and discrepancies to be corrected upon survey.

Particulars of expenditure on war service land settlement are given in Chapter 19, Public Finance (*see* pages 746-7).

### Alienation and occupation of Crown lands

Detailed particulars of the alienation and occupation of Crown lands in the several States and Territories are given in previous issues of the Year Book up to No. 53 (*see* No. 53, pages 878-81).

The following table provides a summary for each State and Territory, and for Australia as a whole, of the alienation and occupation of Crown lands in 1967.

#### ALIENATION AND OCCUPATION OF CROWN LANDS: STATES AND TERRITORIES, 1967

State or Territory	Private lands				Crown lands				Total area
	Alienated		In process of alienation		Leased or licensed		Other (a)		
	'000 acres	Per cent	'000 acres	Per cent	'000 acres	Per cent	'000 acres	Per cent	'000 acres
N.S.W.(b)	61,525	31.1	5,385	2.7	113,108	57.1	18,019	9.1	198,037
Vic.(c)	32,036	57.0	2,101	3.7	6,189	11.0	15,919	28.3	56,246
Qld(d)	26,645	6.2	11,027	2.6	361,456	84.7	27,752	6.5	426,880
S.A.(b)	15,896	6.6	338	0.1	149,192	61.3	77,819	32.0	243,245
W.A.(b)	31,583	5.1	15,200	2.4	248,812	39.8	328,994	52.7	624,589
Tas.(b)	6,652	39.4	246	1.5	1,279	7.6	8,708	51.6	16,885
N.T.(b)	319	0.1	..	..	194,543	58.4	138,117	41.5	332,979
A.C.T.(b)(e)	84	14.4	14	2.4	262	45.0	241	38.2	601
Australia	174,740	9.2	34,311	1.8	1,074,841	56.6	615,569	32.4	1,899,462

(a) Occupied by Crown; reserved; unoccupied; unreserved.  
(d) At 31 December 1967.

(b) At 30 June.

(c) At 31 December 1966.

(e) Includes Jervis Bay area.

### Number and area of rural holdings

#### Number and area

A holding in Australia has been defined by statisticians on a more or less uniform basis, and discrepancies which exist are not of sufficient importance to prevent comparisons. For the purpose of these statistics a holding has been defined as land of one acre or more in extent used in the production of agricultural produce or for the raising of livestock and the production of livestock products.

There are considerable fluctuations from time to time in the numbers of very small holdings, and it is very difficult to determine in some cases whether or not they are rural holdings within the definition. In addition, in the very dry parts, such as the far west of New South Wales and Queensland and the remoter parts of South Australia and Western Australia, there are large areas of marginal lands sporadically occupied for extensive grazing under short-term lease or other arrangement, and the areas so occupied tend to fluctuate with the seasons. Similarly, there are rugged areas in the mountain country of some States which are also occasionally occupied.

#### RURAL HOLDINGS: NUMBER AND AREA, STATES AND TERRITORIES, 1962-63 TO 1966-67

Year	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
NUMBER OF RURAL HOLDINGS									
1962-63	76,294	69,700	43,284	28,922	22,554	10,974	281	217	252,226
1963-64	77,339	69,775	43,183	28,711	22,770	10,949	299	214	253,240
1964-65	77,098	69,737	43,565	28,754	22,856	10,979	307	207	253,503
1965-66	76,152	69,199	43,914	28,759	22,853	10,777	305	203	252,162
1966-67	76,251	68,466	43,858	28,957	23,181	10,641	304	200	251,858
TOTAL AREA OF RURAL HOLDINGS ( <sup>'000</sup> acres)									
1962-63	172,038	37,709	376,788	156,697	262,660	6,422	164,955	376	1,177,645
1963-64	172,076	37,798	376,687	158,905	266,556	6,377	165,734	373	1,184,506
1964-65	172,148	37,844	377,010	156,955	268,553	6,420	171,482	358	1,190,770
1965-66	171,200	37,844	380,325	159,394	270,054	6,496	175,862	355	1,201,531
1966-67	171,652	38,653	379,977	161,510	274,765	6,507	170,018	350	1,203,431

**Land utilisation of rural holdings**

The following table shows the purposes for which the land on the rural holdings referred to in the preceding paragraph was used.

**RURAL HOLDINGS: LAND UTILISATION, 1962-63 TO 1966-67**

('000 acres)

<i>Year</i>	<i>Area used for crops (a)</i>	<i>Land lying fallow (b)</i>	<i>Area under sown grasses and clovers (c)</i>	<i>Balance of holdings (d)</i>	<i>Total area of holdings</i>
<b>1966-67—</b>					
New South Wales . . . . .	12,045	2,860	10,617	146,131	171,652
Victoria . . . . .	5,492	2,751	15,768	14,642	38,653
Queensland . . . . .	4,470	731	3,993	370,782	379,977
South Australia . . . . .	6,267	1,331	6,207	147,705	161,510
Western Australia . . . . .	8,558	2,023	13,018	251,166	274,765
Tasmania . . . . .	243	86	1,755	4,423	6,507
Northern Territory . . . . .	4	..	26	169,988	170,018
Australian Capital Territory . . . . .	8	1	88	253	350
<b>Australia . . . . .</b>	<b>37,087</b>	<b>9,784</b>	<b>51,471</b>	<b>1,105,090</b>	<b>1,203,431</b>
<b>1965-66 . . . . .</b>	<b>32,798</b>	<b>10,471</b>	<b>48,519</b>	<b>1,109,742</b>	<b>1,201,531</b>
<b>1964-65 . . . . .</b>	<b>32,251</b>	<b>8,466</b>	<b>47,159</b>	<b>1,102,894</b>	<b>1,190,770</b>
<b>1963-64 . . . . .</b>	<b>29,948</b>	<b>8,510</b>	<b>44,211</b>	<b>1,101,837</b>	<b>1,184,506</b>
<b>1962-63 . . . . .</b>	<b>30,056</b>	<b>8,719</b>	<b>40,991</b>	<b>1,097,879</b>	<b>1,177,645</b>

(a) Excludes (i) duplication on account of area double cropped, except for New South Wales and South Australia, and (ii) clovers and grasses cut for hay and seed which have been included in Area under sown grasses and clovers, and differs therefore from crop area figures shown later in this chapter. (b) Excludes short or summer fallow. (c) Includes paspalum. (d) Used for grazing, lying idle, etc.

**Classification by size and type of activity**

Some of the information obtained from the 1965-66 Agricultural and Pastoral Census has been classified by size of principal characteristics (area of holdings, area of sown grasses and clovers, area of selected crops, and numbers of livestock). In addition, all holdings have been classified according to type of activity. Tables showing this information, for statistical divisions and States, and an outline of the methods used have been published in a series of bulletins *Classification of Rural Holdings by Size and Type of Activity*, 1965-66. Similar information was published in a series of bulletins for the year 1959-60. A size classification for each State is available for the year 1955-56.

**Employment on rural holdings****Persons engaged**

The following table shows, for each State and Territory, the recorded number of males working on rural holdings. Particulars for females are not available except for New South Wales and Victoria. Additional particulars relating to the number of males employed in agriculture up to 1941-42 are shown in Year Book No. 36, page 852, and previous issues. Similar details for later years are not available.



**MALES(a) ENGAGED ON RURAL HOLDINGS: STATES AND TERRITORIES, 31 MARCH 1967**

<i>Males engaged</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
Permanent—									
Owners, lessees or share-farmers . . . . .	63,171	59,834	45,364	22,579	20,215	7,564	213	124	219,064
Relatives of owner, lessee or share-farmer, over 14 years of age, not receiving wages or salary . . . . .	2,749	4,927	2,588	674	1,289	5	38	18	12,288
Employees, including managers and relatives working for wages or salary . . . . .	28,220	14,840	16,880	8,045	8,051	4,101	700	121	80,958
<i>Total permanent males . . . . .</i>	<i>94,140</i>	<i>79,601</i>	<i>64,832</i>	<i>31,298</i>	<i>29,555</i>	<i>11,670</i>	<i>951</i>	<i>263</i>	<i>312,310</i>
Temporary . . . . .	22,200	18,316	13,051	10,551	4,620	4,773	1,065	40	74,616
<i>Total males . . . . .</i>	<i>116,340</i>	<i>97,917</i>	<i>77,883</i>	<i>41,849</i>	<i>34,175</i>	<i>16,443</i>	<i>2,016</i>	<i>303</i>	<i>386,926</i>

(a) Details for females not available except for New South Wales and Victoria.

Information regarding the number of persons (males and females) working full-time on rural holdings in Australia at 31 March of years to 1958 appears in Year Book No. 50, page 987, and in earlier Year Books. Data for subsequent years are the subject of investigation and are not available at this stage.

**Salaries and wages paid**

Particulars of salaries and wages paid to employees (including amounts paid to contractors) working full-time on rural holdings are shown below for the year 1966–67. Data for New South Wales, and hence Australia, are not available.

**EMPLOYEES ON RURAL HOLDINGS: SALARIES AND WAGES PAID(a)**  
**STATES AND TERRITORIES, 1966-67**  
 (\$'000)

<i>Employees</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
Males and females—									
Permanent . . . . .	(b) {	29,835	35,782	15,225	17,933	8,179	1,535	326	n.a.
Temporary(c) . . . . .		27,811	44,156	12,399	16,232	5,095	635	170	
<i>Total . . . . .</i>		<i>57,646</i>	<i>79,938</i>	<i>27,624</i>	<i>34,165</i>	<i>13,274</i>	<i>2,170</i>	<i>496</i>	

(a) Includes value of keep.

(b) Not available; subject to investigation.

(c) Includes amounts paid to contractors.

Similar information for Australia for years up to 1957–58 is given in Year Book No. 50, page 988, and in earlier Year Books. Particulars for subsequent years are the subject of investigation and are not available at this stage.

**Persons residing permanently on holdings**

Particulars of persons (of all ages) residing permanently on rural holdings in each State and Territory at 31 March 1967, and throughout Australia for a series of years, are as follows.

**PERSONS (OF ALL AGES) RESIDING PERMANENTLY ON RURAL HOLDINGS**  
**STATES AND TERRITORIES, 31 MARCH 1967**

	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
Males . . . . .	154,579	139,835	101,250	58,028	50,000	23,852	1,313	521	529,378
Females . . . . .	134,146	124,087	83,958	51,270	41,596	21,348	672	430	457,507
<i>Total . . . . .</i>	<i>288,725</i>	<i>263,922</i>	<i>185,208</i>	<i>109,298</i>	<i>91,596</i>	<i>45,200</i>	<i>1,985</i>	<i>951</i>	<i>986,885</i>

**PERSONS (OF ALL AGES) RESIDING PERMANENTLY ON RURAL HOLDINGS  
AUSTRALIA, 31 MARCH 1963 TO 1967**

	31 March—				
	1963	1964	1965	1966	1967
Males . . . . .	540,893	541,394	538,496	533,039	529,378
Females . . . . .	464,048	465,990	464,416	461,683	457,507
<b>Total . . . . .</b>	<b>1,004,941</b>	<b>1,007,384</b>	<b>1,002,912</b>	<b>994,722</b>	<b>986,885</b>

**Farm machinery on rural holdings**

The tables following show data for the principal types of farm machinery on rural holdings in the several States and Territories at 31 March 1967 and throughout Australia for a series of years. A more detailed analysis of tractors on rural holdings according to horse-power, type of fuel used, and age of tractor has been published in the Statistical Bulletin *Tractors on Rural Holdings—Australia, 31 March 1966*.

**FARM MACHINERY ON RURAL HOLDINGS: STATES AND TERRITORIES, 31 MARCH 1967**

<i>Machinery</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
<b>Cultivating—</b>									
Mouldboard ploughs—									
Trailing type . . . . .	12,167	13,568	7,592	7,357	2,755	2,977	11	23	46,450
Tractor-mounted type . . . . .	13,789	12,348	7,325	3,194	1,787	3,684	25	67	42,219
Disc implements (including disc ploughs, disc cultivators, disc tillers and disc harrows)—									
Trailing type . . . . .	37,757	31,225	29,551	14,102	17,911	5,932	71	100	136,649
Tractor-mounted type . . . . .	19,414	18,740	20,862	4,809	3,848	3,811	70	47	71,601
Tyne implements—									
Chisel ploughs, scarifiers, cultivators and rippers—									
Trailing type . . . . .	26,882	22,175	19,347	13,737	11,789	3,151	27	38	97,146
Tractor-mounted type . . . . .	26,237	18,399	31,242	7,599	4,184	6,081	53	67	93,862
Tyne harrows (number of leaves)—									
Trailing type . . . . .	115,899	115,045	82,242	91,803	41,340	17,354	185	216	464,084
Tractor-mounted type . . . . .	30,663	25,665	18,374	9,216	3,308	6,209	110	70	93,615
Rotary hoes and rotary tillers—									
Self-contained power unit . . . . .	9,427	7,906	3,456	3,881	1,823	1,221	74	n.a.	(a) 27,788
Tractor-mounted or trailing type . . . . .	6,209	4,399	3,456	1,561	1,513	723	20		(a) 17,881
<b>Seeding and planting—</b>									
Grain drills—									
Combine type . . . . .	28,205	20,392	13,255	15,489	13,628	1,465	31	65	92,530
Other types . . . . .	5,781	9,574	2,369	4,793	4,192	2,546	15	35	29,305
Maize and cotton planters . . . . .	7,382	747	6,041	..	69	..	18	3	14,260
Fertiliser distributors and broadcasters . . . . .	23,017	30,948	14,458	9,166	9,540	5,805	31	99	93,064
<b>Harvesting—</b>									
Grain and seed headers and harvesters(b) . . . . .	19,848	14,319	7,395	11,597	11,072	655	..	31	64,917
Mowers—									
Power-driven . . . . .	n.a.	n.a.	8,337	n.a.	7,581	5,193	64	n.a.	n.a.
Ground-driven . . . . .			3,089		n.a.	823	12		
Hay rakes—									
Side delivery . . . . .	n.a.	n.a.	4,561	n.a.	n.a.	2,438	27	n.a.	n.a.
Buck . . . . .			2,819			988	n.a.		
Dump . . . . .			5,542			861	n.a.		
Pick-up balers . . . . .	10,711	12,965	2,801	4,760	3,624	1,757	19	51	36,688
Potato diggers . . . . .	n.a.	n.a.	1,154	n.a.	n.a.	932	n.a.	n.a.	n.a.
Forage harvesters . . . . .	2,369	1,913	1,291	765	547	309	11	9	7,214
Peanut pickers . . . . .	n.a.	..	380	..	..	..	16	..	(a) 396
Corn pickers . . . . .	n.a.	n.a.	851	..	..	..	..	..	n.a.
<b>Other—</b>									
Shearing machines (number of stands) . . . . .	72,872	43,510	19,197	29,343	23,431	4,559	16	298	193,226
Milk machines (number of units) . . . . .	41,433	108,664	40,878	18,143	9,664	16,414	35	94	235,325
Tractors (wheel and crawler) . . . . .	85,038	79,566	67,553	35,829	33,997	12,171	309	207	314,670
Hammer mills . . . . .	n.a.	n.a.	7,656	n.a.	n.a.	570	..	n.a.	n.a.

(a) Incomplete.

(b) Excludes reapers, binders, specialised clover harvesters and forage harvesters.

**FARM MACHINERY ON RURAL HOLDINGS: AUSTRALIA  
31 MARCH 1963 TO 1967**

<i>Machinery</i>	<i>31 March—</i>				
	<i>1963</i>	<i>1964</i>	<i>1965</i>	<i>1966</i>	<i>1967</i>
<b>Cultivating(a)—</b>					
Mouldboard ploughs—					
Trailing type . . . . .		60,506			46,450
Tractor-mounted type . . . . .		41,722			42,219
Disc implements (including disc ploughs, disc cultivators, disc tillers and disc harrows)—					
Trailing type . . . . .		156,143			136,649
Tractor-mounted type . . . . .		73,675			71,601
Tyne implements—	n.a.		n.a.	n.a.	
Chisel ploughs, scarifiers, cultivators and rippers—					
Trailing type . . . . .		98,180			97,146
Tractor-mounted type . . . . .		77,748			93,862
Tyne harrows (number of leaves)—					
Trailing type . . . . .		448,626			464,084
Tractor-mounted type . . . . .		62,720			93,615
Rotary hoes and rotary tillers—					
Self-contained power unit . . . . .	(b)38,896	(c)37,561	(c)40,195	45,267	27,788
Tractor-mounted or trailing type . . . . .					17,881
<b>Seeding and planting—</b>					
Grain drills—					
Combine type . . . . .	116,116	117,271	90,008	90,866	92,530
Other types . . . . .			30,537	30,401	29,305
Maize and cotton planters . . . . .	(d)15,509	(d)14,635	15,220	14,523	14,260
Fertiliser distributors and broadcasters . . . . .	83,499	84,320	86,653	86,409	93,064
<b>Harvesting—</b>					
Grain and seed headers and harvesters . . . . .	65,628	64,697	65,568	64,744	64,917
Mowers(a)—					
Power-driven . . . . .	n.a.	n.a.	81,410	n.a.	n.a.
Ground-driven . . . . .			17,153		
Hay rakes(a)—					
Side delivery . . . . .			42,832		
Buck . . . . .	n.a.	n.a.	11,917	n.a.	n.a.
Dump . . . . .			16,564		
Pick-up balers . . . . .	28,725	30,411	32,275	34,229	36,688
Potato diggers(a) . . . . .	n.a.	n.a.	6,613	n.a.	n.a.
Forage harvesters . . . . .	5,083	5,509	5,674	6,385	7,214
Peanut pickers(a) . . . . .	n.a.	n.a.	315	(e)371	(e)396
Corn pickers(a) . . . . .	n.a.	n.a.	1,246	n.a.	n.a.
<b>Other—</b>					
Shearing machines (number of stands) . . . . .	178,805	180,370	186,393	188,496	193,226
Milking machines (number of units) . . . . .	229,270	229,042	231,389	233,625	235,325
<b>Tractors—</b>					
Wheel . . . . .	249,783	283,748	295,502	278,118	314,670
Crawler . . . . .	21,277			22,741	
<b>Hammer mills(a) . . . . .</b>	n.a.	n.a.	22,128	n.a.	n.a.

(a) Details for all States are collected at triennial intervals only. (b) Rotary hoes, all types. (c) Incomplete; excludes tractor-drawn rotary hoes and rotary tillers in Queensland. (d) Incomplete; particulars for Victoria not available. (e) Incomplete; excludes New South Wales.

## The soils of Australia

Year Book No. 52 contains an article (pages 873-9) on the soils of Australia which deals with the following matters: nature and development of Australian soils, including the agricultural development of soils, and types of Australian soils. A soil map of Australia and illustrations are included on plates 47 to 51 of Year Book No. 52.

## Soil improvement and conservation

### Fertilisers

The Australian output of prepared fertilisers is derived chiefly from imported rock phosphate. Complete information regarding local production of fertilisers is not available. The number of firms engaged in the manufacture of chemical fertilisers in Australia for the year 1966-67 was 48 made up as follows: New South Wales, 12; Victoria, 6; Queensland, 5; South Australia, 10; Western Australia, 8; and Tasmania, 7. The production of superphosphate in Australia during 1966-67 amounted to 4,430,000 tons.

Information regarding the area treated with artificial fertilisers and the quantity of artificial fertilisers (superphosphate, bonedust, nitrates, etc.) used in each State during the 1966-67 season is given in the following table.

AREA FERTILISED AND QUANTITY OF ARTIFICIAL FERTILISERS USED  
STATES AND TERRITORIES, 1966-67

State or Territory	Crops			Pastures			Total		
	Area fertilised	Super- phosphate used	Other artificial fertilisers used	Area fertilised	Super- phosphate used	Other artificial fertilisers used	Area fertilised	Super- phosphate used	Other artificial fertilisers used
	'000 acres	tons	tons	'000 acres	tons	tons	'000 acres	tons	tons
New South Wales	6,661	266,232	57,488	9,927	525,356	15,493	16,588	791,588	72,981
Victoria	4,772	211,625	55,571	12,502	778,269	67,927	17,275	989,894	123,498
Queensland	1,029	30,885	192,156	180	15,824	3,750	1,210	46,709	195,906
South Australia	5,123	271,083	15,813	5,237	308,656	3,256	10,359	579,739	19,069
Western Australia	8,531	436,834	37,269	11,601	609,858	12,594	20,133	1,046,692	49,863
Tasmania	231	23,927	11,461	1,588	128,205	6,162	1,819	152,132	17,624
Northern Territory	2	134	92	12	435	20	14	569	112
Australian Capital Territory	6	385	56	60	2,756	196	66	3,141	252
Australia	26,356	1,241,105	369,906	41,107	2,369,359	109,398	67,463	3,610,464	479,305

Particulars of the quantity of artificial fertilisers used in each State and Territory during each of the seasons 1962-63 to 1966-67 are shown in the next table. These details include the quantity used for the top-dressing of pasture lands.

QUANTITY OF ARTIFICIAL FERTILISERS USED: STATES AND TERRITORIES  
1962-63 TO 1966-67  
(Tons)

Year	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
1962-63	576,561	822,488	135,896	430,561	713,067	124,523	226	4,501	2,807,823
1963-64	683,968	880,941	183,326	465,583	720,943	141,507	305	5,213	3,081,786
1964-65	837,959	988,106	198,696	528,827	844,455	142,660	307	5,225	3,546,235
1965-66	839,955	1,054,393	214,487	561,962	972,432	163,925	672	3,777	3,811,603
1966-67	864,569	1,113,392	242,615	598,808	1,096,555	169,756	681	3,393	4,089,769

The chief sources of Australia's supplies of natural phosphate are Nauru, Christmas Island (Indian Ocean) and the United States of America. Sodium nitrate is obtained chiefly from Chile.

## ARTIFICIAL FERTILISERS: IMPORTS INTO AUSTRALIA, 1962-63 TO 1966-67

<i>Fertiliser</i>	1962-63	1963-64	1964-65	1965-66	1966-67
QUANTITY ( <sup>'000</sup> cwt)					
Ammonium fertilisers . . . . .	934	2,533	1,565	1,311	1,973
Potassium fertilisers . . . . .	1,167	1,935	2,180	2,163	2,398
Natural phosphate . . . . .	33,898	39,788	50,346	55,901	65,436
Sodium nitrate . . . . .	144	193	221	153	149
Other . . . . .	515	337	746	335	885
<b>Total . . . . .</b>	<b>36,658</b>	<b>44,786</b>	<b>55,058</b>	<b>59,862</b>	<b>70,841</b>
VALUE ( <sup>'000</sup> f.o.b.)					
Ammonium fertilisers . . . . .	1,615	3,934	3,132	2,841	4,161
Potassium fertilisers . . . . .	1,848	2,856	3,441	3,550	3,875
Natural phosphate . . . . .	9,874	12,486	17,978	21,543	29,050
Sodium nitrate . . . . .	336	478	443	393	372
Other . . . . .	1,471	1,092	2,532	1,181	2,698
<b>Total . . . . .</b>	<b>15,144</b>	<b>20,846</b>	<b>27,526</b>	<b>29,508</b>	<b>40,156</b>

Exports of fertilisers (manufactured locally) amounted to 20,000 cwt valued at \$93,000 in 1966-67 compared with 37,000 cwt valued at \$124,000 in 1965-66.

**Aerial agriculture**

Extensive use is made of aircraft for top-dressing and seeding, for spraying and dusting of crops and pastures, and for pest and vermin extermination.

For 1956-57 (the first year for which data are available) the total area treated was 1,466,000 acres; in 1966-67 the total was 15,237,000 acres. The following table shows details of area treated and materials used for each State for the five years ended 31 March 1967.

## AERIAL AGRICULTURE, 1962-63 TO 1966-67

<i>Year ended 31 March</i>	<i>Area topdressed and seeded</i>	<i>Area sprayed</i>	<i>Total area treated (a)</i>	<i>Materials used</i>		<i>Total flying time</i>
				<i>Super- phosphate</i>	<i>Seed</i>	
1967—	<sup>'000</sup> acres	<sup>'000</sup> acres	<sup>'000</sup> acres	tons	<sup>'000</sup> lb	hours
New South Wales(b) . . . . .	6,859	(c)	7,793	318,527	1,086	56,442
Victoria . . . . .	1,945	(c)	2,424	(c)	139	19,109
Queensland(d) . . . . .	(c)	385	(c)	(c)	854	(c)
South Australia . . . . .	903	372	1,276	46,850	(c)	7,822
Western Australia . . . . .	(c)	(c)	2,301	(c)	(c)	14,031
Tasmania . . . . .	(c)	19	(c)	22,009	(c)	(c)
<b>Australia . . . . .</b>	<b>11,646</b>	<b>3,192</b>	<b>15,237</b>	<b>596,628</b>	<b>2,407</b>	<b>108,688</b>
1966 . . . . .	11,314	3,469	15,010	588,045	1,581	108,850
1965 . . . . .	14,147	2,416	16,640	656,094	3,467	108,753
1964 . . . . .	10,666	2,041	12,788	505,811	1,997	84,827
1963 . . . . .	6,965	1,739	8,763	328,646	1,012	61,411

(a) Includes other types of treatment (rabbit baiting, etc.). (b) Includes details for the Australian Capital Territory.  
(c) Not available for publication. (d) Includes details for the Northern Territory.

**Pasture improvement**

An article on pasture improvement, which includes notes on indigenous and introduced species of grasses and which traces the development of pasture research in Australia, appears on pages 1001-2 of Year Book No. 49.

**Soil conservation**

Year Book No. 49 contains an article (pages 1003-4) on soil conservation which deals with the following matters: land use and soil erosion, agents of erosion, prevention and control, and the activities of various Commonwealth and State authorities which promote and co-ordinate research into the problems of soil erosion and the initiation of preventive measures.

## AGRICULTURAL PRODUCTION

In general, statistics in this chapter relating to agricultural production are derived from 'census' returns supplied by approximately 250,000 farmers who utilise one acre or more of land for agricultural or pastoral purposes. The latest figures available are those for the year 1966-67. The returns are collected on a substantially uniform basis in all States at 31 March each year, and relate mainly to crops sown in the previous twelve months. Where harvests are not completed by March (e.g. potatoes), provision is made in some States for a special collection after the harvest is completed and in others for the inclusion of the total estimated yield expected from the complete harvest. In cases where additional data are available from marketing authorities or other sources these are used in conjunction with the 'census' returns. The statistics published in this section are therefore shown in 'agricultural' years. For most purposes there will be little error involved in considering them as applying to years ended 30 June.

For more detailed information on period covered and details of the weights and measures used in recording production of agricultural commodities see introductory notes to the bulletin *Rural Industries*. Details of weights and measures are also included after the Contents of this Year Book.

### Progress, assistance and control

#### Progress of cultivation

The following table shows the area of crops in each of the States and Territories of Australia at ten-yearly intervals since 1860-61 and during each of the ten seasons 1957-58 to 1966-67. Plate 53 in this chapter shows the area of crops in Australia from 1900-01 onward (page 862).

**AREA OF CROPS: STATES AND TERRITORIES, 1860-61 TO 1966-67**  
(<sup>'000</sup> acres)

Year	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
1860-61	246	387	4	359	25	153	..	..	1,174
1870-71	385	693	52	802	55	157	..	..	2,144
1880-81	606	1,549	114	2,087	64	141	..	..	4,561
1890-91	853	2,032	225	2,093	70	157	..	..	5,430
1900-01	2,447	3,114	458	2,370	201	224	..	..	8,814
1910-11	3,386	3,952	667	2,747	855	287	..	..	11,894
1920-21	4,465	4,490	780	3,231	1,805	297	..	2	15,070
1930-31	6,811	6,716	1,144	5,426	4,792	268	2	5	25,164
1940-41	6,375	4,467	1,734	4,255	4,027	254	..	6	21,118
1950-51	4,761	4,537	2,077	3,812	4,650	290	n.a.	6	20,133
1957-58	5,000	4,431	2,600	4,233	5,615	292	1	5	22,177
1958-59	6,820	5,040	2,852	4,436	6,135	339	1	8	25,631
1959-60	7,137	4,817	2,926	4,400	6,495	322	1	7	26,105
1960-61	8,044	5,838	3,057	5,399	6,871	357	2	8	29,576
1961-62	8,288	5,626	3,216	5,024	7,112	364	2	7	29,639
1962-63	8,903	6,318	3,490	5,495	7,482	395	2	7	32,092
1963-64	8,997	6,102	3,665	5,975	6,915	380	3	8	32,045
1964-65	10,334	6,477	3,967	5,965	7,505	404	4	9	34,665
1965-66	9,052	6,219	4,119	6,030	8,680	386	4	8	34,498
1966-67	12,421	6,765	4,605	6,488	8,817	444	4	10	39,553

#### The Australian Agricultural Council

The influence of governmental and semi-governmental authorities on Australian rural industry is most apparent in the fields of guaranteed prices, subsidies and controlled marketing. Many of these aspects of intervention at the national level take place indirectly through the Australian Agricultural Council. This is a permanent organisation which was formed following a conference of Commonwealth and State Ministers on agricultural and marketing matters held at Canberra in December 1934. The Council consists of the Commonwealth Ministers for Primary Industry and Territories and the State Ministers of Agriculture, with power to co-opt the services of other Commonwealth and State Ministers as required. The principal functions of the Council are: the promotion of the welfare and development of agricultural industries generally; the exchange of information on agricultural production and marketing; the improvement of the quality of agricultural products and the maintenance of high grade standards; to ensure, as far as possible, balance between production and available markets; and organised marketing.

In addition, a permanent Standing Committee on Agriculture was formed to advise the Council, to secure co-operation and co-ordination in agricultural research, to advise State and Commonwealth Governments on the initiation and development of agricultural research, and to secure co-operation between all Governments in respect of quarantine measures against pests and diseases of plants and animals.

The Standing Committee on Agriculture comprises the permanent heads of the State Departments of Agriculture, the Secretary, Department of Primary Industry, and a representative each from the Commonwealth Departments of the Treasury, Health, Trade and Industry, and Territories, and from the Commonwealth Scientific and Industrial Research Organization.

#### **Financial assistance to primary producers**

Financial assistance to primary producers by the Commonwealth Government may be provided in a number of ways. Examples of these follow.

*Bounties.* A bounty to producers, not exceeding \$4,000,000 in any one year, is currently paid on raw cotton produced and sold for use in Australia. This arrangement is due for review in 1968.

A bounty of \$27,000,000 paid annually on the production of butter, cheese and related butterfat products and an export bounty on processed milk products of a maximum of \$800,000 annually are both continued in the fifth Five Year Dairy Industry Stabilization Plan which commenced 1 July 1967.

*Commitments to industry-financed stabilisation schemes.* In schemes of this nature the Commonwealth generally accepts a defined contingent liability to contribute to Government-approved stabilisation funds if falling prices, or rising costs, or both, lead to a situation where growers' contributions prove inadequate. The Dried Vine Fruits Stabilization Fund and the Wheat Prices Stabilization Fund are examples of this.

#### **Other financial assistance**

The Commonwealth Government also pays for cattle tick control, flood, drought and bush fire relief, fisheries research, and farm mechanisation research.

Over recent years, legislative research schemes financed by matching contributions from the Commonwealth, and industry or States, or both, have been initiated in regard to tobacco, wool, wheat, dairy produce, meat, eggs, wine and honey. Non-legislative schemes, on a similar financial basis, have been operative in relation to Australian plague locusts, pest management in pome fruit orchards, grape crop forecasting, honey research, barley research, banana research, fruit fly research and poultry research.

#### **Agricultural training and research**

Agricultural colleges have been established in all States except Tasmania. The primary function of these colleges is the training of students in the various phases of agriculture and livestock husbandry. Students are required to undertake a considerable amount of practical work in addition to lectures and theory. A secondary function of the colleges is agricultural research and experimentation. To a lesser degree, they carry out extension work in the form of public field days. Upon graduation, students receive diplomas in agriculture, dairying, etc., according to the course undertaken.

Experimental farms have been set up by State Departments of Agriculture in all States. They are concerned primarily with agricultural research and experimentation, each farm concentrating on problems specific to the region in which it is located. The results of the work undertaken are passed on to farmers at field days which are held at regular intervals, through publication in various agricultural or scientific journals, and through the agricultural extension services of the State Departments of Agriculture.

The Commonwealth Scientific and Industrial Research Organization has field stations in many parts of Australia, and sometimes undertakes research jointly with the appropriate State authorities. It also has regional laboratories in several States, conducting research into agronomic and livestock problems as they occur in each particular region (*see also* the chapter Education, Cultural Activities and Research). The State Departments of Agriculture study problems of particular significance within their own boundaries. In addition, the universities carry out valuable work in their laboratories and on their experimental farms.

#### **Extension services**

Extension services operate in each State and in the Northern Territory, Australian Capital Territory and the Territory of Papua-New Guinea. Commonwealth funds have been provided in the States to enable them to expand their extension activities, through the Commonwealth Extension Services Grant since 1952-53 and the Commonwealth Dairy Industry Grant since 1948-49. The

funds made available increased over the period and by 1963 had reached \$1.4 million. In 1966 the Commonwealth decided to amalgamate the two grants and to increase the funds available progressively over a period of five years to a maximum of \$5.4 million per annum. In 1966-67 the Commonwealth Extension Services grant was \$2.9 million and in 1967-68 \$3.65 million was made available. The scope of the grant has been enlarged to include regional research and training for extension and regional research.

### Distribution, production and value of crops

#### Distribution of crops

The wide range of climatic and soil conditions over the agricultural regions of Australia has resulted in a diversity of crops being grown throughout the Commonwealth. Generally, cereal crops (excluding rice and sorghum) are grown in all States over wide areas, while industrial crops are confined to specific locations in a few States. A graph showing the area sown to principal crops for the years 1900-01 to 1966-67 appears on plate 53, over the page.

AREA OF CROPS: STATES AND TERRITORIES, 1966-67  
(Acres)

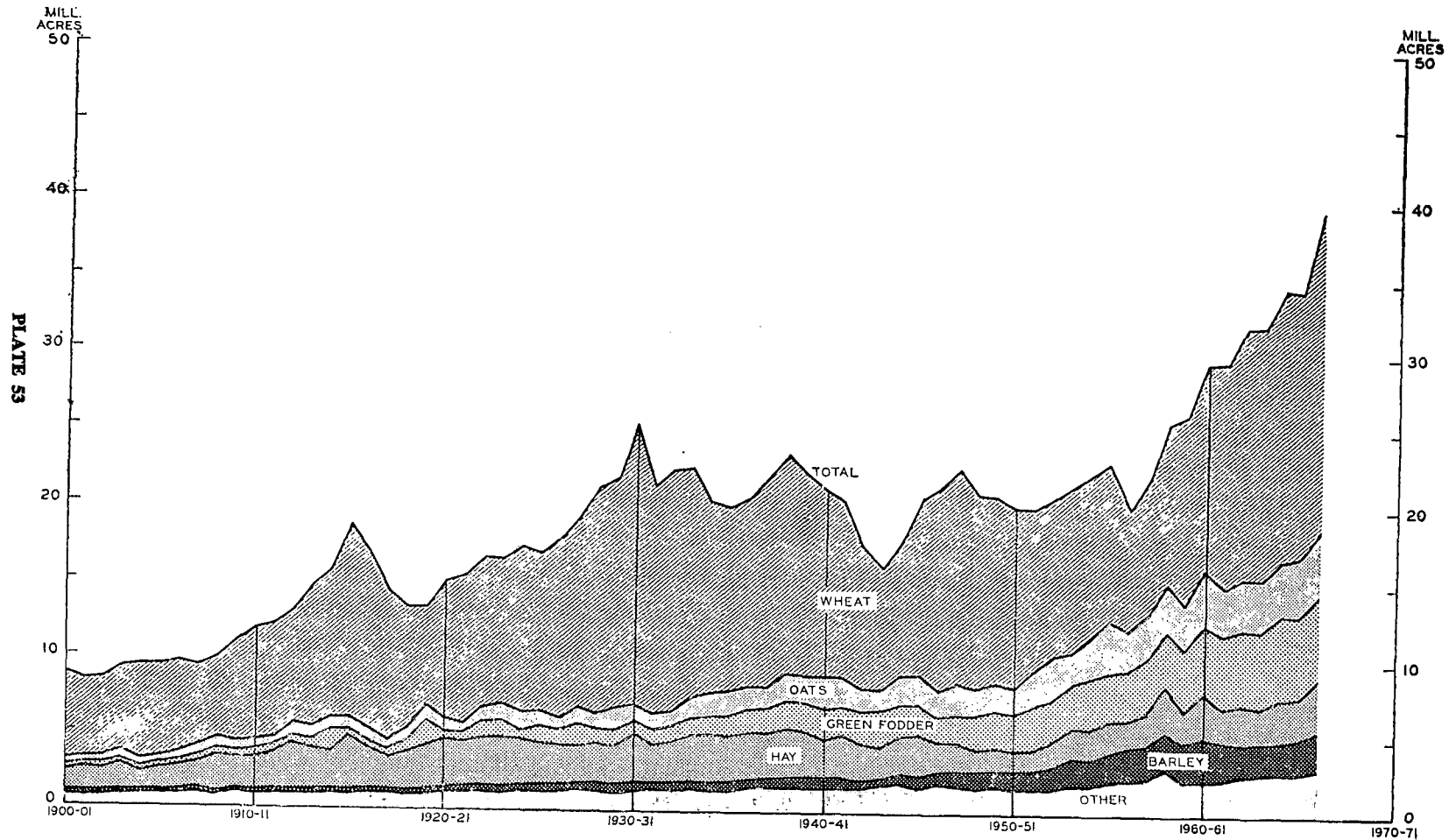
Crops	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
<b>Cereals for grain—</b>									
Barley—									
2-row . . .	245,489	213,380	343,760	1,056,394	72,190	20,065	..	..	1,951,278
6-row . . .	139,685	14,270	39,976	50,564	300,909	992	..	..	546,396
Maize—Hybrid	(a)44,688	1,261	(a)141,133	..	(b)	..	..	..	(c)187,082
Other . . .	(a)4,331	146	(a)9,877	..	5	..	(d)	..	(c)14,359
Oats . . .	1,362,607	1,078,877	66,482	508,845	1,203,815	35,909	..	1,797	4,258,332
Panicum, millet and setaria . . .	423	3,576	(a)60,124	..	..	..	..	..	64,123
Rice . . .	73,724	..	..	..	(d)	..	(e)	..	(c)73,724
Rye . . .	8,586	11,608	178	56,617	10,682	25	..	..	87,696
Sorghum . . .	(a)98,161	123	(a)403,500	..	38	..	527	..	502,349
Wheat . . .	7,135,046	3,138,029	1,227,377	2,960,275	6,346,613	12,747	..	2,666	20,822,753
Hay . . .	823,428	1,558,482	128,707	481,742	295,082	203,181	1,334	3,983	3,495,939
Green fodder . . .	2,132,592	443,438	1,179,061	1,168,688	398,827	74,333	463	1,100	5,398,511
Other stock fodder . . .	14,659	26,291	3,090	31,384	4,575	31,517	n.a.	..	(c)111,516
<b>Grass seed—</b>									
Lucerne . . .	8,290	(f)	422	36,216	160	..	794	..	(c)45,882
Clover . . .	26,480	7,174	8	6,402	95,421	880	..	..	136,365
Other . . .	22,350	29,166	31,070	11,505	22,677	(g)4,256	111	503	121,638
<b>Industrial crops—</b>									
Broom millet . . .	1,881	169	239	..	14	..	..	..	2,303
Canary seed . . .	(d)	..	4,439	..	..	..	..	..	(c)4,439
Cotton . . .	30,104	..	(a)11,167	..	11,892	..	..	..	53,163
Flax for linseed . . .	9,580	5,012	17,854	389	1,751	..	..	..	34,586
Hops . . .	..	(h)714	..	..	(d)	(i)1,556	..	..	(c)2,270
Peanuts . . .	397	..	69,330	..	..	..	(d)	..	(c)69,727
Safflower . . .	5,092	729	88,803	(d)	(d)	..	..	..	(c)94,624
Sugar cane—									
For crushing . . .	22,475	..	534,998	..	..	..	..	..	557,473
Stand-over and cut for plants . . .	19,161	..	91,874	..	..	..	..	..	111,035
Sunflower . . .	1,025	441	12,734	..	(d)	..	..	..	(c)14,200
Tobacco . . .	1,794	8,455	12,134	..	..	..	..	..	22,383
Other . . .	..	918	183	(d)	..	245	..	..	(c)1,346
<b>Vegetables for human consumption—</b>									
Onions . . .	1,256	3,295	3,495	1,631	413	129	(j)	(j)	(c)10,210
Potatoes . . .	23,594	37,167	16,227	5,948	6,100	10,278	(j)	14	(c)99,328
Other . . .	41,379	55,244	45,305	9,847	9,260	22,720	218	111	184,084
<b>Vineyards—</b>									
Bearing . . .	18,899	45,381	2,913	52,732	7,304	..	..	..	127,229
Not bearing . . .	2,358	3,783	391	4,348	641	..	..	..	11,521
<b>Fruit—</b>									
Bearing . . .	76,590	56,677	34,855	30,372	19,590	18,624	74	29	236,811
Not bearing . . .	19,892	16,842	15,203	13,785	6,867	3,719	59	9	76,376
<b>Nurseries and cut flowers . . .</b>	1,218	2,693	535	244	240	113	..	8	5,051
<b>All other crops . . .</b>	3,790	1,477	7,326	104	1,906	2,214	45	27	16,889
<b>Total area . . .</b>	<b>12,421,024</b>	<b>6,764,818</b>	<b>4,604,770</b>	<b>6,488,032</b>	<b>8,816,972</b>	<b>443,504</b>	<b>3,625</b>	<b>10,247</b>	<b>39,552,992</b>

(a) Sown 1965-66. (b) Included in Other maize. (c) Incomplete: see individual States. (d) Not available for publication. Included in All other crops. (e) Not available for publication. Excluded from totals. (f) Not available separately. Included in All other crops. (g) Excludes area sown simultaneously to oats. (h) Includes 43 acres not bearing. (i) Includes 88 acres not bearing. (j) Not available for publication. Included in Other vegetables.



# AREA OF CROPS: AUSTRALIA

1900-01 TO 1966-67



## RELATIVE AREAS OF CROPS: STATES AND TERRITORIES, 1966-67

(Per cent)

<i>Crop</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
Wheat (grain)	57.4	46.4	26.7	45.6	72.0	2.9	..	26.0	52.6
Green fodder	17.2	6.6	25.6	18.0	4.5	16.8	12.8	10.7	13.6
Oats (grain)	11.0	15.9	1.4	7.8	13.7	8.1	..	17.5	10.8
Hay	6.6	23.0	2.8	7.4	3.3	45.8	36.8	38.9	8.8
Barley (grain)	3.1	3.4	8.3	17.1	4.2	4.7	..	..	6.3
Sugar cane for crushing	0.2	..	11.6	..	..	..	..	..	1.4
Sorghum	0.8	..	8.8	..	..	..	14.5	..	1.3
Fruit	0.8	1.1	1.1	0.7	0.3	4.8	3.7	0.4	0.8
Maize (grain)	0.4	..	3.3	..	..	..	..	..	0.5
Vineyards	0.2	0.7	0.1	0.9	0.1	..	..	..	0.4
Potatoes	0.2	0.5	0.4	0.1	0.1	2.3	..	0.1	0.3
All other	2.1	2.4	9.9	2.4	1.8	14.6	32.2	6.4	3.2
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

## AREA OF CROPS: AUSTRALIA, 1962-63 TO 1966-67

('000 acres)

<i>Crop</i>	<i>1962-63</i>	<i>1963-64</i>	<i>1964-65</i>	<i>1965-66</i>	<i>1966-67</i>
<b>Cereals for grain—</b>					
Barley—					
2-row	1,553	1,621	1,655	1,766	1,951
6-row	474	392	409	531	546
Maize—					
Hybrid	161	172	176	164	187
Other	48	43	36	32	14
Oats	3,292	3,392	3,497	3,768	4,258
Rice	55	59	62	64	74
Sorghum	391	366	346	433	502
Wheat	16,469	16,474	17,919	17,515	20,823
Hay	2,720	2,602	2,793	2,780	3,496
Green fodder	4,952	4,877	5,614	5,324	5,399
Grass seed	162	219	258	227	304
<b>Industrial crops—</b>					
Cotton	38	41	38	55	53
Flax for linseed	97	118	134	25	35
Hops	2	2	2	2	2
Peanuts	36	45	46	58	70
Safflower	6	19	48	60	95
Sugar cane	506	539	628	647	669
Tobacco	29	29	26	23	22
<b>Vegetables for human consumption—</b>					
Onions	11	9	10	8	10
Potatoes	114	102	88	96	99
Other	163	166	168	185	184
Vineyards	134	136	139	140	139
Fruit	305	310	311	313	313
All other crops	374	312	262	282	308
<b>Total</b>	<b>32,092</b>	<b>32,045</b>	<b>34,665</b>	<b>34,498</b>	<b>39,553</b>

## Production and yield per acre of crops

## PRODUCTION OF CROPS: STATES AND TERRITORIES, 1966-67

Crop		N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Cereals for grain—										
Barley—										
2-row . . . '000 bus	7,359	5,066	11,917	22,678	1,450	736	..	..	..	49,207
6-row . . . "	4,437	355	1,277	1,020	5,257	35	..	..	..	12,381
Maize—										
Hybrid . . . "	(a)2,301	67	(a)4,659	..	(b)	..	..	..	..	(c)7,026
Other . . . "	(a)170	5	(a)289	..	..	..	(d)	..	..	(c)465
Oats . . . "	41,003	31,248	1,467	10,276	22,117	948	..	..	47	107,106
Panicum, millet and setaria . . . "	7	88	(a)1,064	..	..	..	..	..	..	1,159
Rice . . . "	11,250	..	..	..	(d)	..	(d)	..	..	(c)11,250
Rye . . . "	155	78	3	244	99	..	..	..	..	580
Sorghum . . . "	(a)1,527	4	(a)10,172	..	..	..	8	..	..	11,711
Wheat . . . "	202,501	70,896	35,730	53,816	103,195	385	..	..	87	466,610
Hay . . . '000 tons	1,481	2,982	314	729	417	437	2	..	9	6,371
Grass seed—										
Lucerne . . . cwt	10,199	n.a.	403	45,263	82	..	2,079	..	..	(c)58,026
Clover . . . "	64,884	11,068	3	9,681	186,999	632	..	..	..	273,267
Other . . . "	19,670	47,811	29,682	13,255	33,565	11,070	15	..	183	155,251
Industrial crops—										
Broom millet—										
Fibre . . . cwt	12,659	893	694	..	80	..	..	..	..	14,326
Grain . . . bushels	18,795	595	n.a.	..	..	..	..	..	..	(c)19,390
Canary seed . . . bus	(d)	..	64,251	..	..	..	..	..	..	(c)64,251
Cotton, unginced '000 lb	79,159	..	(a)11,800	..	29,400	..	..	..	..	120,360
Flax for linseed . . . tons	3,265	2,319	7,338	188	634	..	..	..	..	13,744
Hops (dry weight) cwt	..	10,234	..	..	(d)	18,673	..	..	..	(c)28,907
Peanuts . . . "	5,194	..	821,957	..	..	..	(d)	..	..	(c)827,151
Safflower . . . '000 bus	72	7	1,290	(d)	(d)	..	..	..	..	(c)1,369
Sugar cane for crushing '000 tons	1,171	..	15,513	..	..	..	..	..	..	16,685
Sunflower . . . cwt	4,812	1,449	66,755	..	(d)	..	..	..	..	(c)73,016
Tobacco, dried leaf . . . '000 lb	2,133	10,953	14,819	..	..	..	..	..	..	27,905
Vegetables for human consumption—										
Onions . . . tons	10,809	22,375	27,033	17,933	5,417	898	(d)	(d)	(c)84,465	
Potatoes . . . "	126,183	225,186	93,738	60,271	64,169	73,300	(d)	120	(c)642,967	
Vineyards—										
Grapes—										
For drying . . . "	59,004	294,577	..	60,609	5,679	..	..	..	..	419,869
" table . . . "	8,201	11,381	4,193	1,027	2,088	..	..	..	..	26,890
" wine . . . "	47,145	20,531	245	165,030	5,313	..	..	..	..	238,264

(a) Harvested from crop sown in 1965-66.

(b) Included in Other maize.

(c) Incomplete; see individual States.

(d) Not available for publication.

## PRODUCTION OF PRINCIPAL CROPS: AUSTRALIA, 1962-63 TO 1966-67

Crop		1962-63	1963-64	1964-65	1965-66	1966-67
Cereals for grain—						
Barley—						
2-row . . . . .	'000 bus	31,370	36,464	41,775	33,235	49,207
6-row . . . . .	"	8,209	6,931	7,540	8,600	12,381
Maize—						
Hybrid . . . . .	"	6,064	5,592	5,896	4,253	7,026
Other . . . . .	"	1,393	1,130	983	664	465
Oats . . . . .	"	68,809	68,234	70,043	60,739	107,106
Rice . . . . .	"	7,129	7,455	8,030	9,540	11,250
Sorghum . . . . .	"	10,252	7,889	7,164	7,149	11,711
Wheat . . . . .	"	306,912	327,912	368,789	259,666	466,610
Hay . . . . .	'000 tons	4,717	4,269	4,963	4,179	6,371
Grass seed . . . . .	cwt	232,669	333,286	411,919	356,815	486,544
Industrial crops—						
Cotton, unginned . . . . .	'000 lb	15,762	18,223	63,009	133,850	120,360
Flax for linseed . . . . .	tons	25,717	29,516	46,600	6,064	13,744
Hops (dry weight) . . . . .	cwt	33,629	19,858	27,893	37,394	28,907
Peanuts . . . . .	"	319,402	460,726	207,115	548,279	827,151
Safflower . . . . .	'000 bus	90	303	697	550	1,369
Sugar cane for crushing . . . . .	'000 tons	12,736	12,118	15,070	14,155	16,685
Tobacco (dried leaf) . . . . .	'000 lb	27,148	34,342	25,111	27,361	27,905
Vegetables for human consumption—						
Onions . . . . .	'000 tons	68	59	70	58	84
Potatoes . . . . .	"	667	562	508	639	643
Vineyards—						
Grapes . . . . .	"	471	646	680	582	685
Wine made(a) . . . . .	'000 gals	29,893	37,536	38,520	33,956	41,642
Dried vine fruits . . . . .	'000 tons	71	104	108	91	107

(a) Net factory and farm production of beverage and distillation wine. This excludes the liquid gallonage of spirits added in wine fortifying.

## YIELD PER ACRE OF PRINCIPAL CROPS: AUSTRALIA, 1962-63 TO 1966-67

Crop		1962-63	1963-64	1964-65	1965-66	1966-67
Cereals for grain—						
Barley—						
2-row . . . . .	bushels	20.2	22.5	25.2	18.8	25.2
6-row . . . . .	"	17.3	17.7	18.4	16.2	22.7
Maize—						
Hybrid . . . . .	"	37.7	32.6	33.4	25.9	37.6
Other . . . . .	"	28.7	26.2	27.4	20.5	32.4
Oats . . . . .	"	20.9	20.1	20.0	16.1	25.2
Rice . . . . .	"	129.8	125.5	130.3	148.1	152.6
Sorghum . . . . .	"	26.2	21.6	20.7	16.5	23.3
Wheat . . . . .	"	18.6	19.9	20.6	14.8	22.4
Hay . . . . .	tons	1.73	1.64	1.78	1.50	1.82
Industrial crops—						
Cotton, unginned . . . . .	lb	418	445	1,662	2,436	2,264
Flax for linseed . . . . .	tons	0.26	0.25	0.35	0.25	0.40
Hops (dry weight)(a) . . . . .	cwt	16.82	9.68	13.23	17.24	13.51
Peanuts . . . . .	"	8.89	10.25	4.51	9.50	11.86
Safflower . . . . .	bushels	15.81	15.64	14.68	9.12	14.47
Sugar cane for crushing(a) . . . . .	tons	31.71	29.02	32.04	28.13	29.93
Tobacco (dried leaf) . . . . .	lb	924	1,183	954	1,165	1,247
Vegetables for human consumption—						
Onions . . . . .	tons	6.34	6.43	7.18	7.04	8.27
Potatoes . . . . .	"	5.86	5.51	5.78	6.63	6.47
Vineyards—						
Grapes(a) . . . . .	"	3.86	5.21	5.42	4.56	5.38

(a) Per acre of productive crops.

**Value of agricultural production**

Further reference to the value of production of agriculture and other industries in Australia as well as a brief explanation of the terms used may be found in the chapter Miscellaneous.

**GROSS VALUE<sup>(a)</sup> OF AGRICULTURAL PRODUCTION: AUSTRALIA, 1962-63 TO 1966-67**  
(\$'000)

<i>Crop</i>	<i>1962-63</i>	<i>1963-64</i>	<i>1964-65</i>	<i>1965-66</i>	<i>1966-67</i>
Cereals for grain—					
Barley . . . . .	42,656	47,484	55,620	47,932	73,743
Maize . . . . .	9,524	10,364	9,999	9,517	10,395
Oats . . . . .	51,258	49,666	51,449	53,323	83,384
Rice . . . . .	7,676	7,912	8,529	10,224	12,445
Wheat . . . . .	449,064	467,432	517,702	384,853	689,880
Hay . . . . .	92,958	87,462	99,209	107,755	151,470
Green fodder . . . . .	19,224	20,990	25,011	28,380	24,805
Industrial crops—					
Cotton, unginned . . . . .	1,876	2,212	7,685	14,323	13,572
Hops . . . . .	2,570	1,534	2,372	3,020	2,531
Sugar cane . . . . .	131,038	162,880	133,372	121,865	142,810
Tobacco (dried leaf) . . . . .	30,022	33,408	24,608	30,399	29,782
Vegetables for human consumption—					
Onions . . . . .	3,628	4,096	5,340	6,667	6,044
Potatoes . . . . .	27,960	33,226	60,713	43,751	41,233
Other vegetables for human consumption . . . . .	57,552	66,514	68,335	74,804	82,387
Grapes . . . . .	32,048	46,416	50,385	43,516	50,173
Fruit and nuts . . . . .	128,860	135,133	146,242	151,877	162,918
All other crops . . . . .	48,712	51,758	53,413	51,603	67,183
<b>Total . . . . .</b>	<b>1,136,626</b>	<b>1,228,487</b>	<b>1,319,984</b>	<b>1,183,809</b>	<b>1,644,756</b>

(a) Includes amounts paid as bounty, relief, etc.

Values of agricultural production in the various States and Territories are shown for 1966-67 in the following table. In computing the net value of production, no deduction has been made for the cost of maintenance of farm buildings and fences, nor for the depreciation of farm plant.

**GROSS, LOCAL AND NET VALUES OF AGRICULTURAL PRODUCTION**  
**STATES AND TERRITORIES, 1966-67**  
(\$'000)

<i>State or Territory</i>	<i>Gross production valued at principal markets</i>	<i>Marketing costs</i>	<i>Local value of production</i>	<i>Value of materials used in process of production</i>	<i>Net value of production (a)</i>
New South Wales . . . . .	551,059	105,889	445,170	(b)37,261	407,909
Victoria . . . . .	325,461	43,507	281,954	26,937	255,016
Queensland . . . . .	318,954	42,399	276,555	47,129	229,426
South Australia . . . . .	184,090	20,910	163,179	26,137	137,042
Western Australia . . . . .	219,310	29,805	189,504	34,683	154,821
Tasmania . . . . .	44,925	9,304	35,621	6,240	29,381
Northern Territory . . . . .	354	n.a.	354	n.a.	354
Australian Capital Territory . . . . .	603	40	563	26	537
<b>Australia . . . . .</b>	<b>1,644,756</b>	<b>251,854</b>	<b>1,392,900</b>	<b>178,413</b>	<b>1,214,486</b>

(a) No deduction has been made for depreciation and maintenance. (b) No allowance has been made for costs of power, power kerosene, petrol and other oils.

**NET VALUE OF AGRICULTURAL PRODUCTION(a): STATES AND TERRITORIES, 1962-63 TO 1966-67**

Year	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Net value (\$'000)—									
1962-63 . . . . .	226,072	193,972	185,728	93,358	108,506	22,312	168	298	830,414
1963-64 . . . . .	245,906	218,136	222,370	125,180	79,622	25,729	169	276	917,388
1964-65 . . . . .	293,883	232,775	193,673	134,239	92,800	27,223	222	349	975,164
1965-66 . . . . .	175,390	202,674	198,665	105,657	154,494	23,070	225	253	860,428
1966-67 . . . . .	407,909	255,016	229,426	137,042	154,821	29,381	354	537	1,214,486
Per head of population (\$)—									
1962-63 . . . . .	56.23	64.40	118.80	93.50	139.57	62.29	3.58	4.28	76.56
1963-64 . . . . .	60.29	70.98	139.42	122.31	99.67	70.93	3.38	3.59	82.95
1964-65 . . . . .	70.94	74.22	119.04	127.59	113.56	74.31	4.21	4.14	86.46
1965-66 . . . . .	41.66	63.45	119.67	97.66	184.52	62.42	4.06	2.73	74.82
1966-67 . . . . .	95.47	78.47	135.91	124.14	179.58	78.58	6.09	5.37	103.73

(a) No deduction has been made for depreciation and maintenance.

**Indexes of quantum and price of agricultural production**

Indexes of quantum and price of agricultural production are shown in the following table. The quantum indexes relate to gross output of farm products valued at constant prices. The quantities of each farm product produced each year have been revalued at the unit gross value for the period 1936-37 to 1938-39. The price indexes relate to average 'prices' of farm products realised at the principal markets of Australia. Average quantities of each product marketed in the period 1946-47 to 1950-51 have been used as fixed weights. Further details on weights used, etc. are to be found in the chapter Miscellaneous.

**INDEXES OF QUANTUM(a) AND PRICE OF AGRICULTURAL PRODUCTION, 1962-63 TO 1966-67**

(Base: Average three years ended June, 1939 = 100)

	1962-63	1963-64	1964-65	1965-66	1966-67
Quantum produced—					
Wheat . . . . .	186	199	224	158	283
Other crops . . . . .	194	194	214	200	254
<i>Total, all crops . . . . .</i>	<i>191</i>	<i>196</i>	<i>218</i>	<i>184</i>	<i>265</i>
Per head of population . . . . .	121	122	133	110	156
Price—					
Wheat . . . . .	366	356	351	372	366
Other crops . . . . .	309	348	351	340	337
<i>Total, all crops . . . . .</i>	<i>334</i>	<i>351</i>	<i>351</i>	<i>354</i>	<i>350</i>

(a) Indexes of value at constant prices, i.e. quantities revalued at average unit values of the base years (1936-37 to 1938-39).

**Wheat**

Wheat is grown on a large scale in all States except Tasmania, and is the most important crop in Australia in terms of area, production and exports. The present limits of the wheat belt have been established after considerable fluctuation over the last four decades. In January 1934 a Royal Commission was appointed to inquire into and report upon the economic condition of the growing, handling and marketing of wheat, and the manufacturing, distributing and selling of flour and bread. The Report of this Royal Commission provides an authoritative description of all aspects of the industry up to that time.

**Wheat marketing and research**

Two of the aspects of governmental and semi-governmental assistance and control which have contributed to the development of the industry are the organisation of overseas marketing and of research.

As a large proportion of the Australian wheat crop is normally exported, the marketing of wheat plays an important part in the industry. The Australian Wheat Board was constituted in September 1939, under National Security (Wheat Acquisition) Regulations, to purchase, sell, or dispose of wheat or wheat products, and to manage and control all matters connected with the handling, storage, protection, shipment, etc. of wheat acquired, and such other matters as were necessary to give effect to the regulations. Details of the operations of the Australian Wheat Board and the Wheat Stabilization Board in licensing wheat grown during the seasons 1941-42 to 1948-49 will be found in Year Book No. 38, pages 940-1, and a detailed survey of legislation relating to stabilisation of the wheat industry, including controls exercised during the 1914-18 and 1939-45 Wars and legislation establishing the Wheat Stabilization Plan in 1948, is given in the Appendix to Year Book No. 37, pages 1295-9.

The Wheat Stabilization Board ceased to function on 31 December 1948, and under the *Wheat Industry Stabilization Act* 1948 the Australian Wheat Board was reconstituted to administer the first stabilisation plan and was given powers similar to those held under the National Security Regulations. The new Board commenced to function on 18 December 1948. The Board has been continued in existence by the *Wheat Industry Stabilization Acts* 1954, 1958 and 1963-66 for the purpose of administering the second, third and fourth five-year stabilisation plans. Details of the more recent plans were published in Year Book No. 40, pages 841 and 842 (1947-48 to 1952-53 Plan), No. 44, page 861 (1953-54 to 1957-58), and No. 48, pages 903 and 904 (1958-59 to 1962-63).

*Fourth Post-war Wheat Industry Stabilisation Plan.* Following negotiations during 1962 and 1963, the fourth post-war Wheat Industry Stabilisation Plan was enacted by the Commonwealth and States towards the end of 1963. The new plan operates on very much the same lines as the previous ones. However, there are some important changes in detail in the main features of the plan which are set out below.

The plan operates for five years. It commenced with the 1963-64 wheat crop and will end with the marketing of the 1967-68 crop.

The *Wheat Export Charge Act* 1963 repealed the *Wheat Export Charge Act* 1958 and provided for an export charge on wheat and wheat products for the seasons 1963-64 to 1967-68 inclusive. The charge which may be levied is the excess of the export price over the cost of production or 15 cents a bushel, whichever is the less. The Commonwealth has guaranteed a return to growers applying to a maximum of 150 million bushels of wheat exported from each crop during the period of the plan. The guaranteed return is based on the findings of a survey of the economic structure of the wheat industry conducted by the Bureau of Agricultural Economics. It is subject to adjustment in each year of the plan in accordance with movements in costs based on a cost index established from the survey. The guaranteed returns per bushel since the inception of the latest plan were: 1963-64, \$1.442; 1964-65, \$1.458; 1965-66, \$1.517; 1966-67, \$1.550. For the 1967-68 season the guaranteed return has been fixed at \$1.640 per bushel. The ceiling of the stabilisation fund is established at \$60 million; any excess beyond this figure is returned to growers on the 'first-in, first-out' principle. Collections from the wheat export charge are paid into the Wheat Prices Stabilization Fund, out of which payments will be made to the Australian Wheat Board, when required, for the purpose of building up the average export price, for any season, to the guaranteed price. When the average export realisations fall below the guaranteed return the deficiency is made up first by drawing upon the stabilisation fund in respect of up to 150 million bushels of wheat from each crop. If the fund is exhausted, additional payments will be made from the Consolidated Revenue Fund. As the return from exports has been below the guaranteed price, there have been no collections of the wheat export charge since the 1956-57 (No. 20) Pool when \$3,178,000 was collected. In fact, growers' moneys in the Fund were exhausted with the closure of the 1959-60 Pool, and since then the Commonwealth has been obliged to meet its commitment in respect of the export guarantee. Up to the closure of the 1965-66 Pool this has involved an amount totalling \$97 million.

The Australian Wheat Board is retained as the sole constituted authority for the marketing of wheat within Australia and for the marketing of wheat and flour for export from Australia for the period of the plan.

The home consumption base price for 1963-64, the first year of the new plan, was established at \$1.442 a bushel, bulk basis, f.o.r. ports, plus 1.66 cents a bushel loading to cover the cost of transporting wheat to Tasmania. (Provision is made for a loading on the price of all wheat sold for consumption in Australia to the extent necessary to cover the cost of transporting wheat from the mainland to Tasmania in each season of the plan.) There is provision in the plan for annual adjustments in the following years in accordance with the guaranteed price as outlined above. The home consumption price was \$1.533 a bushel for the 1965-66 season, \$1.565 a bushel for the 1966-67 season and is \$1.655 for the 1967-68 season. These prices include a loading of 1.5 cents per bushel to meet freight charges on wheat shipped to Tasmania.

A premium is paid from export realisations on wheat grown in Western Australia and exported from that State, in recognition of the natural freight advantage enjoyed by Western Australia owing to its proximity to the principal overseas markets for wheat. The premium is the amount of the actual freight advantage enjoyed by Western Australia up to a maximum of 2.5 cents a bushel.

#### Wheat standards

A description of the F.A.Q. (fair average quality) standard of wheat which was formerly in use is given in issues of the Year Book up to No. 53 (*see*, for example No. 53 page 902). Australian wheat is now marketed under eleven different and distinct classifications. Each reflects the climatic and growing characteristics of its region of origin and also the particular characteristics of the varieties of wheat cultivated.

For each classification, samples of wheat are obtained each year and are mixed to give a representative sample of that grade. From these samples, which are representative of all the wheat of a particular classification grown in that region, standards for each grade are established; the bushel weight is determined by the use of the Schopper 1-litre scale chondrometer. This standard is used as the basis for sales of each grade and varies from year to year and from State to State. The eleven different grades of wheat are:

- Queensland prime hard
- New South Wales prime hard
- South Australian hard
- Queensland F.A.Q.
- New South Wales northern F.A.Q.
- New South Wales southern-western F.A.Q.
- Victorian F.A.Q.
- South Australian F.A.Q.
- Western Australian F.A.Q.
- Western Australian soft
- Victorian soft

The six F.A.Q. grades, while possessing some characteristics in common, vary in protein content, milling characteristics, and dough qualities, and all are distinct grades. Similarly, the prime hard, hard, and soft grades are individual grades segregated for specific end uses.

Australia currently produces a full range of wheats for all purposes from high protein hard wheats to low protein soft wheats.

#### Bulk handling and storage of wheat

A detailed description of the bulk handling system, including its advantages and disadvantages compared with other methods of handling, appears on pages 954-8 of Year Book No. 39.

New South Wales, Victoria and Western Australia have operated bulk handling systems for a number of years, and in more recent years other States have also introduced bulk systems. The bodies concerned with the administration of bulk handling in the various States are: Grain Elevators Board of New South Wales, Victorian Grain Elevators Board, State Wheat Board (Queensland), South Australian Co-operative Bulk Handling Ltd., Co-operative Bulk Handling Ltd. (Western Australia), and the Tasmanian Grain Elevators Board.

**WHEAT: TOTAL CAPACITY OF BULK HANDLING FACILITIES(a)**  
**STATES, 30 NOVEMBER 1963 TO 1967**  
(<sup>'000</sup> bushels)

State	1963	1964	1965	1966	1967
New South Wales . . . . .	87,046	93,727	104,852	117,472	135,057
Victoria(b) . . . . .	86,253	90,247	97,132	101,302	103,812
Queensland . . . . .	11,081	13,178	15,956	19,213	24,987
South Australia . . . . .	28,370	35,483	39,685	43,328	40,798
Western Australia . . . . .	99,535	115,438	128,175	134,898	144,487
Tasmania . . . . .	960	960	1,060	1,060	1,060
<b>Australia . . . . .</b>	<b>313,245</b>	<b>349,033</b>	<b>386,860</b>	<b>417,273</b>	<b>450,201</b>

(a) Includes terminals, sub-terminals, country installations, and temporary storage.  
southern New South Wales operated by the Victorian Grain Elevators Board.

(b) Includes storage in

Particulars of the operation of the bulk handling and storage systems in each State are set out on pages 916 and 917 of Year Book No. 48.



### International Wheat Agreement

Details of the first and second International Wheat Agreements operative from 1 August 1949 to 31 July 1953, and from 1 August 1953 to 31 July 1956, respectively, were published in Year Book No. 42 (see pages 840-1) or previous issues. Details of the third and fourth International Wheat Agreements which covered the period from 1 August 1956 to 31 July 1959 and 1 August 1959 to 31 July 1962 were published in Year Books 43 (page 836) and 48 (page 906), respectively.

A fifth International Wheat Agreement, ratified by the required number of wheat exporting and importing countries, came into force on 1 August 1962. This was intended to cover the three-year period from 1 August 1962 to 31 July 1965, but at a special meeting held in February 1965 the International Wheat Council adopted the text of a protocol providing for the prolongation of the Agreement, without amendment, to 31 July 1966. The Council stated that it recognised the need for the maintenance of institutional arrangements to provide for continuing international co-operation in wheat matters, and that, following its decision to recommend a one-year extension of the existing agreement, it had given immediate consideration to preparatory work designed to ensure effective arrangements to follow the expiry of the term of the protocol. The Agreement was subsequently extended by protocol to 31 July 1967 and, with respect to its administrative provisions only, for a further year to 31 July 1968.

### International Grains Arrangement

In August 1967 agreement was reached on a new International Grains Arrangement to operate for a period of three years from 1 July 1968. The new arrangement consists of two legal instruments, the Wheat Trade Convention and the Food Aid Convention.

The Wheat Trade Convention seeks to continue the orderly marketing arrangements which have been developed over a series of International Wheat Agreements, whilst introducing a number of important new elements and improvements. It preserves the institutional and administrative structures of previous wheat agreements and will be administered by the International Wheat Council and its Secretariat.

The convention goes further than earlier wheat agreements in regard to pricing provisions. In contrast with previous agreements, which specified minimum and maximum prices for only one type of wheat, the convention specifies minimum and maximum prices for fourteen types. The basic wheat is now United States Hard Red Winter No. 2 Ordinary Protein, the minimum price for which has been fixed at \$US1.73 per bushel f.o.b. from loading ports in the Gulf of Mexico. The minimum price per bushel for No. 1 Manitoba Northern Wheat is now \$US1.955 f.o.b. Gulf ports, and for Australian f.a.q. wheat \$US1.68 f.o.b. Gulf ports. It is estimated that, after allowing for quality differentials and for the change in geographical basing points, the general level of minimum prices is approximately 19 US cents per bushel above the minimum prices in the 1962 International Wheat Agreement. The maximum price for each type of wheat is 40 US cents above the minimum.

The convention provides for the establishment of a Prices Review Committee, on which Australia is represented. The committee will conduct a continuous review of world wheat prices and is empowered to initiate action to restore market stability when prices approach the agreed limits.

The convention continues the arrangement in the 1962 agreement whereby the member importing countries undertake to buy each year from the member exporting countries a specified percentage of their total commercial purchases of wheat. Exporting countries undertake that wheat will be made available at prices consistent with the price range and will not be sold below minimum prices to any purchaser whether a member of the arrangement or not. Member countries importing wheat from non-member countries undertake to do so at prices consistent with the price range. When prices are at the maximum of the range, exporters agree to supply to member importing countries, at prices not above the maximum, certain minimum quantities of wheat based on the importing country's historical purchases. A provision is also included under which member countries undertake to conduct any concessional transactions in grains in such a way as to avoid harmful interference with normal patterns of commercial trade.

The Food Aid Convention provides for a programme of food aid to developing countries amounting in total to 4.5 million metric tons of grains for human consumption in each of the three years of the arrangement. Australia's contribution has been fixed at 225,000 metric tons annually (8,267,000 bushels) which is approximately 5 per cent of the total contribution. Donor countries are free to specify the country or countries to which the grain may be supplied.

### Research into the wheat industry

The extension and growth of the wheat industry in the past has been made possible to a large extent through research into new varieties of seed, crop rotation and fertiliser treatments by governmental, university and private research organisations. In recent years there has been a growing awareness of the value of this research, and funds are being raised by a direct levy on the growers' returns.

The *Wheat Tax Act* 1957 imposed a tax of 0.21 cents for each bushel of wheat:

- (a) which was delivered to the Wheat Board on or after the first day of October 1956 and before the date of commencement of the Act, or
- (b) which was delivered to the Wheat Board on or after that date.

The Act was amended in October 1965 to become the *Wheat Tax Act 1957-1965* to provide for an increase in the rate of taxation from 0.21 cents to 0.25 cents for each bushel of wheat delivered to the Board on or after 1 October 1965. The *Wheat Research Act 1957* provided for the establishment of a Wheat Research Trust Account to receive moneys payable under the *Wheat Tax Act 1957* and for the setting up of a Wheat Industry Research Council to direct the expenditure of moneys from that account for research, etc. to benefit the wheat industry. This money, contributed by the growers, is being spent by the Wheat Industry Research Committees set up in the wheat-growing States. These Committees, which consist of representatives of wheatgrowers, universities and State Departments of Agriculture, also received a total of \$568,000 under the provisions of the *Wheat Acquisition (Undistributed Moneys) Act 1958*.

The Commonwealth Government has undertaken to supply additional funds for research (with a maximum of \$1 for \$1 against the growers' contribution) and has set up the Wheat Industry Research Council to make recommendations on the appropriate expenditure of the Commonwealth contribution. The Council, at its inaugural meeting in February 1958, considered that possible avenues of research would include the breeding of better varieties, cereal chemistry, soil fertility, mechanisation, the industry's cost structure, and marketing problems. To the end of June 1967 the Council and the State Committees had spent \$9,541,000, including grants to the Commonwealth Scientific and Industrial Research Organization, State Departments of Agriculture, universities, and agricultural colleges.

#### Wheat farms: number and classification by activity

Particulars of the number of farms growing twenty acres and upwards of wheat for grain during each of the years 1962-63 to 1966-67 are shown in the following table. A farm worked on the share system or as a partnership is included as one holding only.

NUMBER OF FARMS GROWING TWENTY ACRES AND UPWARDS  
OF WHEAT FOR GRAIN: STATES AND A.C.T., 1962-63 TO 1966-67

State or Territory	1962-63	1963-64	1964-65	1965-66	1966-67
New South Wales . . . . .	18,286	17,753	18,537	16,150	19,575
Victoria . . . . .	12,166	11,370	11,981	11,355	11,202
Queensland . . . . .	5,095	4,927	5,236	4,941	5,674
South Australia . . . . .	9,881	9,902	9,657	9,387	9,419
Western Australia . . . . .	8,966	8,983	8,779	9,044	8,897
Tasmania . . . . .	243	251	255	213	194
Australian Capital Territory . . . . .	27	29	20	13	25
<b>Australia . . . . .</b>	<b>54,664</b>	<b>53,215</b>	<b>54,465</b>	<b>51,103</b>	<b>54,986</b>

There is in Australia a widespread combination of wheat growing with other rural activities. This is illustrated, for all States and for Australia, in respect of the 1965-66 season, in a series of statistical bulletins: *Classification of Rural Holdings by Size and Type of Activity*, 1965-66, Nos 1 to 7. These publications also contain details of numbers of rural holdings classified according to area of wheat for grain.

#### Varieties of wheat sown

The breeding of wheat suitable to local conditions has long been established in Australia. Farrer (1845-1905) did invaluable work in pioneering this field, and the results of his labour and the continued efforts of those who have followed him have proved of immense benefit to the industry. Their efforts have resulted in the development of disease-resistant varieties, better average yields, and a greater uniformity of sample, with which have accrued certain marketing advantages, as well as an improvement in the quality of wheat grown. More than 1,000 different varieties of Australian wheats have been catalogued by the Commonwealth Scientific and Industrial Research Organization, but the number of principal varieties grown in any one season is restricted to about forty-five.

The principal varieties of wheat sown and the percentage of each to the total area sown in the five main wheat-producing States of Australia in 1966-67 were as follows: New South Wales, Heron (23.1), Falcon (12.9), Olympic (11.3); Victoria, Insignia (48.3), Olympic (23.5), Pinnacle (16.5); Queensland, Mendos (34.0), Spica (25.0), Gamut (9.0); South Australia, Insignia (including Insignia 49) (34.4), Heron (23.4), Gabo (9.9); and Western Australia, Gamenya (38.5), Insignia (15.2), Insignia 49 (9.6). A detailed table of wheat varieties sown appears in the annual bulletin *The Wheat Industry* (see No. 112, published in February 1968).

**Wheat area, production and yield per acre**

Prominent factors in the early development of the wheat industry were the increase in population following the discovery of gold and the redistribution of labour after the surface gold had been won. The economic depression of 1893 interrupted its progress, but its subsequent recovery was assisted by the invention of mechanical appliances, the use of superphosphates as an aid to production, and the introduction of new and more suitable varieties of wheat for Australian conditions. The establishment of closer settlement schemes and the settling of returned soldiers and others on the land were additional factors in its expansion.

**WHEAT FOR GRAIN: AREA, PRODUCTION AND YIELD PER ACRE  
STATES AND AUSTRALIAN CAPITAL TERRITORY, 1936-37 TO 1966-67**

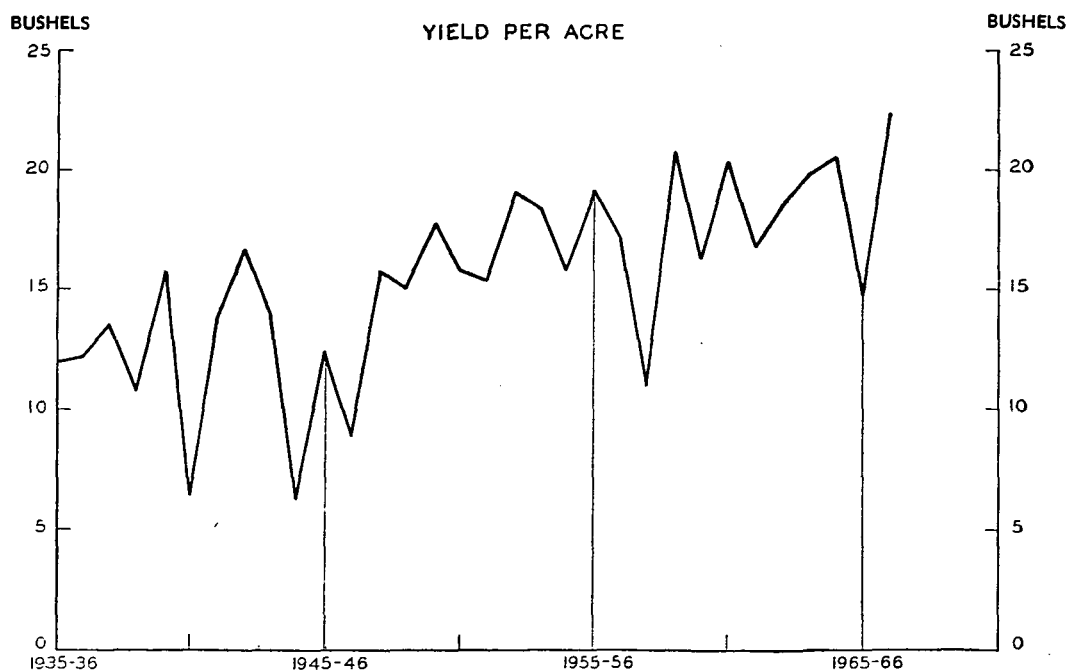
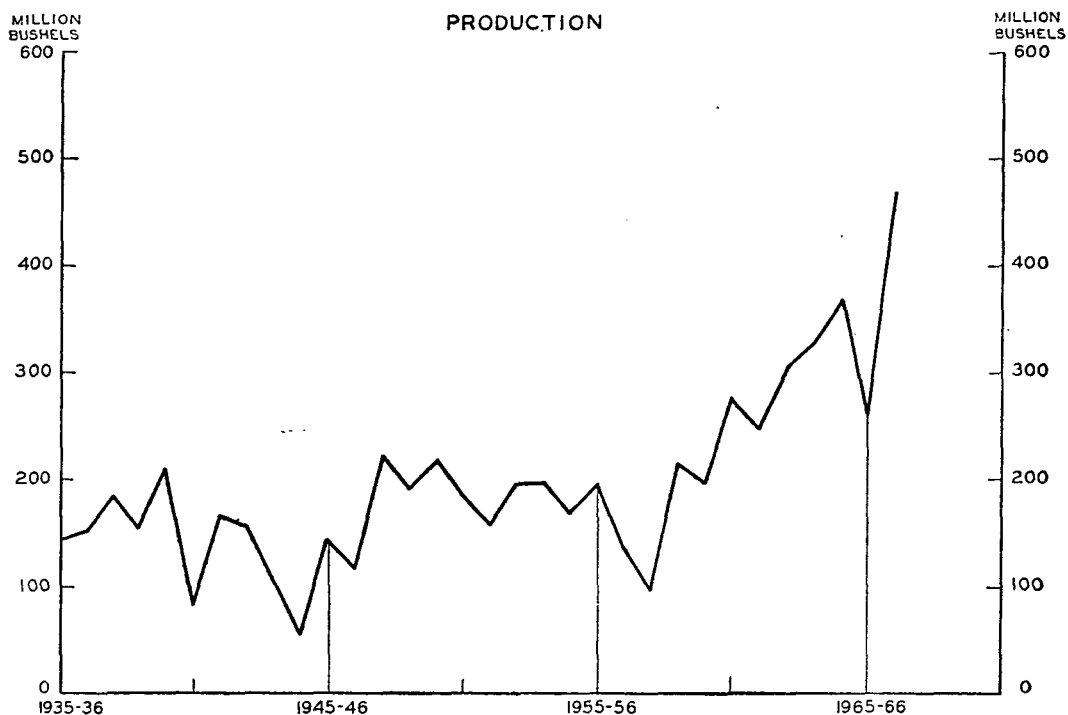
<i>Period</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>A.C.T.</i>	<i>Aust.</i>
<b>AREA ('000 ACRES)</b>								
<b>Average for three years ended—</b>								
1938-39 . .	4,366	2,609	366	3,100	3,005	18	2	13,466
1948-49 . .	4,519	3,241	439	2,319	2,685	7	4	13,214
1958-59 . .	2,392	1,737	508	1,392	3,005	5	1	9,040
<b>Year—</b>								
1962-63 . .	5,008	3,125	919	2,595	4,804	15	3	16,469
1963-64 . .	4,964	3,109	938	2,802	4,640	18	3	16,474
1964-65 . .	5,760	3,236	1,026	2,727	5,151	17	2	17,919
1965-66 . .	4,577	3,074	954	2,745	6,150	14	1	17,515
1966-67 . .	7,135	3,138	1,227	2,960	6,347	13	3	20,823
<b>PRODUCTION ('000 BUSHEL)(a)</b>								
<b>Average for three years ended—</b>								
1938-39 . .	56,890	36,374	4,783	34,606	31,539	434	45	164,671
1948-49 . .	58,537	48,332	8,569	28,856	31,517	138	78	176,027
1958-59 . .	35,178	36,705	9,938	26,126	40,950	135	15	149,047
<b>Year—</b>								
1962-63 . .	109,002	67,899	18,683	38,339	72,500	419	70	306,912
1963-64 . .	122,472	76,302	22,275	53,971	52,340	483	69	327,912
1964-65 . .	151,483	78,166	22,830	52,817	63,071	364	58	368,789
1965-66 . .	39,117	60,591	17,429	39,976	102,156	368	28	259,666
1966-67 . .	202,501	70,896	35,730	53,816	103,195	385	87	466,610
<b>YIELD PER ACRE (BUSHEL)(a)</b>								
<b>Average for three years ended—</b>								
1938-39 . .	13.0	13.9	13.1	11.2	10.5	24.1	22.5	12.2
1948-49 . .	13.0	14.9	19.5	12.4	11.7	19.7	19.5	13.3
1958-59 . .	14.7	21.1	19.6	18.8	13.6	24.7	15.0	16.5
<b>Year—</b>								
1962-63 . .	21.8	21.7	20.3	14.8	15.1	27.3	29.3	18.6
1963-64 . .	24.7	24.5	23.8	19.3	11.3	27.5	24.6	19.9
1964-65 . .	26.3	24.2	22.3	19.4	12.2	21.7	27.6	20.6
1965-66 . .	8.5	19.7	18.3	14.6	16.6	26.1	20.8	14.8
1966-67 . .	28.4	22.6	29.1	18.2	16.3	30.2	32.5	22.4

(a) 60 lb per bushel.

A graph showing the area sown to wheat for grain in Australia since 1900-1 appears on plate 53 of this Year Book, and a map showing the distribution of areas growing wheat for grain throughout Australia in 1962-63 appears on page 1013 of Year Book No. 50. Similar maps showing the distribution of wheat areas in 1924-25, 1938-39, 1947-48, and 1954-55 appeared respectively in Year Books No. 22, page 695, No. 34, page 451, No. 39, pages 977-8, and No. 43, page 833.

# WHEAT FOR GRAIN: AUSTRALIA

## 1935-36 to 1966-67



Apart from the variations in the area sown, the size of the wheat harvest in Australia is determined largely by the nature of the season, resulting in considerable year-to-year fluctuations in production. The main wheat-producing States of Australia are New South Wales, Victoria, South Australia, and Western Australia. Tasmania imports wheat from the mainland to satisfy its needs, though it exports flour made from local wheat which is particularly suitable for biscuits.

Area, production, and yield per acre of wheat for Australia in respect of the 1966-67 crop were at record levels. Production exceeded by 27 per cent the previous highest figure, for the year 1964-65. It was 80 per cent greater than production in 1965-66, when the crop was seriously affected by drought conditions in New South Wales and Queensland.

The following table shows the average area, production and yield per acre for decennial periods since 1861 together with similar details for the latest season, 1966-67. Repeated cropping and short rotations (mainly in the eastern States) are believed to have led to the decline in yield to 1900, while fallowing and the widespread use of artificial fertilisers contributed to the increased yields in the decade following. The increase in yield since 1950 has been generally ascribed to the impact of improved pastures and ley-farming (broadly, the alternation of crops and pastures) upon soil fertility in wheat-growing areas. The production and yield per acre of wheat for each year from 1935-36 to 1966-67 are shown on plate 54, page 873.

**WHEAT FOR GRAIN: AVERAGE AREA AND PRODUCTION  
AUSTRALIA, 1861 TO 1966-67**

<i>Period</i>	<i>Area</i>	<i>Production</i>	<i>Yield per acre</i>
	'000 acres	'000 bushels	bushels
Yearly average—			
1861-70 . . . . .	831	10,622	12.8
1871-80 . . . . .	1,646	17,711	10.8
1881-90 . . . . .	3,258	26,992	8.3
1891-1900 . . . . .	4,087	29,934	7.3
1901-10 . . . . .	5,711	56,058	9.8
1911-20 . . . . .	8,928	95,480	10.7
1921-30 . . . . .	11,291	135,400	12.0
1931-40 . . . . .	14,176	177,758	12.5
1941-50 . . . . .	11,358	145,599	12.8
1951-60 . . . . .	10,164	173,622	17.1
Year—			
1966-67 . . . . .	20,823	466,610	22.4

#### Price of wheat

The prices charged by the Australian Wheat Board for wheat sold to millers for gristing into flour for consumption in Australia and for wheat sold as stock feed were as follows: year ended 30 November 1964, \$1.46; 1965, \$1.47; 1966, \$1.53; 1967, \$1.57; and 1968, \$1.66. These prices include a loading to meet freight charges incurred on wheat shipped to Tasmania (1.66 cents in 1964; 0.83 cents in 1965; 1.66 cents in 1966; and 1.50 cents in 1967 and 1968).

The Wheat Board's monthly basic export selling prices for f.a.q. bulk wheat f.o.b. basis, both for wheat sold under the International Wheat Agreement and for 'free' wheat sold on the open market, fell in the following ranges; season ended 31 July 1964, \$1.43 to \$1.58; 1965, \$1.35 to \$1.52; 1966, \$1.38 to \$1.51; 1967, \$1.49 to \$1.60.

The 1962 International Wheat Agreement, operative from 1 August 1962 to 31 July 1967, set the maximum price at \$US2.025 a bushel and the minimum at \$US1.625 for f.a.q. wheat sold under the Agreement. Under the new International Grains Arrangement, which is operative from 1 July 1968, provision has been made for minimum and maximum prices for fourteen types of wheat, the basic wheat being United States Hard Red Winter No. 2 Ordinary Protein, the minimum price for which has been fixed at \$US1.73 per bushel. The minimum price per bushel for No. 1 Manitoba Northern Wheat is now \$US1.955 and for Australian f.a.q. wheat \$US1.68 (see page 870 for a description of the International Grains Arrangement).

Details of export prices of wheat in previous years, including those received for wheat sold under the terms of the 1949-1953 International Wheat Agreement, are given in Year Book No. 40, pages 849-50, and in the statistical bulletin *The Wheat Industry, Australia*, No. 99, March 1961, and in previous issues of these publications.

#### Value of the wheat crop

The estimated gross value of the wheat crop in each State and in Australia during the season 1966-67 and the value per acre are shown below.

#### WHEAT FOR GRAIN: VALUE OF CROP(a), STATES, 1966-67

		N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	Aust. (b)
Aggregate value	\$'000	299,201	104,471	52,759	79,612	153,157	552	689,880
Value per acre	\$	41.93	33.29	43.00	26.90	24.13	42.46	33.13

(a) Gross value of total crop, including wheat used for seed and for stock feed on farms. Also includes payment of \$15,508,000 by the Commonwealth Government. (b) Includes the Australian Capital Territory.

#### Production and disposal of wheat in Australia

In the following tables details are given of Australian Wheat Board transactions and of total production and disposal of wheat during each of the years ended 30 November 1963 to 1967.

#### AUSTRALIAN WHEAT BOARD WHEAT RECEIVED, STATES, 1962-63 TO 1966-67 HARVESTS (<sup>'000</sup> bushels)

Pool	Harvest	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	Aust.
26	1962-63	98,677	67,215	17,537	35,120	66,898	275	285,722
27	1963-64	110,722	77,728	20,330	51,660	47,071	325	307,836
28	1964-65	137,495	80,685	20,712	49,991	57,440	188	346,511
29	1965-66	27,558	60,923	13,701	36,160	95,837	217	234,396
30	1966-67	184,644	74,614	32,884	50,007	96,823	247	439,219

Stocks of wheat (including flour in terms of wheat) held by the Australian Wheat Board in each State at 30 November for the years 1963 to 1967 are shown in the following table. These data relate to stocks held at mills, sidings, ports, and depots as recorded by the Australian Wheat Board.

#### AUSTRALIAN WHEAT BOARD: STOCKS(a) OF WHEAT (INCLUDING FLOUR IN TERMS OF WHEAT), STATES, 30 NOVEMBER 1963 TO 1967 (<sup>'000</sup> bushels)(b)

Year	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	Aust.
1963	10,879	7,000	775	1,775	2,221	625	23,275
1964	7,340	7,490	806	3,048	1,257	472	20,413
1965	15,265	3,716	862	2,602	1,556	382	24,383
1966	3,406	6,020	343	2,623	3,626	529	16,547
1967	43,128	22,710	554	8,066	5,180	542	80,180

(a) Held at mills, sidings, ports and depots. Excludes new season's wheat received from growers prior to 30 November of years shown. (b) One short ton (2,000 lb) of flour is taken as being equivalent to 46.3 bushels of wheat.

Particulars of the disposal of wheat during the years ended 30 November 1963 to 1967, as recorded by the Australian Wheat Board, are shown in the following table.

**AUSTRALIAN WHEAT BOARD: DISPOSAL OF WHEAT, 1963 TO 1967**  
(<sup>'000</sup> bushels)

	<i>Year ended 30 November—</i>				
	1963	1964	1965	1966	1967
Exported as wheat . . . . .	203,703	221,530	243,725	158,104	293,958
Exported as flour(a) . . . . .	24,903	31,797	23,318	16,615	19,329
Sold for local consumption as flour	40,389	42,954	44,160	44,164	43,845
Sold for other purposes . . . . .	10,791	13,658	30,556	22,705	17,384

(a) Includes wheat equivalent of manufactured wheat products exported.

A summary of *all* transactions in wheat for Australia, as distinct from those recorded for the Wheat Board above, appears in the following table.

**WHEAT: PRODUCTION AND DISPOSAL, AUSTRALIA, 1963 TO 1967**  
(million bushels)(a)

	<i>Year ended 30 November—</i>				
	1963	1964	1965	1966	1967
Opening stocks (including flour) (b)(c)(d) . . . . .	17.7	23.3	20.4	24.4	16.5
Production . . . . .	306.9	327.9	368.8	259.7	466.6
<i>Total available supplies</i> . . . . .	<i>324.6</i>	<i>351.2</i>	<i>389.2</i>	<i>284.1</i>	<i>483.1</i>
Exports—					
Wheat . . . . .	200.4	221.6	244.5	163.2	294.0
Flour(b) . . . . .	25.1	34.4	23.8	16.2	21.1
Breakfast foods and other products(b)(d)	0.7	0.7	0.7	0.7	0.9
Local consumption—					
Flour(b)(d) . . . . .	40.4	43.0	44.2	44.2	43.8
Breakfast foods and other products(b)(d)	1.7	1.7	1.9	2.4	1.8
Stock feed wheat sales(d) . . . . .	9.1	12.0	28.7	20.3	15.6
Seed . . . . .	15.4	16.6	16.3	19.1	23.1
Retained on farm (excluding seed) . . . . .	5.8	3.4	6.0	6.2	4.3
Closing stocks (including flour)(b)(c)(d) . . . . .	23.3	20.4	24.4	16.5	80.2
<i>Total disposals</i> . . . . .	<i>321.9</i>	<i>353.8</i>	<i>390.5</i>	<i>288.8</i>	<i>484.8</i>
Excess (+) or deficiency (—) of disposals in relation to available supplies(e) . . . . .	—2.7	+2.6	+1.3	+4.7	+1.7

(a) One short ton (2,000 lb) of flour is taken as being equivalent to 46.3 bushels of wheat. (b) In terms of wheat. (c) Held at ports, depots, mills, and sidings. (d) Source: Australian Wheat Board. (e) Includes allowance for unrecorded movements in stocks, gain or loss in out-turn, etc.

The *Wheat Industry Stabilization Act* 1948 empowered the Minister to arrange with the Commonwealth Bank for advances to the Board, the advances being guaranteed by the Commonwealth Government. These provisions have been continued in the subsequent legislation, with the exception that advances are now arranged through the Reserve Bank.

**AUSTRALIAN WHEAT BOARD: FINANCIAL OPERATIONS, POOLS NOS 26 TO 30**  
(**\$'000**)

	<i>No. 26 Pool</i>	<i>No. 27 Pool</i>	<i>No. 28 Pool</i>	<i>No. 29 Pool (a)</i>	<i>No. 30 Pool (a)</i>
	<i>(1962-63 Harvest)</i>	<i>(1963-64 Harvest)</i>	<i>(1964-65 Harvest)</i>	<i>(1965-66 Harvest)</i>	<i>(1966-67 Harvest)</i>
Paid to growers . . . . .	351,972	373,254	409,337	288,983	451,471
Rail freight . . . . .	45,358	49,270	57,765	34,605	76,536
Expenses . . . . .	20,552	17,990	21,298	20,219	33,541
<i>Total payments . . . . .</i>	<i>417,882</i>	<i>440,514</i>	<i>488,400</i>	<i>343,807</i>	<i>561,548</i>
Value of sales delivered . . . . .	(b)395,842	(c)439,262	(d)471,052	(e)335,647	(f)635,977

(a) Incomplete. (b) Subject to additional \$22,634,000 provided by the Commonwealth Government and payment of \$594,000 to Wheat Industry Research Fund. (c) Subject to additional \$1,892,000 provided by the Commonwealth Government and payment of \$640,000 to Wheat Industry Research Fund. (d) Subject to additional \$18,069,000 provided by the Commonwealth Government and payment of \$722,000 to Wheat Industry Research Fund. (e) Subject to additional \$16,154,000 provided by the Commonwealth Government and payment of \$586,000 to Wheat Industry Research Fund. (f) Subject to additional \$15,508,000 provided by the Commonwealth Government and payment of \$1,097,000 to Wheat Industry Research Fund.

Details of earlier pools will be found in previous issues of the Year Book.

#### Imports of wheat

Wheat and flour have been imported in substantial quantities on three occasions since 1900; in 1902-3 the wheat harvest was only 12,378,000 bushels, and wheat and flour equivalent to 12,468,000 bushels of wheat were imported. An equivalent of 7,279,000 bushels was imported in 1914-15 to supplement the yield of 25 million bushels produced in that season. Owing to drought conditions in 1957-58 supplies of high protein wheat were insufficient for local requirements and, as a result, 1,485,000 bushels were imported from Canada in 1958. No wheat has since been imported.

#### Exports of wheat and flour

Statistics in the following three tables are for years ended 30 June and relate to the exports of *Australian produce* only.

**WHEAT AND FLOUR: EXPORTS, AUSTRALIA, 1962-63 TO 1966-67**

Year	Quantity				Value		
	Wheat	Flour		Total (in terms of wheat)	Wheat	Flour (a)	Total
		As flour (a)	In terms of wheat (b)				
	'000 bushels	short tons	'000 bushels	'000 bushels	\$'000 f.o.b.	\$'000 f.o.b.	\$'000 f.o.b.
1962-63 . . . . .	151,970	544,441	25,208	177,178	216,904	32,660	249,565
1963-64 . . . . .	253,724	714,939	33,102	286,826	362,018	43,758	405,776
1964-65 . . . . .	209,980	598,037	27,689	237,669	297,199	39,122	336,321
1965-66 . . . . .	189,479	416,201	19,270	208,749	264,062	26,526	290,588
1966-67 . . . . .	239,051	379,348	17,564	256,615	361,227	24,600	385,827

(a) White flour (plain and self-raising), sharps and wheatmeal for baking. (b) One short ton (2,000 lb) of flour is taken as being equivalent to 46.3 bushels of wheat.



**WHEAT: EXPORTS TO VARIOUS COUNTRIES, AUSTRALIA, 1962-63 TO 1966-67**  
(<sup>'000</sup> bushels)

<i>Country to which exported</i>	<i>1962-63</i>	<i>1963-64</i>	<i>1964-65</i>	<i>1965-66</i>	<i>1966-67</i>
China (mainland) . . . . .	76,230	93,440	83,623	74,131	79,523
Pakistan . . . . .	5,596	2,044	2,173	1,569	25,863
Japan . . . . .	12,673	18,800	16,276	13,357	15,851
India . . . . .	7,144	7,572	17,543	6,650	14,721
United Kingdom . . . . .	16,317	28,146	19,132	23,293	14,233
South Africa . . . . .	2,019	..	3	2,209	10,473
Malaysia . . . . .	560	149	(a) 3,669	(a) 3,758	9,244
Singapore . . . . .	32	1,588	(b)	(b) 4,479	7,403
Lebanon . . . . .	3,131	5,274	2,725	1,157	5,130
Iraq . . . . .	..	4,876	2,450	45	4,902
Netherlands . . . . .	..	..	..	..	4,406
Norway . . . . .	2,739	4,169	2,830	702	4,142
Other(c) . . . . .	25,529	87,666	59,556	58,129	43,160
<b>Total . . . . .</b>	<b>151,970</b>	<b>253,724</b>	<b>209,980</b>	<b>189,479</b>	<b>239,051</b>

(a) Includes Singapore from 1 July 1964 to 30 September 1965. (b) Included in Malaysia from 1 July 1964 to 30 September 1965. (c) Includes particulars which could not be classified to countries and shipments made 'for orders'.

The following table shows the exports of flour to various countries for each of the years 1962-63 to 1966-67. The figures relate to exports of white flour (plain and self-raising), sharps and wheatmeal for baking.

**FLOUR: EXPORTS TO VARIOUS COUNTRIES, AUSTRALIA, 1962-63 TO 1966-67**  
(Short tons)

<i>Country to which exported</i>	<i>1962-63</i>	<i>1963-64</i>	<i>1964-65</i>	<i>1965-66</i>	<i>1966-67</i>
Ceylon . . . . .	103,503	115,273	191,144	170,083	144,982
South Arabia, Federation of . . . . .	38,914	40,675	44,990	29,968	25,272
Indonesia . . . . .	5,525	5,080	9,124	3,086	24,766
Fiji . . . . .	29,554	37,993	34,915	34,219	24,642
India . . . . .	14	18	86	162	21,084
United Kingdom . . . . .	66,641	48,744	45,579	33,075	19,411
Papua and New Guinea . . . . .	10,369	11,516	13,871	14,889	16,139
Mauritius . . . . .	14,011	21,279	19,847	11,817	12,147
Saudi Arabia . . . . .	16,211	12,564	15,822	16,692	12,111
Malaysia . . . . .	95,865	95,545	(a) 97,560	(a) 32,344	9,189
Other(b) . . . . .	163,834	326,252	125,099	69,866	69,605
<b>Total . . . . .</b>	<b>544,441</b>	<b>714,939</b>	<b>598,037</b>	<b>416,201</b>	<b>379,348</b>

(a) Includes Singapore from 1 July 1964 to 30 September 1965. (b) Includes particulars which could not be classified to countries and shipments made 'for orders'.

### World area and production of wheat

The figures in the following table of the world area and production of wheat by principal countries and by continents have been compiled from the statistics published by the International Wheat Council. Harvests in the northern hemisphere occur in the first of the two years mentioned in each column heading, and in the southern hemisphere at the end of that year and the beginning of the next. Harvests of the northern hemisphere countries are thus combined with those of the southern hemisphere which immediately follow; e.g. in 1966-67 the Canadian harvest occurred from August to September 1966 and the Australian harvest from September 1966 to February 1967.

### WHEAT: AREA, PRODUCTION AND YIELD PER ACRE IN VARIOUS COUNTRIES 1964-65 TO 1966-67

(Source for countries other than Australia: International Wheat Council—World Wheat Statistics)

Continent and country	Area			Production			Yield per acre		
	1964-65	1965-66	1966-67	1964-65	1965-66	1966-67	1964-65	1965-66	1966-67
	'000 acres	'000 acres	'000 acres	mill. bus	mill. bus	mill. bus	bus	bus	bus
U.S.S.R. (Europe and Asia) .	167,749	173,477	172,866	2,734	2,190	3,693	16.3	12.6	21.4
Europe—									
France . . . . .	10,843	11,169	9,864	509	542	415	46.9	48.6	42.1
Italy . . . . .	10,892	10,596	10,561	316	359	345	29.0	33.9	32.7
Romania . . . . .	7,312	7,371	7,497	141	218	186	19.2	29.6	24.8
Spain . . . . .	10,237	10,519	10,371	146	173	177	14.2	16.5	17.1
Total, Europe(a) .	71,961	71,267	69,040	2,248	2,479	2,300	31.2	34.8	33.3
North and Central America—									
United States . . . . .	49,761	49,558	49,867	1,283	1,316	1,312	25.8	26.5	26.3
Canada . . . . .	29,684	28,281	29,692	600	649	827	20.2	22.9	27.9
Total, North and Central America(a) .	81,617	79,591	81,345	1,964	2,025	2,200	24.1	25.4	27.0
Asia—									
China (mainland)(b) .	63,011	61,034	60,500	849	790	739	13.5	12.9	12.2
India . . . . .	33,349	33,260	31,273	362	452	383	10.9	13.6	12.2
Turkey . . . . .	19,790	19,840	19,938	310	317	357	15.7	16.0	17.9
Pakistan . . . . .	12,543	13,272	12,874	154	170	145	12.3	12.8	11.3
Total, Asia(a) . .	152,535	150,163	148,418	2,019	2,099	1,954	13.2	14.0	13.2
Oceania—									
Australia . . . . .	17,919	17,515	20,823	369	260	467	20.6	14.8	22.4
Total, Oceania(a) .	18,103	17,714	21,058	378	270	479	20.9	15.3	23.3
South America—									
Argentina . . . . .	15,160	11,349	12,884	414	228	230	27.3	19.7	17.8
Total, South America(a)	20,485	16,136	17,396	510	315	308	24.9	19.2	17.7
Africa . . . . .	19,274	19,817	16,976	216	211	172	11.2	10.7	10.1
World total(a) . . .	531,722	528,159	527,098	10,067	9,589	11,104	18.9	18.1	21.1

(a) Includes allowances for any missing data for countries shown and for other producing countries not shown.  
b) International Wheat Council estimate.

### Principal wheat exporting and importing countries

The following table shows world exports of wheat and wheat flour (in terms of wheat) by the major wheat exporting countries, according to continents and countries of primary destination, based on statistics recently published by the International Wheat Council. While Australia's production of wheat has averaged about three per cent of the world's total during recent years, its exports account for a much higher proportion of the total quantities shipped. For the three years ended 1966-67 Australia's share of the world wheat exports has averaged 11 per cent.

**WORLD EXPORTS OF WHEAT AND WHEAT FLOUR IN TERMS OF WHEAT  
1962-63 TO 1966-67**

*(Source: International Wheat Council—World Wheat Statistics)*

*(Million bushels)*

<i>Year and country of primary destination</i>	<i>Exporting country</i>							
	<i>United States of America</i>	<i>Canada</i>	<i>Australia</i>	<i>U.S.S.R.</i>	<i>France</i>	<i>Argen- tina</i>	<i>Other</i>	<i>Total</i>
<b>1966-67p—</b>								
<b>Asia(a)—</b>								
India . . . . .	156.0	58.4	15.7	..	..	0.2	0.3	230.6
China (mainland) . . . . .	..	90.6	79.5	..	2.7	11.2	..	184.0
Japan . . . . .	78.5	59.5	15.8	..	..	..	..	153.8
Pakistan . . . . .	41.9	7.6	25.6	..	..	..	..	75.1
Korea, South . . . . .	30.0	..	..	..	..	..	..	30.0
Other . . . . .	77.5	7.0	59.5	12.4	12.3	0.4	23.3	192.4
<i>Total, Asia . . . . .</i>	<i>383.9</i>	<i>223.1</i>	<i>196.1</i>	<i>12.4</i>	<i>15.0</i>	<i>11.8</i>	<i>23.6</i>	<i>865.9</i>
<b>Europe(a)—</b>								
United Kingdom . . . . .	25.8	73.5	15.1	..	3.4	7.9	22.5	148.2
Poland . . . . .	5.6	16.8	..	23.8	13.7	..	4.6	64.5
Germany, East . . . . .	..	6.7	..	48.2	2.4	..	0.1	57.4
Germany, Federal Re- public of . . . . .	16.5	25.6	..	..	7.5	1.5	4.5	55.6
Czechoslovakia . . . . .	..	3.3	..	32.3	11.6	..	0.3	47.5
Italy . . . . .	8.2	9.8	..	..	6.6	11.8	0.4	36.8
Netherlands . . . . .	20.2	3.0	4.4	1.1	1.5	5.8	0.4	36.4
Belgium-Luxembourg . . . . .	5.9	14.8	..	0.1	2.6	0.7	0.2	24.3
France . . . . .	10.3	1.8	..	..	..	2.2	5.9	20.2
Other . . . . .	27.9	19.9	7.5	1.1	5.9	2.3	36.0	100.6
<i>Total, Europe . . . . .</i>	<i>120.4</i>	<i>175.2</i>	<i>27.0</i>	<i>106.6</i>	<i>55.2</i>	<i>32.2</i>	<i>74.9</i>	<i>591.5</i>
<b>Africa—</b>								
United Arab Republic . . . . .	34.0	..	1.9	19.7	1.5	..	25.7	82.8
Other . . . . .	88.1	12.6	19.1	7.9	30.1	2.1	13.9	173.8
<i>Total, Africa . . . . .</i>	<i>122.1</i>	<i>12.6</i>	<i>21.0</i>	<i>27.6</i>	<i>31.6</i>	<i>2.1</i>	<i>39.6</i>	<i>256.6</i>
<b>South America—</b>								
Brazil . . . . .	42.8	..	3.8	0.7	..	46.0	6.9	100.2
Other . . . . .	57.4	5.6	2.7	..	0.6	19.6	0.3	86.2
<i>Total, South America . . . . .</i>	<i>100.2</i>	<i>5.6</i>	<i>6.5</i>	<i>0.7</i>	<i>0.6</i>	<i>65.6</i>	<i>7.2</i>	<i>186.4</i>
<b>U.S.S.R.</b>		99.6	..	..	4.9	0.8	..	105.3
North and central America . . . . .	15.4	28.8	0.1	4.2	3.3	..	2.6	54.4
Oceania . . . . .	0.1	0.1	5.7	..	1.2	..	..	7.1
All other . . . . .	0.3	..	1.0	0.1	1.0	..	0.9	3.2
<b>World total, 1966-67 . . . . .</b>	<b>742.4</b>	<b>545.0</b>	<b>257.4</b>	<b>151.6</b>	<b>112.8</b>	<b>112.4</b>	<b>148.8</b>	<b>2,070.4</b>
<b>1965-66 . . . . .</b>	<b>859.7</b>	<b>545.0</b>	<b>208.7</b>	<b>80.9</b>	<b>175.7</b>	<b>292.0</b>	<b>134.0</b>	<b>2,296.0</b>
<b>1964-65 . . . . .</b>	<b>720.4</b>	<b>437.6</b>	<b>237.7</b>	<b>42.6</b>	<b>169.6</b>	<b>163.3</b>	<b>110.0</b>	<b>1,881.2</b>
<b>1963-64 . . . . .</b>	<b>848.7</b>	<b>554.4</b>	<b>287.1</b>	<b>47.1</b>	<b>98.5</b>	<b>102.0</b>	<b>134.3</b>	<b>2,072.1</b>
<b>1962-63 . . . . .</b>	<b>636.8</b>	<b>331.2</b>	<b>175.9</b>	<b>195.8</b>	<b>109.4</b>	<b>66.4</b>	<b>83.7</b>	<b>1,599.2</b>

*(a) Excludes U.S.S.R., details for which are shown separately.*

The above particulars are based on customs clearances of the exporting countries, and relate to years ended 30 June. There are small differences between Australian exports as shown and those on pages 877-8 due in part to the use by the International Wheat Council of a slightly different factor to convert flour to wheat equivalent.

## Oats

This cereal is widely grown in all agricultural areas which have autumn, winter and spring rainfall; it is tolerant of wet conditions and heavy soils. It has excellent feed value and produces a higher yielding crop than other winter cereals. It needs less cultivation, but requires ample fertiliser. Oats has a variety of uses—as a pasture plant when rough sown into stubble or heavy clover pastures, as silage if cut before maturity, as a hay crop when mown and baled or cut for chaff, or as a grain when stripped (the stubble then being grazed off). The grain is sold on a 'fair average quality' basis through voluntary pools in Victoria, South Australia and Western Australia.

**Oats area, production and yield per acre**

Oats is usually next in importance to wheat among the grain crops cultivated in Australia. However, while wheat grown for grain in 1966-67 accounted for 53 per cent of the area of all crops, oats grown for grain represented only 11 per cent.

**OATS FOR GRAIN: AREA, PRODUCTION AND YIELD PER ACRE  
STATES AND AUSTRALIAN CAPITAL TERRITORY, 1936-37 TO 1966-67**

<i>Period</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>A.C.T.</i>	<i>Aust.</i>
<b>AREA ('000 ACRES)</b>								
Average for three years ended—								
1938-39 . . .	297	478	8	338	425	26	..	1,572
1948-49 . . .	515	548	21	282	484	17	1	1,868
1958-59 . . .	756	735	29	445	1,178	20	..	3,163
Year—								
1962-63 . . .	708	932	27	416	1,177	31	1	3,292
1963-64 . . .	794	910	31	501	1,125	30	1	3,392
1964-65 . . .	850	966	55	444	1,152	28	1	3,497
1965-66 . . .	1,033	966	45	455	1,240	28	1	3,768
1966-67 . . .	1,363	1,079	66	509	1,204	36	2	4,258
<b>PRODUCTION ('000 BUSHELS)(a)</b>								
Average for three years ended—								
1938-39 . . .	4,065	4,781	65	2,575	4,159	810	6	16,461
1948-49 . . .	7,166	9,757	324	3,606	5,355	406	7	26,621
1958-59 . . .	12,619	14,140	547	7,911	15,606	409	10	51,242
Year—								
1962-63 . . .	16,035	27,042	545	5,770	18,572	828	17	68,809
1963-64 . . .	19,811	19,885	673	9,149	17,850	844	22	68,234
1964-65 . . .	22,885	22,446	1,171	8,977	14,011	521	32	70,043
1965-66 . . .	12,607	17,784	735	5,622	23,279	677	37	60,739
1966-67 . . .	41,003	31,248	1,467	10,276	22,117	948	47	107,106
<b>YIELD PER ACRE (BUSHELS)(a)</b>								
Average for three years ended—								
1938-39 . . .	13.7	10.0	8.1	7.6	9.8	3.1	24.3	10.5
1948-49 . . .	13.9	17.8	15.4	12.8	11.1	2.4	11.8	14.3
1958-59 . . .	16.7	19.2	18.9	17.8	13.3	20.5	22.5	16.2
Year—								
1962-63 . . .	22.7	29.0	20.0	13.9	15.8	26.6	25.6	20.9
1963-64 . . .	24.9	21.8	21.7	18.3	15.9	27.8	19.8	20.1
1964-65 . . .	26.9	23.2	21.1	20.2	12.2	18.5	21.6	20.0
1965-66 . . .	12.2	18.4	16.3	12.4	18.8	23.9	25.6	16.1
1966-67 . . .	30.1	29.0	22.1	20.2	18.4	26.4	26.2	25.2

(a) 40 lb per bushel.

Graphs showing the area sown to oats and production of oats in Australia appear on pages 993 and 995 of Year Book No. 49, and a map showing the distribution of areas growing oats for grain throughout Australia in 1962-63 appears on page 1015 of Year Book No. 50. The area sown to oats from 1900-01 is shown in plate 53, page 862.

Area, production, and yield per acre of oats for Australia in respect of the 1966-67 crop were at record levels. Production of 107,106,000 bushels exceeded by 23 per cent the previous highest figure for the year 1958-59 (86,905,000 bushels). It was 76 per cent greater than production in 1965-66, when the crop was seriously affected by drought conditions in eastern States.

#### Value of oat crop

The average wholesale price in the Melbourne market for oats of good milling quality was \$0.80 a bushel in 1966-67, compared with \$0.94 in 1965-66. The estimated gross value of the oat crop in each State for the 1966-67 season and the value per acre were as follows.

OATS FOR GRAIN: VALUE OF CROP, STATES, 1966-67

		<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>Aust.(a)</i>
Aggregate value	\$'000	40,593	19,033	1,173	5,914	15,800	835	83,384
Value per acre	\$	29.78	17.64	17.77	11.62	13.12	23.19	19.58

(a) Includes the Australian Capital Territory.

#### Exports of oats

OATS: EXPORTS, AUSTRALIA, 1962-63 TO 1966-67

		1962-63	1963-64	1964-65	1965-66	1966-67
Quantity	'000 bus	17,744	16,673	20,161	13,825	22,134
Value	.\$'000 f.o.b.	14,152	12,623	15,616	11,980	17,450

In 1966-67 the principal countries of destination were the Federal Republic of Germany (8,161,000 bushels), Italy (5,519,000 bushels), the Netherlands (4,260,000 bushels), Japan (1,021,000 bushels), and the United Kingdom (913,000 bushels). Imports of oats into Australia are negligible.

#### Oatmeal and other oat products

In 1966-67 the production of granulated or rolled oats or oatmeal (kilned and unkilned) for breakfast foods, porridge and other purposes was 28,000 tons.

#### World production of oats

The world production of oats for the year 1966, according to figures issued by the United States Department of Agriculture, amounted to 3,109 million bushels, harvested from 73.6 million acres, resulting in an average yield of 42.2 bushels an acre. This compared with an estimated production in the previous year of 3,028 million bushels from an area of 73.8 million acres and an average yield of 41.0 bushels an acre.

### Barley

This cereal contains two main groups of varieties, 2-row and 6-row. The former is generally, but not exclusively, preferred for malting purposes. Barley was formerly stubble-sown, but is now grown principally on pasture land worked up early in the year of sowing. In this way it forms an important phase in the rotation of the land. Like oats, it may also be sown for fodder production or for grain. When sown for fodder, sowing may take place either early or late in the season, as it has a short growing period. It may thus provide grazing or fodder supplies when other sources are not available. Barley grain may be crushed to meal for stock (especially pigs) or sold for malting.

Crops sown for malting purposes require well-worked, weed-free paddocks of even soil, and are thus restricted to specific districts. The main barley-growing areas in Australia are situated in South Australia (Murray-Mallee, Eyre and Yorke Peninsulas), but considerable quantities are grown also in New South Wales, Victoria, Queensland and Western Australia.

#### Barley boards

The bulk of the barley crop in the various States is acquired and marketed by grower-controlled boards. Pooled returns from sales are distributed to growers at standard rates for the individual grades and varieties delivered. The Victorian and South Australian crops are marketed by the

Australian Barley Board (a joint board established by the two State Governments), and the Queensland and Western Australian Barley Boards handle the crops of their respective States. Particulars of the proportion of barley production which was received by the Australian Barley Board (for Victoria and South Australia), together with details of quantity sold, advances and total payments to growers, are presented below.

**AUSTRALIAN BARLEY BOARD: BARLEY RECEIVED, SOLD, ETC.  
1962-63 TO 1966-67**

<i>Pool</i>	<i>Quantity received</i>	<i>Quantity sold(a)</i>	<i>Total advances made per bushel on 2-row No. 1 grade less freight</i>	<i>Total net payments to growers</i>
	'000 bushels	'000 bushels	\$	\$'000
No. 24 (1962-63 Crop) . . .	17,195	17,285	1.1563	16,666
„ 25 (1963-64 „ ) . . .	23,145	23,204	1.1862	22,446
„ 26 (1964-65 „ ) . . .	25,465	25,404	1.2000	25,184
„ 27 (1965-66 „ ) . . .	14,922	14,894	1.2873	14,824
„ 28 (1966-67 „ ) . . .	22,043	(b)22,027	(b)1.1800	(b)21,290

(a) Includes surplus or shortage in out-turn, except for No. 28 Pool for which the surplus has not yet been ascertained. (b) As at 30 June 1968. At that date it was estimated that the amount still to be paid to growers was 6.667 cents per bushel.

**Barley area, production and yield per acre**

There was a substantial increase in the area of barley sown for grain (particularly in Western Australia and Queensland) in the years up to 1960-61, and in that year the area sown reached the record level of 2,830,000 acres. However, the area sown in 1966-67, 2,498,000 acres, was 12 per cent less than the area in 1960-61. The production of barley for grain in 1966-67, 61,588,000 bushels, was 9 per cent less than the record production of 67,970,000 bushels in 1960-61. The area, production and yield per acre of barley for grain in the several States for the years 1962-63 to 1966-67, compared with the averages for the three-year periods ended 1938-39, 1948-49 and 1958-59 are shown in the following table. Separate details for 2-row and 6-row varieties are shown for all States for 1966-67. The area sown to barley from 1900-01 is shown in plate 53, page 862.

**BARLEY FOR GRAIN: AREA, PRODUCTION AND YIELD PER ACRE  
STATES AND AUSTRALIAN CAPITAL TERRITORY, 1936-37 TO 1966-67**

<i>Period</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>A.C.T.</i>	<i>Aust.</i>
<b>AREA ('000 ACRES)</b>								
<b>Average for three years ended—</b>								
1938-39 . . .	13	138	10	391	53	8	..	613
1948-49 . . .	23	166	18	587	65	7	..	866
1958-59 . . .	73	354	184	1,255	324	8	..	2,198
<b>Year—</b>								
1962-63 . . .	221	194	150	1,053	390	19	..	2,027
1963-64 . . .	211	190	176	1,123	299	14	..	2,013
1964-65 . . .	239	187	225	1,095	303	15	..	2,064
1965-66 . . .	236	192	338	1,098	413	20	..	2,298
1966-67—								
2-row . . .	245	213	344	1,056	72	20	..	1,951
6-row . . .	140	14	40	51	301	1	..	546
<i>Total</i> . . .	<i>385</i>	<i>228</i>	<i>384</i>	<i>1,107</i>	<i>373</i>	<i>21</i>	<i>..</i>	<i>2,498</i>

**BARLEY FOR GRAIN: AREA, PRODUCTION AND YIELD PER ACRE  
STATES AND A.C.T., 1936-37 TO 1966-67—continued**

Period	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	A.C.T.	Aust.
<b>PRODUCTION ('000 BUSHEL)(a)</b>								
Average for three years ended—								
1938-39	197	2,174	135	6,816	660	252	..	10,234
1948-49	316	3,149	375	11,964	748	194	..	16,746
1958-59	1,463	7,192	4,673	29,740	4,239	267	..	47,574
Year—								
1962-63	5,331	5,469	4,088	18,004	6,056	631	..	39,579
1963-64	5,351	4,025	5,191	24,337	4,077	414	..	43,395
1964-65	6,707	4,335	7,111	26,932	3,701	529	..	49,315
1965-66	3,801	3,218	9,137	18,514	6,481	684	..	41,835
1966-67—								
2-row	7,359	5,066	11,917	22,678	1,450	736	..	49,207
6-row	4,437	355	1,277	1,020	5,257	35	..	12,381
Total	11,796	5,421	13,194	23,698	6,707	772	..	61,588

<b>YIELD PER ACRE (BUSHEL)(a)</b>								
Average for three years ended—								
1938-39	15.2	15.7	13.5	17.4	12.5	31.5	52.3	16.7
1948-49	13.7	19.0	20.8	20.4	11.5	27.7	19.5	19.3
1958-59	20.0	20.3	25.4	23.7	13.1	33.4	..	20.7
Year—								
1962-63	24.2	28.1	27.3	17.1	15.5	31.9	..	19.5
1963-64	25.3	21.2	29.5	21.7	13.6	30.0	..	21.6
1964-65	28.1	23.2	31.6	24.6	12.2	34.2	..	23.9
1965-66	16.1	16.7	27.0	16.9	15.7	34.4	..	18.2
1966-67—								
2-row	30.0	23.7	34.7	21.5	20.1	36.7	..	25.2
6-row	31.8	24.9	31.9	20.2	17.5	35.6	..	22.7
Total	30.6	23.8	34.4	21.4	18.0	36.7	..	24.7

(a) 50 lb per bushel.

For Australia, 78 per cent of the area of barley for grain in 1966-67 was sown with 2-row barley, while the remainder consisted of 6-row varieties. The proportion, however, varied considerably in the several States. The utilisation of barley during the season ended November 1967 was as follows: exports, 20,271,000 bushels; malting and distilling, 14,867,000 bushels; pearl barley, 141,000 bushels; seed, 3,400,000 bushels.

**BARLEY FOR GRAIN, 2- AND 6-ROW: AREA AND PRODUCTION  
AUSTRALIA, 1936-37 TO 1966-67**

Period	Area ('000 acres)			Production ('000 bushels)(a)			Yield per acre (bushels)(a)		
	2-row	6-row	Total	2-row	6-row	Total	2-row	6-row	Total
Average for three years ended—									
1938-39	523	90	613	8,963	1,271	10,234	17.1	14.1	16.7
1948-49	769	97	866	15,142	1,604	16,746	19.7	16.5	19.3
1958-59	1,809	389	2,198	41,633	5,941	47,574	23.0	15.3	20.7
Year—									
1962-63	1,553	474	2,027	31,370	8,209	39,579	20.2	17.3	19.5
1963-64	1,621	392	2,013	36,464	6,931	43,395	22.5	17.7	21.6
1964-65	1,655	409	2,064	41,775	7,540	49,315	25.2	18.4	23.9
1965-66	1,766	531	2,298	33,235	8,600	41,835	18.8	16.2	18.2
1966-67	1,951	546	2,498	49,207	12,381	61,588	25.2	22.7	24.7

(a) 50 lb per bushel.

A graph showing the production of barley in Australia since 1935-36 appears on page 995 of Year Book No. 49, and a map showing the distribution of barley growing areas throughout Australia in 1962-63 appears on page 1014 of Year Book No. 50.

#### Value of barley crop

The average wholesale price for 2-row English malting barley in the Melbourne market was \$1.48 a bushel in 1966-67 compared with \$1.47 in 1965-66. The estimated gross value of the barley crop in each State for the 1966-67 season and the value per acre are shown in the following table.

BARLEY FOR GRAIN: VALUE OF CROP, STATES, 1966-67

		<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>Aust.</i>
Aggregate value	\$'000	15,197	7,260	15,789	26,912	7,476	1,109	73,743
Value per acre	\$	39.45	31.89	41.15	24.31	20.04	52.67	29.52

#### Exports of barley

South Australia is the principal exporting State, and Japan, Italy, the Netherlands and the United Kingdom were the principal countries to which barley was shipped in 1966-67. Particulars of exports of Australian-produced barley for the years 1962-63 to 1966-67 are shown in the following table.

BARLEY: EXPORTS, AUSTRALIA, 1962-63 TO 1966-67

		1962-63	1963-64	1964-65	1965-66	1966-67
Quantity	'000 bus	10,322	17,756	16,281	9,994	18,718
Value	\$'000 f.o.b.	10,458	18,298	18,002	11,508	21,569

In addition to exports of barley grain, there are also exports of Australian pearl and Scotch barley, the total for 1966-67 amounting to 325,000 lb, valued at \$16,000, the main countries of consignment being the Federation of South Arabia, and Ceylon. Imports of barley into Australia are negligible.

#### Barley malt

Details of the recorded usage of barley and the production of barley malt in the years 1962-63 to 1966-67 are given in the following table.

BARLEY MALT: GRAIN USED AND MALT PRODUCED, AUSTRALIA  
1962-63 TO 1966-67

		1962-63	1963-64	1964-65	1965-66	1966-67
Barley used	'000 bus(a)	10,119	11,886	11,667	12,883	13,601
Malt produced	'000 bus(b)	10,429	11,988	12,127	13,235	13,969

(a) 50 lb per bushel.

(b) 40 lb per bushel.

Since 1952-53 the production of malt in Australia has been sufficient to meet local requirements and to provide a margin for export. Exports of Australian produce amounting to 4,678,000 bushels (value \$9,295,000) and 5,235,000 bushels (value \$10,543,000) were recorded in 1965-66 and 1966-67 respectively.

#### World production of barley

In comparison with the barley production of other countries that of Australia is extremely small. The main producers in 1966 were the Union of Soviet Socialist Republics, the United Kingdom and the United States of America. China is also normally a major producer, but details for 1966 are not available. Australian production in that year was approximately 1 per cent of the world total.



According to estimates made by the United States Department of Agriculture, world production of barley in the year 1966 amounted to 4,593 million bushels harvested from 153.8 million acres, equivalent to a yield per acre of 29.9 bushels. This compared with the production of 4,218 million bushels in the previous year from 154.1 million acres, a yield of 27.4 bushels per acre.

## Sorghum

Grain sorghum is a summer-growing annual palatable to stock and more drought and frost-resistant than maize. It requires a summer rainfall. The growing of this crop for grain on an extensive scale is a comparatively recent development in Australia, and, as with other cereals, operations are highly mechanised.

The climatic conditions of Queensland and northern New South Wales are particularly suited to the growing of sorghum, and development has so far been restricted mainly to these areas, more particularly to Queensland. The grain produced is fed to livestock and has become an important source for supplementing other coarse grains for this purpose. Other sorghums are grown in Australia mainly as green fodder, hay and silage (sweet sorghums and Sudan grass) and for the production of brush for broom manufacture (broom millet). In Queensland the growing of grain sorghum is concentrated in the Burnett, Dawson-Callide areas and in the central highlands. In New South Wales the north-western slopes and Murrumbidgee Irrigation Areas are the main areas. This crop is also suitable for the semi-tropical areas of the Northern Territory, where development is proceeding, and the Kimberleys.

GRAIN SORGHUM: AREA, PRODUCTION AND YIELD PER ACRE, STATES  
1962-63 TO 1966-67

Year	Area			Production(a)			Yield per acre(a)		
	N.S.W.	Qld	Aust. (b)	N.S.W.	Qld	Aust. (b)	N.S.W.	Qld	Aust. (b)
	acres	acres	acres	'000 bushels	'000 bushels	'000 bushels	bushels	bushels	bushels
1962-63	80,255	311,068	391,334	1,891	8,361	10,252	23.6	26.9	26.2
1963-64	61,203	303,857	365,708	1,269	6,612	7,889	20.7	21.8	21.6
1964-65	51,699	292,769	345,737	1,270	5,883	7,164	24.6	20.1	20.7
1965-66	99,576	332,768	433,437	605	6,533	7,149	6.1	19.6	16.5
1966-67	98,161	403,500	502,349	1,527	10,172	11,711	15.6	25.2	23.3

(a) 60 lb per bushel. Production in New South Wales and Queensland harvested from crop sown in previous year.  
(b) Includes small areas sown and quantities produced in other States and Territories.

## Maize

Like sorghum, maize is a summer cereal demanding specific soil and climatic conditions. For grain, it is grown almost entirely in the south-east and Atherton Tablelands of Queensland and the north coast and northern tablelands of New South Wales. On the Atherton Tablelands in Queensland, and generally in New South Wales and Victoria, it provides a stock feed for dairy cattle, fat stock and pigs. In times of drought it is used also as a sheep feed. In all States except South Australia, however, this crop is grown to some extent for green fodder and silage, particularly in connection with the dairying industry. There is practically no difference between grain and fodder varieties.

There has been a continuing increase in recent years in the growing of maize from hybrid strains of seed. Varieties have been developed which are capable of producing yields per acre considerably in excess of the older open pollinated types. The expansion in areas sown to hybrid maize has led to a parallel development in the specialised industry of growing hybrid strains for seed.

## Maize area, production and yield per acre

MAIZE FOR GRAIN: AREA, PRODUCTION AND YIELD PER ACRE  
STATES AND A.C.T., 1936-37 TO 1966-67

<i>Period</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>A.C.T.</i>	<i>Aust.</i>
AREA (ACRES)								
Average for three years ended—								
1938-39 . .	121,178	19,826	179,641	20	16	..	6	320,687
1948-49 . .	91,612	7,511	122,263	1	87	6	1	221,481
1958-59 . .	57,662	3,629	120,417	(a)	13	1	2	(b)181,724
Year—								
1962-63 . .	46,537	3,634	159,285	(a)	34	..	..	(b)209,490
1963-64 . .	44,679	3,399	166,598	(a)	85	..	..	(b)214,761
1964-65 . .	41,660	2,353	168,300	..	10	..	..	212,323
1965-66 . .	42,000	1,683	153,081	..	1	..	..	196,765
1966-67—								
Hybrid . .	44,688	1,261	141,133	..	(c)	..	..	(b)187,082
Other . .	4,331	146	9,877	..	5	..	..	14,359
<i>Total</i> . .	<i>49,019</i>	<i>1,407</i>	<i>151,010</i>	..	<i>5</i>	..	..	<i>201,441</i>
PRODUCTION ('000 BUSHEL)(d)								
Average for three years ended—								
1938-39 . .	3,204	665	3,170	1	..	..	..	7,040
1948-49 . .	2,446	314	2,960	..	1	..	..	5,721
1958-59 . .	2,347	175	3,428	(a)	..	..	..	(b)5,950
Year—								
1962-63 . .	2,145	216	5,096	(a)	..	..	..	(b)7,457
1963-64 . .	2,089	204	4,427	(a)	2	..	..	(b)6,722
1964-65 . .	1,878	114	4,887	..	..	..	..	6,879
1965-66 . .	1,607	101	3,209	..	..	..	..	4,918
1966-67—								
Hybrid . .	2,301	67	4,659	..	(c)	..	..	(b)7,026
Other . .	170	5	289	..	..	..	..	465
<i>Total</i> . .	<i>2,471</i>	<i>72</i>	<i>4,948</i>	..	..	..	..	<i>7,491</i>
YIELD PER ACRE (BUSHEL)(d)								
Average for three years ended—								
1938-39 . .	26.4	33.5	17.6	43.7	12.3	..	10.2	22.0
1948-49 . .	26.7	41.8	24.2	6.7	7.2	14.8	13.7	25.8
1958-59 . .	40.7	48.2	28.5	(a)	16.8	30.0	..	(b)32.7
Year—								
1962-63 . .	46.1	59.5	32.0	(a)	12.2	..	..	(b)35.6
1963-64 . .	46.8	59.8	26.6	(a)	18.5	..	..	(b)31.3
1964-65 . .	45.1	48.5	29.0	..	15.6	..	..	32.4
1965-66 . .	38.3	60.3	21.0	..	60.0	..	..	25.0
1966-67—								
Hybrid . .	51.5	53.2	33.0	..	(c)	..	..	(b)37.6
Other . .	39.4	34.8	29.3	..	12.8	..	..	32.4
<i>Total</i> . .	<i>50.4</i>	<i>51.3</i>	<i>32.8</i>	..	<i>12.8</i>	..	..	<i>37.2</i>

(a) Not available for publication. (b) Incomplete. (c) Included in Other maize. (d) 56 lb per bushel.  
Production in New South Wales and Queensland harvested from crop sown in previous year.

The average yield for Australia for the five-year period ended 1966-67 was 32.3 bushels per acre. Among principal producing countries, the United States of America averaged 72.1 bushels per acre and Brazil 22.7 bushels for 1966.

**Value of maize crop**

The average wholesale price of maize in the Melbourne market in 1966-67 was \$2.28 a bushel compared with \$2.83 in 1965-66. The estimated gross value of the crop in each State for the 1966-67 season and the value per acre were as follows.

**MAIZE FOR GRAIN: VALUE OF CROP, STATES, 1966-67**

		<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>Aust.</i>
Aggregate value	\$'000	3,855	115	6,425	..	..	..	10,395
Value per acre	\$	78.64	81.73	42.55	..	..	..	51.60

**Exports of maize****MAIZE: EXPORTS, AUSTRALIA, 1962-63 TO 1966-67**

		1962-63	1963-64	1964-65	1965-66	1966-67
Quantity	'000 bus	552	14	20	1	80
Value	\$'000 f.o.b.	480	27	42	4	114

The exports of maize in 1962-63 were due principally to the shipment of 474,000 bushels to Japan, a country to which there were no previous or subsequent significant exports. Imports of maize into Australia amounted to 19,000 bushels in 1966-67.

**World production of maize**

According to figures issued by the United States Department of Agriculture, world production of maize in the year 1966 amounted to 8,944 million bushels, harvested from 246 million acres, giving an average yield per acre of 36.3 bushels. This compared with production in the previous year of 8,182 million bushels from 240 million acres, and an average yield of 34.1 bushels per acre.

The United States of America is the most important maize-producing country in the world, and during the three years ended 1966 the area sown to maize in that country averaged 57 million acres or 23 per cent of the world total. During the same period production averaged 3,941 million bushels or 47 per cent of the world total.

**Rice**

The principal rice-growing areas of the world are confined almost entirely to Asia, although limited quantities are grown in other countries. In Australia rice was first cultivated at the Yanco Experimental Farm in New South Wales, but it was not grown commercially until 1924-25, when 16,240 bushels were produced from 153 acres. Favoured by high average yields and protected by tariff, rice culture made rapid progress in the Murrumbidgee Irrigation Areas until local requirements were met and a surplus became available for export. The acreage sown in this area is controlled, as the quantity of water available is limited.

Apart from small experimental areas in Western Australia and the Northern Territory, rice-growing in Australia is practically confined to the Murrumbidgee Irrigation Areas in New South Wales. The bulk of Australia's exports of rice in 1966-67 was shipped to Papua and New Guinea and the Pacific Islands. Details relating to area, production, and Australian-produced exports for the years 1962-63 to 1966-67 are shown in the following table.

**RICE: AREA, PRODUCTION AND EXPORTS, AUSTRALIA(a)  
1962-63 TO 1966-67**

Year	No. of holdings growing rice(b)	Area	Production (paddy rice)		Average yield (paddy) per acre	Exports		Imports
			Quantity	Gross value(c)		Un- cleaned	Cleaned	
		acres	'000 bushels (d)	\$'000	bushels (d)	'000 lb	'000 lb	'000 lb
1962-63	956	54,929	7,129	7,676	129.8	26,860	101,425	1,971
1963-64	1,033	59,398	7,455	7,912	125.5	22,268	102,847	2,452
1964-65	1,074	61,617	8,030	8,529	130.3	24,219	118,505	2,987
1965-66	1,115	64,398	9,540	10,224	148.1	25,552	116,704	3,951
1966-67	1,164	73,724	11,250	12,445	152.6	23,050	175,320	3,718

(a) Particulars of area and production for Western Australia and the Northern Territory are not available for publication, and are excluded. (b) Twenty acres or more in area. (c) Excludes the value of straw. (d) 42 lb per bushel.

## Fodder crops

## Hay

Because of the comparatively unreliable nature of rainfall in Australian agricultural and pastoral areas, hay as a fodder crop occupies a position of importance. In 1966-67 hay represented 9 per cent of the total area of crops. Up to 1946-47 hay, in terms of area, was second only to wheat for grain, but in more recent years it has been supplanted by green fodder (for feeding-off) and oats for grain. Hay is generally considered to include cereal hay, meadow hay and lucerne hay. Cereal crops cut early for hay contain a higher level of protein than those cut late.

In most European countries hay is made almost entirely from meadow pastures, but in Australia a very large proportion is made from cereals and lucerne, the hay being stored loose, in sheaves or baled. Because of its bulk, hay is usually produced for individual or local use, except in times of drought, when large inter-regional transfers may take place. Meadow hay requires greater care in preparation than cereal hay. Baling must be spaced carefully behind mowing to ensure that the bales are dry enough to prevent moulding, but not so dry as to result in excessive leaf loss. The leaves contain the bulk of the protein. Lucerne hay requires similar attention.

**HAY: AREA, PRODUCTION AND YIELD PER ACRE, STATES AND TERRITORIES  
1936-37 TO 1966-67**

Season	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
<b>AREA ('000 ACRES)</b>									
Average for three years ended—									
1938-39 . . .	859	1,122	67	540	439	81	..	3	3,111
1948-49 . . .	516	642	66	287	245	93	..	3	1,852
1958-59 . . .	556	978	64	336	305	129	..	4	2,372
Year—									
1962-63 . . .	587	1,251	87	287	340	165	1	2	2,720
1963-64 . . .	584	1,138	80	358	289	150	1	2	2,602
1964-65 . . .	600	1,306	82	314	305	180	1	3	2,793
1965-66 . . .	733	1,150	155	299	291	148	1	4	2,780
1966-67 . . .	823	1,558	129	482	295	203	1	4	3,496
<b>PRODUCTION ('000 TONS)</b>									
Average for three years ended—									
1938-39 . . .	975	1,181	94	591	434	120	..	3	3,398
1948-49 . . .	618	987	119	396	275	153	..	4	2,552
1958-59 . . .	752	1,712	129	476	377	248	..	7	3,701
Year—									
1962-63 . . .	965	2,376	197	406	453	313	1	6	4,717
1963-64 . . .	1,006	1,947	184	488	389	249	1	5	4,269
1964-65 . . .	1,040	2,506	167	487	390	365	1	7	4,963
1965-66 . . .	978	1,873	282	368	414	257	2	5	4,179
1966-67 . . .	1,481	2,982	314	729	417	437	2	9	6,371
<b>YIELD PER ACRE (TONS)</b>									
Average for three years ended—									
1938-39 . . .	1.14	1.05	1.40	1.09	0.99	1.48	..	1.00	1.09
1948-49 . . .	1.20	1.54	1.80	1.38	1.12	1.65	..	1.33	1.38
1958-59 . . .	1.35	1.75	2.02	1.42	1.24	1.92	0.54	1.75	1.56
Year—									
1962-63 . . .	1.64	1.90	2.27	1.41	1.33	1.89	1.21	2.38	1.73
1963-64 . . .	1.72	1.71	2.30	1.37	1.35	1.67	1.02	1.71	1.64
1964-65 . . .	1.73	1.92	2.19	1.55	1.28	2.02	1.11	1.99	1.78
1965-66 . . .	1.33	1.63	1.83	1.23	1.43	1.74	1.39	1.29	1.50
1966-67 . . .	1.80	1.91	2.44	1.51	1.41	2.15	1.63	2.14	1.82

Plate 53 shows the area under hay since 1900-01 (page 862).

Information regarding areas cut for hay and varieties grown in 1966-67 is given in the following table.

**HAY: AREA OF VARIOUS KINDS GROWN, STATES AND TERRITORIES**  
1966-67  
(Acres)

<i>State or Territory</i>	<i>Oaten</i>	<i>Lucerne</i>	<i>Wheaten</i>	<i>Other</i>	<i>Total</i>
New South Wales . . . . .	129,059	269,158	102,740	322,471	823,428
Victoria . . . . .	213,109	99,361	29,453	1,216,559	1,558,482
Queensland . . . . .	11,323	92,463	10,138	14,783	128,707
South Australia . . . . .	135,051	67,055	47,988	231,648	481,742
Western Australia . . . . .	111,045	2,909	35,247	145,881	295,082
Tasmania . . . . .	14,033	1,803	146	187,199	203,181
Northern Territory . . . . .	..	..	..	1,334	1,334
Australian Capital Territory . . . . .	466	1,874	22	1,621	3,983
<b>Australia . . . . .</b>	<b>614,086</b>	<b>534,623</b>	<b>225,734</b>	<b>2,121,496</b>	<b>3,495,939</b>

For all States and the Territories combined, the proportions of the areas sown to the principal kinds of hay in 1966-67 were 17.6 per cent for oaten, 15.3 per cent for lucerne, 6.5 per cent for wheaten, and 60.7 per cent for other hay.

The following table shows the estimated gross value, and the value per acre, of the hay crop of the several States for the 1966-67 season.

**HAY: VALUE OF CROP, STATES 1966-67**

		<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>Aust..</i> (a)
Aggregate value	\$'000	39,019	74,151	9,738	12,089	8,985	7,145	151,470
Value per acre	\$	47.39	47.58	75.66	25.09	30.45	35.17	43.33

(a) Includes \$76,000 and \$266,000 for the Northern Territory and Australian Capital Territory respectively.

#### Farm stocks of hay

Particulars of stocks of hay held on farms at 31 March for the years 1963 to 1967 are given in the table below.

**STOCKS OF HAY HELD ON FARMS, STATES AND A.C.T., 1963 TO 1967**  
(Tons)

<i>31 March—</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>A.C.T.</i>	<i>Aust..</i> (a)
1963 . . . . .	1,609,639	2,197,725	194,948	470,202	273,500	333,650	6,896	5,086,560
1964 . . . . .	1,610,063	1,911,475	179,422	547,354	274,812	276,650	5,085	4,804,861
1965 . . . . .	1,586,969	2,402,299	145,737	614,451	275,948	414,415	7,606	5,447,425
1966 . . . . .	1,158,481	1,915,693	190,659	444,089	291,528	296,196	5,171	4,301,817
1967 . . . . .	1,888,668	2,175,731	270,470	544,676	249,531	399,891	8,151	5,537,118

(a) Excludes the Northern Territory, for which particulars are not available.

Under normal conditions, hay, whether whole or in the form of chaff, is somewhat bulky for overseas trade, and consequently does not figure largely among Australian exports. During 1966-67 exports amounting to 5,599 tons, valued at \$265,000, were made, principally to Kuwait, Singapore and Malaysia. Imports of hay are not recorded separately, but are considered to be negligible.

**Green fodder**

Considerable areas are devoted to the growing of green fodder, usually as an adjunct to cereal operations or as a minor crop in irrigation areas. The areas recorded in respect of green fodder include areas of crops cut for feeding to live stock as green fodder or ensilage, together with areas fed off to stock as green forage. Statistics of green fodder exclude areas which may have been sown with the intention of harvesting for grain, but which, owing to adverse conditions, showed no promise of producing grain or even hay and were fed off to livestock. The principal crops cut for green fodder are lucerne and oats, while small quantities of barley, sorghum, wheat, maize, rye, and sugar cane are also used in this way. In 1966-67 the area under green fodder (5,398,511 acres) consisted of lucerne (2,226,058 acres), oats (2,159,850 acres), sorghum (224,140 acres), barley (184,340 acres), wheat (163,101 acres), rye (28,421 acres), maize (27,387 acres), sugar cane (1,216 acres), and other crops (383,998 acres). Particulars concerning the area of green fodder in the several States during each of the years 1962-63 to 1966-67 are given in the following table.

**GREEN FODDER: AREA, STATES AND TERRITORIES, 1962-63 TO 1966-67**

('000 acres)

Year	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
1962-63 . . .	1,900	478	912	928	668	65	..	1	4,952
1963-64 . . .	1,974	431	1,011	972	417	71	..	1	4,877
1964-65 . . .	2,397	454	1,111	1,135	446	67	1	1	5,614
1965-66 . . .	1,952	526	1,143	1,210	414	78	1	1	5,324
1966-67 . . .	2,133	443	1,179	1,169	399	74	..	1	5,399

In the 1966-67 season green fodder ranked second to wheat in area of crops throughout Australia. A graph showing the area sown to green fodder appears on plate 53. The value of these crops is variously estimated in the several States, but the Australian total, excluding Western Australia, may be taken as approximately \$28,000,000 for the 1965-66 season and \$25,000,000 for the 1966-67 season.

**Ensilage**

Ensilage is produced from herbage compacted tightly to exclude air and kept from contact with air and extraneous moisture to avoid moulding. Fermentation results in a dark mass of high protein and lactic acid content. Molasses may be added to hasten fermentation. Ensilage may be stored in pits or stacks or in constructed silos.

The several State Governments devote a considerable amount of attention to the education of the farming community with regard to the value of ensilage. Monetary aid is afforded in the erection of silos, and expert advice is supplied in connection with the design of the silos and the cutting and packing of the ensilage. Information regarding production and farm stocks of ensilage for the years 1962-63 to 1966-67 is given in the following table.

**ENSILAGE: PRODUCTION AND FARM STOCKS, STATES AND A.C.T.**

1962-63 TO 1966-67

(Tons)

Period	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	A.C.T.	Aust.
<b>Production during—</b>								
1962-63 season . . .	210,653	295,914	63,489	64,206	48,806	68,117	290	751,475
1963-64 " . . .	222,126	252,837	53,160	88,183	37,238	43,760	270	697,574
1964-65 " . . .	182,063	250,997	34,440	78,709	26,798	54,438	400	627,845
1965-66 " . . .	139,438	228,439	42,886	48,388	30,225	52,802	120	542,298
1966-67 " . . .	312,968	335,244	31,895	65,548	29,135	87,041	406	862,237
<b>Farm stocks at—</b>								
31 March 1963 . . .	602,585	263,440	146,286	63,315	37,415	61,110	1,768	1,175,919
" " 1964 . . .	565,457	185,115	139,691	78,997	29,709	43,554	1,108	1,043,631
" " 1965 . . .	534,730	206,304	112,596	86,093	24,160	49,668	892	1,014,443
" " 1966 . . .	365,995	157,134	73,122	58,038	28,293	43,461	291	726,334
" " 1967 . . .	519,371	233,979	77,180	62,262	20,476	68,464	740	982,472

## Sugar cane

The growing of sugar cane is restricted to those coastal areas in Queensland and northern New South Wales which have suitable climatic and soil conditions.

The Bureau of Sugar Experiment Stations in Queensland and the Colonial Sugar Refining Company Limited render useful service to the sugar industry by advocating and demonstrating better methods of cultivation and the more scientific use of fertilisers, lime, etc. and by producing and distributing improved varieties of cane. In common with these two organisations, Sugar Research Ltd, of Mackay, undertakes technological research in raw sugar milling practices.

### Sugar agreements and marketing arrangements in Australia

In Year Book No. 37, pages 940-1, a summary is given of the agreement operating between the Commonwealth and Queensland Governments in respect of the sugar industry in Australia. Briefly, the agreement places an embargo on sugar importations and fixes the price of sugar consumed in Australia. The current agreement was for the period from 1 September 1961 to 31 August 1967. It was extended for a further year to 31 August 1968 by a supplementary agreement which prescribed prices for sugar equivalent to a retail price of 10.5 cents per lb.

Production of sugar is regulated under the terms of the agreement. At the mill level control is exerted by means of seasonal 'mill peaks' in respect of Queensland mills and a proportionate allowance for New South Wales mills. The combined total equals the estimated requirements of the domestic and export markets. Farm production is regulated according to the limit on the mill which the farm supplies. Up to the end of 1961 exports were limited by the export quota provisions of the International Sugar Agreement, but these provisions have not been operative since then (*see below*).

The Queensland Government acquires the whole of the sugar production of that State and of New South Wales by legislation and private agreement respectively. The net proceeds of all sugar sold are pooled and uniform prices paid to mills. In 1963 a Queensland Government Committee of Enquiry recommended that the industry should expand production to 2.26 million tons (of 94 net titre sugar) by 1965-66, of which New South Wales might produce 132,000 tons. This recommendation has been implemented, although seasonal conditions prevented the attainment of the target until 1966-67, when 2,343,000 tons were produced, the New South Wales contribution being 140,000 tons. Production for 1967-68 is estimated to be 2,334,000 tons 94 net titre, to which New South Wales is expected to contribute 121,000 tons.

### International Sugar Agreement

The International Sugar Agreement of 1937 was superseded by the International Sugar Agreements of 1953 and 1958. Details of the 1937 and 1953 Agreements were given in Year Books No. 40, pages 881-2, and No. 48, page 936, respectively. The 1958 Agreement, which came into operation on 1 January 1959, established basic export quotas for exporting countries. The British Commonwealth was allocated a total quota, the distribution of which remained a matter for internal arrangement by the countries and territories concerned (*see below*). The Australian quota for 1960 and 1961 was approximately 651,000 tons per annum.

The quota and price provisions of the International Sugar Agreement were subject to review before 31 December 1961. A conference in Geneva in 1961 failed to reach agreement on quota provisions for 1962 and 1963. The conference adjourned with a resolution that it be reconvened if circumstances became favourable for an agreement on quotas. The principal practical effect of the adjournment of the 1961 conference was that former export limitations on participating exporting countries, including Australia, did not apply until such time as agreement on this question was again reached at a resumed session of that conference or at a newly convened conference.

The question of convening a United Nations conference to consider re-introduction of an agreement with quota provisions was deferred at a meeting of the International Sugar Council in April 1963. The 1958 Agreement, in its restricted form, was extended by protocol until 31 December 1965.

A United Nations conference was convened at Geneva in September 1965. This conference did not negotiate a new agreement, but extended the 1958 Agreement, in a restricted form, until 31 December 1966. The restricted Agreement was further extended until 31 December 1968. A conference for the purpose of negotiating a new International Sugar Agreement met at Geneva in April 1968.

### **British Commonwealth Sugar Agreement**

On 1 January 1953 the British Commonwealth Sugar Agreement became effective. This agreement, which has been extended to 1974, provides for Australia to export to preferential markets a maximum of 600,000 tons per annum. Of the 600,000 tons, 335,000 tons are purchased by the United Kingdom Government at a regularly negotiated price and the balance may be sold at world market prices plus tariff preferences where applicable. The negotiated price of £Stg42 a ton bulk f.o.b. and stowed payable for Australian raws in 1965 was increased to £Stg43 10s. a ton for 1966, 1967 and 1968.

### **Fruit Industry Sugar Concession Committee and sugar rebates**

The Fruit Industry Sugar Concession Committee was established by agreement between the Commonwealth and Queensland Governments and administers a fund contributed by the Queensland Government on behalf of the sugar industry.

Until 15 May 1960 a rebate of \$4.40 a ton of refined sugar used in processing approved fruit products was paid to Australian manufacturers, provided they bought fresh fruit at prices not lower than those declared by the Committee as reasonable. This was increased to \$10 a ton from 16 May 1960.

An export sugar rebate is also paid by the Committee to exporters of approved fruit products to ensure that manufacturers do not pay higher prices for the Australian sugar content than the price for which the cheapest imported sugar could be landed duty free in Australia. The Queensland Government is responsible for payment of a similar rebate to exporters of other approved products. Payment of the export sugar rebate in respect of approved fruit products has been made conditional upon satisfactory arrangements having been made for payment for such fruit at not less than the prices (if any) which the Committee has declared to be reasonable at the time of purchase.

Under the Sugar Agreement 1962 the Queensland Government contributes to the fund \$528,000 annually, reimburses the Committee for the actual expenditure on export sugar rebates, and, by a supplementary agreement operating from 1 September 1962, pays the Committee an additional sum equal to the amount payable by way of domestic sugar rebate in respect of the products exported. Any money remaining in the fund after the payment of rebates and administrative expenses may be used by the Committee for the promotion of the use and sale of fruit products, or for research for the purpose of increasing the yield per acre of Australian fruit, or of obtaining information regarding Australian fresh marketable fruits.

### **Financial assistance to the sugar industry**

Under the provisions of the *Sugar Marketing Assistance Agreement Act 1967* the Commonwealth Government arranged a repayable grant of \$19 million through the Queensland Government to the sugar industry to raise returns from sales of the No. 1 Pool in the 1966 season to a level comparable with that received in the 1965 season. A further grant of up to a maximum of \$15 million was authorised for a similar purpose in respect of No. 1 Pool in the 1967 season. The grants will be repayable over ten years commencing in mid-1970, and will not be subject to interest before then. Thereafter they will incur interest at the medium term bond rate prevailing when each grant was made.

### **Bulk handling of sugar**

Bulk handling and mechanised loading and unloading of raw sugar is now in operation throughout the Australian sugar industry, except for the operation of a bagging station specially provided at Townsville to meet the needs of a few overseas customers. Terminals for the bulk loading of sugar were opened at Mackay in 1957, at Lucinda and Bundaberg in 1958, at Townsville in 1959, at Mourilyan in 1960, and at Cairns in 1964. A second storage shed at Bundaberg, a third shed at Mackay and second sheds at Lucinda and Townsville have been opened subsequently. The comparatively small New South Wales sugar industry was converted to bulk handling in 1954. Bulk receiving facilities are in operation at all Australian refineries.

### **Area of sugar cane**

A brief outline of the development of the industry was included in earlier issues of the Year Book (see No. 38, page 985). The area of sugar cane in Australia for the seasons 1962-63 to 1966-67 and the averages for the three-year periods ended 1938-39, 1948-49 and 1958-59 are shown in the following table. The areas shown in the table do not include the small acreage cut for green fodder, which in 1966-67 amounted to 1,216 acres. The whole area planted is not cut for crushing during any one season, there being always a considerable amount of young and 'stand-over' cane as well as a small quantity required for plants.



**SUGAR CANE: AREA(a), STATES, 1936-37 TO 1966-67**  
(Acres)

Period	New South Wales			Queensland			Australia			Total
	Area crushed	Area of standover and newly- planted cane	Area cut for plants	Area crushed	Area of standover and newly- planted cane	Area cut for plants	Area crushed	Area of standover and newly- planted cane	Area cut for plants	
Average for three years ended—										
1938-39 . . .	10,468	10,366	n.a.	247,632	89,690	n.a.	258,100	100,056	n.a.	n.a.
1948-49 . . .	7,687	8,666	338	230,905	90,448	12,891	238,592	99,114	13,229	350,935
1958-59 . . .	11,094	9,462	619	360,709	110,786	12,596	371,803	120,248	13,215	505,266
Year—										
1962-63 . . .	14,109	12,656	495	387,477	80,438	11,313	401,586	93,094	11,808	506,488
1963-64 . . .	15,508	14,204	594	402,060	93,149	13,205	417,568	107,353	13,799	538,720
1964-65 . . .	19,429	17,043	728	450,956	126,906	12,896	470,385	143,949	13,624	627,958
1965-66 . . .	15,824	23,350	668	487,375	105,361	14,243	503,199	128,711	14,911	646,821
1966-67 . . .	22,475	18,548	613	534,998	78,609	13,265	557,473	97,157	13,878	668,508

(a) Excludes areas cut for green fodder and small area sown in Western Australia.

**Production of cane and sugar**

The production of sugar cane in 1966-67 was at the record level of 16.7 million tons, which was 10.7 per cent above the previous record production of 15.1 million tons in 1964-65. A graph showing the production of sugar appears on page 995 of Year Book No. 49.

**SUGAR CANE: PRODUCTION OF CANE AND RAW SUGAR, STATES, 1936-37 TO 1966-67**  
(Tons)

Period	New South Wales		Queensland		Australia	
	Cane	Sugar(a)	Cane	Sugar(a)	Cane	Sugar(a)
Average for three years ended—						
1938-39 . . .	324,531	43,419	5,215,217	760,994	5,539,748	804,413
1948-49 . . .	283,613	35,444	4,767,291	700,053	5,050,904	735,497
1958-59 . . .	356,324	43,881	9,221,497	1,260,564	9,577,821	1,304,445
Year—						
1962-63 . . .	637,310	79,733	12,098,582	1,770,084	12,735,892	1,849,817
1963-64 . . .	617,402	75,980	11,500,672	1,648,273	12,118,074	1,724,253
1964-65 . . .	784,126	95,195	14,286,350	1,854,883	15,070,476	1,950,078
1965-66 . . .	609,320	69,989	13,545,719	1,883,364	14,155,039	1,953,353
1966-67 . . .	1,171,441	139,967	15,513,449	2,202,809	16,684,890	2,342,776

(a) Raw sugar at 94 net titre.

Owing to climatic variations the crop in New South Wales matures in from twenty to twenty-four months, whereas in Queensland a period of from twelve to sixteen months is sufficient. The average yields of cane and sugar per acre for the years 1962-63 to 1966-67 and for the three-year periods ended 1938-39, 1948-49 and 1958-59 are shown below. Allowance should be made in interpreting these figures for the disparity in maturing periods noted above.

**SUGAR CANE AND SUGAR: YIELD PER ACRE, STATES, 1936-37 TO 1966-67**  
(Tons)

Period	New South Wales			Queensland			Australia		
	Cane per acre crushed	Sugar per acre crushed	Cane to each ton of sugar	Cane per acre crushed	Sugar per acre crushed	Cane to each ton of sugar	Cane per acre crushed	Sugar per acre crushed	Cane to each ton of sugar
Average for three years ended—									
1938-39 . . .	31.00	4.15	7.47	21.06	3.07	6.85	21.46	3.12	6.89
1948-49 . . .	36.90	4.61	8.00	20.65	3.03	6.81	21.17	3.08	6.87
1958-59 . . .	32.12	3.96	8.12	25.57	3.49	7.32	25.76	3.52	7.34
Year—									
1962-63 . . .	45.17	5.65	7.99	31.22	4.57	6.84	31.71	4.61	6.88
1963-64 . . .	39.81	4.90	8.13	28.60	4.10	6.98	29.02	4.13	7.03
1964-65 . . .	40.36	4.90	8.24	31.68	4.11	7.70	32.04	4.15	7.73
1965-66 . . .	38.51	4.42	8.71	27.79	3.86	7.19	28.13	3.88	7.25
1966-67 . . .	52.12	6.23	8.37	29.00	4.12	7.04	29.93	4.20	7.12

**Production and utilisation of sugar**

Details of the production and utilisation of sugar for the years 1962-63 to 1966-67 are shown below. Consumption is shown in terms of refined sugar, including that consumed in manufactured products.

**SUGAR: PRODUCTION AND UTILISATION, AUSTRALIA, 1962-63 TO 1966-67**

Year	<i>Changes in stocks(a)</i>	<i>Production (raw)</i>	<i>Exports(b)</i>	<i>Miscel- laneous uses(c)</i>	<i>Consumption in Australia(d)</i>	
					<i>Total</i>	<i>Per head</i>
	'000 tons	'000 tons	'000 tons	'000 tons	'000 tons	lb
1962-63	+ 114.7	1,831.6	1,175.3	17.5	524.1	108.2
1963-64	- 64.8	1,648.7	1,156.0	20.9	536.7	108.7
1964-65	- 4.1	1,880.0	1,308.2	20.5	555.4	110.3
1965-66	+ 76.7	1,961.8	1,289.0	27.9	568.2	110.7
1966-67	- 58.4	2,222.1	1,674.6	27.1	578.7	110.7

(a) Includes allowance for estimated sugar content of imported foodstuffs. (b) Raw and refined, including ships' stores and sugar in exported foodstuffs. (c) Includes refining losses and quantities used in golden syrup and treacle. (d) Includes sugar content of manufactured products consumed.

The quantity of sugar recorded as used in factories in 1966-67 amounted to 374,207 tons compared with 377,708 tons in 1965-66 and 359,596 tons in 1964-65. Particulars of sugar used in establishments not classified as factories are not available, and consequently these quantities are deficient to that extent. In 1966-67 consumption by factories engaged in the production of jams, jellies and preserved and dried fruit and vegetables amounted to 81,219 tons, by those producing confectionery, ice cream, etc. to 65,182 tons, by breweries to 48,487 tons, and by factories producing aerated waters, cordials, etc. to 63,664 tons.

**Sugar by-products**

Industrial chemicals, together with large quantities of molasses, are produced as by-products in sugar mills. Further, during the period 1939 to 1960 building boards were made from the residue of crushed fibre after removal of the sugar content from sugar cane. These boards possessed high insulating and sound absorbing properties which made them particularly suitable for use in walls and ceilings. Early in the period referred to, the boards were manufactured almost entirely from crushed fibre residue, the remaining component being non-millable pine, but gradually the pine content was increased until by 1960 fibre residue was no longer being used. The main purpose for which crushed cane fibre residue is now used is furnace fuel in sugar mills.

**Sugar prices and returns**

The current prices of sugar in Australia (as determined under the Sugar Agreement in Australia see page 892) and details of net returns for raw sugar from 1962-63 to 1966-67 are shown in the following tables.

**SUGAR: PRICES IN AUSTRALIA**

Year	<i>Raw sugar, 94 net titre</i>			<i>Refined sugar</i>		
	<i>Average return per ton received by millers and growers for—</i>			<i>Date of determination</i>	<i>Wholesale price to retailer per ton</i>	<i>Retail price capital cities per lb</i>
	<i>Home consumption</i>	<i>Exports (a)</i>	<i>Whole crop (a)</i>			
	\$	\$	\$		\$	\$
1962	125.10	82.18	95.98	16.5.60 to 18.6.67	180.52	0.092
1963	122.00	131.22	127.97	19.6.67	206.72	0.105
1964	120.75	83.89	95.78			
1965	121.95	67.27	85.14			
1966(b)	121.25	51.45	75.01			

(a) Includes 'excess' sugar. (b) Excludes repayable Commonwealth grant (see page 893).

## RAW SUGAR(a): NET RETURNS, AUSTRALIA, 1962-63 TO 1966-67

(Source: The Queensland Sugar Board)

Year	Proportion exported	Net value of exports per ton	Average price per ton for whole crop	Estimated value of crop
	per cent	\$	\$	\$'000
1962-63 . . .	67.85	82.18	95.98	177,496
1963-64 . . .	64.70	131.22	127.97	220,520
1964-65 . . .	67.76	83.89	95.78	186,728
1965-66 . . .	67.31	67.27	85.14	166,270
1966-67 . . .	72.50	51.45	75.01	175,694

(a) 94 net titre.

The estimated value of the raw sugar produced has been based upon details taken from the audited accounts of the Queensland Sugar Board. The values stated comprise the gross receipts from sales in Australia and overseas, less refining costs, freight, administrative charges, etc., and export charges. They include concessions to the fruit industry and other rebates which in 1966-67 amounted to \$3,893,000, but exclude the repayable Commonwealth grants referred to earlier. The value thus obtained represents the net market value of all raw sugar sold, which, less the rebates, is divided between the growers and millers in the approximate proportions of 70 per cent and 30 per cent respectively.

## Exports of sugar

## RAW AND REFINED SUGAR: EXPORTS, AUSTRALIA, 1962-63 TO 1966-67

		1962-63	1963-64	1964-65	1965-66	1966-67
Quantity . . . . .	tons	1,145,966	1,116,190	1,269,139	1,252,546	1,638,263
Value . . . . .	\$'000 f.o.b.	91,042	156,513	112,683	93,925	99,535

## Tobacco

Tobacco is a summer-growing annual which requires a temperate to tropical climate, adequate soil moisture and a frost-free period of approximately five months. In Australia almost all tobacco is grown under irrigation. Because of specialised requirements, commercial production is restricted mainly to river valleys where suitable light friable soil types are found. Grown in the three eastern States of Australia, the centres of production include Mareeba (northern Queensland), Bundaberg (central coastal Queensland), Beerwah (Glasshouse Mountains, Queensland), Texas (south-western Queensland), Ashford (north-western New South Wales), Myrtleford (north-eastern Victoria), and Gunbower (northern Victoria). All tobacco produced in Australia is of the flue-cured type. The main variety grown is Hicks.

## Marketing

Between 9 May 1941 and 24 September 1948 all leaf was under the direct control of the Australian Tobacco Board, and prices were paid on leaf appraisal. Subsequently the Board was disbanded, and sales have been by open auction through the Tobacco Leaf Marketing Board (Queensland and northern New South Wales) and the Victorian Tobacco Growers Association Ltd (southern New South Wales and Victoria). In 1964 the Victorian Tobacco Leaf Marketing Board was set up to market the portion of the crop that was formerly sold by the Victorian Tobacco Growers Association Ltd, and in 1965 a Board was established in New South Wales. However, the actual physical handling of New South Wales leaf at auction is carried out by the Queensland and Victorian authorities.

A stabilisation plan for the tobacco growing industry was agreed on between Commonwealth and State Governments in 1965. In 1968, the final year of the plan, the Governments concerned agreed that it should continue for a further period of five years. The plan provides broadly for the establishment of an annual marketing quota of 26 million pounds (green weight) of leaf to be sold under an

agreed grade and price schedule providing for an average minimum price, based on normal crop fall out. The overall marketing quota is divided among tobacco-producing States and the State quotas are in turn divided among individual growers.

The plan is administered by the Australian Tobacco Board, constituted under the *Tobacco Marketing Act 1965-66* and representative of the Commonwealth, tobacco-producing States, growers, and manufacturers.

The guaranteed average minimum price for the 1968 season, i.e. 109.0 cents per lb, is 0.4 cents per lb below the minimum for the previous season.

#### Central Tobacco Advisory Committee

The Australian Agricultural Council formed the Standing Advisory Committee on Tobacco during 1950. This Committee consisted of representatives of tobacco growers, tobacco manufacturers and the Commonwealth and State Governments. Its main functions were to review the industry and make recommendations on its problems. The Committee was reconstituted by the Agricultural Council during 1952-53.

In 1955 the Committee formulated a programme for increased research and advisory activities. The capital costs of establishing this programme were estimated at \$336,000, of which the Commonwealth Government and tobacco manufacturers each agreed to contribute half. Annual contributions are made to a fund by the Commonwealth and State Governments and tobacco growers and manufacturers. A Tobacco Industry Trust Account has been established under the *Tobacco Industry Act 1955-1965* to receive these contributions. The contributions from growers and manufacturers are obtained under the Tobacco Charges Assessment Act and the Tobacco Charges Acts, whose purpose is to provide funds to be used in research and otherwise with a view to fostering and expanding the Australian tobacco industry. This programme commenced in 1956, and since then \$4,593,310 has been paid to State and Commonwealth departments for expenditure on tobacco research and extension. The allocation for 1967-68 was \$724,736. As from 1 July 1964 the annual Commonwealth contribution has been increased to one-half of approved expenditure from the Tobacco Industry Trust Account. In 1961 a Research Sub-Committee was established to review annually scientific programmes and finance in relation to the Tobacco Industry Trust Account and make recommendations to the Central Tobacco Advisory Committee. However, following the establishment of the Australian Tobacco Board, the Australian Agricultural Council in 1966 abolished this sub-committee and reconstituted the Central Tobacco Advisory Committee with the following terms of reference:

'To make recommendations annually to the Australian Agricultural Council, through the Standing Committee on Agriculture, regarding research and extension programmes to be financed from the Tobacco Industry Trust Account.'

#### Other assistance and research

Details of the recommendations by the Tobacco Inquiry Committee and grants periodically approved by the Commonwealth Government up to 30 June 1953 are given in Year Book No. 40, pages 895-6, and in previous issues.

The Commonwealth Scientific and Industrial Research Organization and the State Departments of Agriculture in the tobacco growing States are carrying out investigations into a wide range of problems involving fundamental research, plant breeding, variety trials, irrigation, disease and pest control, fertilisers, crop rotation, and cultural practices.

#### Tobacco factories

Manufacturers of Australian cigarettes and tobacco are granted a lower rate of duty on imported tobacco leaf, provided it is blended with a prescribed minimum percentage of Australian leaf. These percentages, which in November 1946 stood at 3 per cent for cigarettes and 5 per cent for tobacco, have been increased progressively in intervening years and since 1 January 1966 have been set at 50 per cent for both cigarettes and tobacco.

In 1966-67 the quantity of cured leaf recorded as used in tobacco factories in Australia amounted to 51 million lb, of which 25 million lb was of local origin. The balance was imported, chiefly from the United States of America and South Africa.

#### Tobacco area and production

The area of tobacco in 1966-67 was 23.8 per cent below the record area established in 1962-63. Production at 27,905,000 lb was 17.7 per cent below the record established in 1963-64.

## TOBACCO: AREA AND PRODUCTION, STATES, 1936-37 TO 1966-67

<i>Period</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>Aust.</i>
AREA (ACRES)							
Average for three years ended—							
1938-39 . . .	697	4,262	3,842	77	1,055	134	10,067
1948-49 . . .	415	1,046	1,948	..	609	..	4,018
1958-59 . . .	1,257	3,478	7,479	..	1,295	..	13,509
Year—							
1962-63 . . .	3,163	9,844	16,346	..	28	..	29,381
1963-64 . . .	2,927	10,519	15,579	..	..	..	29,025
1964-65 . . .	2,546	9,720	14,042	..	..	..	26,308
1965-66 . . .	1,742	9,230	12,509	..	..	..	23,481
1966-67 . . .	1,794	8,455	12,134	..	..	..	22,383
PRODUCTION OF DRIED LEAF ('000 lb)							
Average for three years ended—							
1938-39 . . .	471	1,603	2,173	17	741	104	5,109
1948-49 . . .	380	670	1,725	..	523	..	3,298
1958-59 . . .	1,066	3,770	5,563	..	1,016	..	11,415
Year—							
1962-63 . . .	2,885	9,447	14,787	..	29	..	27,148
1963-64 . . .	2,652	14,459	17,231	..	..	..	34,342
1964-65 . . .	2,356	12,080	10,675	..	..	..	25,111
1965-66 . . .	1,698	11,083	14,580	..	..	..	27,361
1966-67 . . .	2,133	10,953	14,819	..	..	..	27,905

## Imports and exports of tobacco

Imports of tobacco and tobacco manufactures into Australia during 1966-67 were valued at \$27.5 million. This included 27.0 million lb of unmanufactured tobacco valued at \$20.6 million. Exports of tobacco and tobacco manufactures during 1966-67 were valued at \$2,363,000, including Australian produce, \$1,534,000.

## Cotton

This annual shrub requires a hot climate and inter-row weed control. Lint (long fibres) is extracted from the seed cotton in the ginneries and is used for yarn. The residue, consisting of linters (short fibres), kernels and hulls (outer seed coat), is treated in oil mills. From linters and kernels are produced such items as short-fibred cotton, cotton seed oil for human consumption and industrial purposes, and meal cakes for stock feed. The hulls may be used as fuel.

The production of cotton in Australia was formerly restricted mainly to the coastal river valleys of Queensland. In recent years, however, the Namoi River area of New South Wales and the Ord River district of Western Australia have emerged as the predominant growing areas, while smaller quantities are grown in the Murrumbidgee Irrigation Area of New South Wales. The bulk of the Australian cotton crop is now grown under irrigation and this has resulted in greatly increased yields.

## Cotton bounty

For particulars of the *Cotton Bounty Act* 1951 and amendments of 1952, 1955 and 1957, see page 1044 of Year Book No. 49. Under the *Raw Cotton Bounty Act* 1963-1966 the Commonwealth pays a bounty on raw cotton produced and sold for use in Australia at the rate of 13.4375 cents per lb for Middling 1' White, with premiums and discounts on grades and staples above and below, up to a maximum of \$4 million in any one year. The bounty is for a period of five years from 1 January 1964.

## Cotton area and production

COTTON: AREA, PRODUCTION AND YIELD PER ACRE, STATES AND TERRITORIES  
1962-63 TO 1966-67

Year	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
AREA (ACRES)									
1962-63	2,359	(a)	35,330	..	(a)	..	(a)	..	(b)37,689
1963-64	10,947	..	28,465	..	1,526	..	..	..	40,938
1964-65	18,897	(a)	13,550	..	5,475	..	..	..	(b)37,922
1965-66	33,176	(a)	13,455	..	8,307	..	..	..	(b)54,938
1966-67	30,104	..	11,167	..	11,892	..	..	..	53,163
PRODUCTION (UNGINNED) ('000 lb)									
1962-63	2,993	(a)	12,769	..	(a)	..	(a)	..	(b)15,762
1963-64	8,167	..	7,943	..	2,114	..	..	..	18,223
1964-65	45,951	(a)	6,268	..	10,790	..	..	..	(b)63,009
1965-66	103,280	(a)	10,138	..	20,431	..	..	..	(b)133,850
1966-67	79,159	..	11,800	..	29,400	..	..	..	120,360
YIELD PER ACRE (lb)									
1962-63	1,269	(a)	361	..	(a)	..	(a)	..	(b)418
1963-64	746	..	279	..	1,385	..	..	..	445
1964-65	2,432	(a)	463	..	1,971	..	..	..	(b)1,662
1965-66	3,113	(a)	754	..	2,460	..	..	..	(b)2,436
1966-67	2,630	..	1,057	..	2,472	..	..	..	2,264

(a) Not available for publication. (b) Incomplete; see individual States.

NOTE. Production in Queensland relates to the crop harvested in the first of the years mentioned in column 1, and in other States to the year following: e.g., for 1966-67, the Queensland crop was harvested during 1966, while the crop in other States was harvested during 1967.

Production of ginned cotton for 1962-63 was 5,403,000 lb; 1963-64, 6,570,000 lb; 1964-65, 17,286,000 lb; 1965-66, 40,885,000; and 1966-67, 35,510,000 lb.

The gross value of unginncd cotton for the five years ended 1966-67 was \$1,876,000; \$2,212,000; \$7,685,000; \$14,323,000; and \$13,572,000 respectively.

Imports of raw cotton (excluding linters) during the past five years were: 1962-63, 42,543,000 lb; 1963-64, 56,663,000 lb; 1964-65, 55,474,000 lb; 1965-66, 32,096,000 lb; and in 1966-67, 19,963,000 lb.

## Peanuts

Peanuts, or groundnuts, are a sub-tropical legume (and hence summer growers), the pods of which mature beneath the surface of the soil. They thus require well drained, light textured soils. At harvest the plant is pulled, wind-rowed, field-cured for two to four weeks, and then threshed to recover the pods. The main products of the industry are nuts, peanut oil, oil cake, and synthetic protein fibre.

The production of peanuts in Australia is confined mainly to Queensland, although small quantities are grown in New South Wales, the Northern Territory and, in some years, Western Australia.

## PEANUTS: AREA AND PRODUCTION, STATES, 1962-63 TO 1966-67

Year	Area (acres)			Production (cwt)		
	N.S.W.	Qld	Aust.	N.S.W.	Qld	Aust.
1962-63	395	35,552	(a)35,947	4,258	315,144	(a)319,402
1963-64	478	44,482	(a)44,960	4,744	455,982	(a)460,726
1964-65	400	45,554	(a)45,954	4,746	202,369	(a)207,115
1965-66	394	57,298	57,708	4,468	543,735	548,279
1966-67	397	69,330	(a)69,727	5,194	821,957	(a)827,151

(a) Incomplete: excludes Northern Territory.

The gross value of the 1966-67 crop was \$7,966,000 which was approximately \$2,677,000 more than in 1965-66. Total supplies available for consumption in Australia in 1966-67 were 20,631 tons (in shell equivalent), after allowing for an increase of 8,371 tons in stock held by the Peanut Marketing Board, exports of 104 tons of peanuts and peanuts products, and industrial usage of 4,777 tons. Supplies were made up of 31,203 tons from Australian production received into store by the Board and 2,680 tons imported.

## Flax

Prior to 1948-49 the growing of flax for linseed oil had not been developed extensively in Australia. Since then, however, action has been taken to develop this industry, the ultimate objective being the production of sufficient linseed to meet Australia's total oil requirements. The main producing areas are the Darling Downs in Queensland, the wheat belt of New South Wales, and the western and north-eastern districts of Victoria.

The question of assistance to the industry was investigated by the Commonwealth Tariff Board in 1953, and its conclusions are contained in its Report on *Linseed and Linseed Products* dated 23 October 1953.

Particulars of area and production of flax for linseed, by States, are given in the following table for the years 1962-63 to 1966-67. The significant reduction in area in 1965-66 was attributable to over-production in 1964-65.

FLAX FOR LINSEED: AREA AND PRODUCTION, STATES, 1962-63 TO 1966-67

Year	N.S.W.	Vic.	Qld	S.A.	W.A.	Aust.
Area (acres)—						
1962-63 . . . . .	11,493	25,232	58,493	1,220	626	97,064
1963-64 . . . . .	15,335	16,240	83,336	1,002	1,588	117,501
1964-65 . . . . .	23,769	9,953	97,092	898	2,135	133,847
1965-66 . . . . .	3,658	7,370	12,266	1,196	97	24,587
1966-67 . . . . .	9,580	5,012	17,854	389	1,751	34,586
Production (tons of linseed)—						
1962-63 . . . . .	2,634	8,180	14,477	290	136	25,717
1963-64 . . . . .	3,722	4,758	20,342	283	411	29,516
1964-65 . . . . .	8,761	2,671	34,175	426	567	46,600
1965-66 . . . . .	213	2,538	2,895	403	15	6,064
1966-67 . . . . .	3,265	2,319	7,338	188	634	13,744

## Hops

Hops are grown from perennial rootstocks over deep, well-drained soils in localities sheltered from the wind. The hop-bearing vine shoots are carried upon wire and coir trellises, from which they are later harvested, principally by hand. The green hops are kiln-dried and bleached with sulphur dioxide fumes, following which the cured hops are pressed into bales.

Hop growing in Australia is confined to the Derwent, Huon and Channel areas of Tasmania and the Ovens and King Valleys in Victoria. A small area is also under hops in Western Australia, near Manjimup, but the details are not available for publication.

### Production and imports of hops

The production of hops in Australia is insufficient to meet local requirements, and additional supplies are imported to meet the needs of the brewing industry. In the following table details of the production and imports of hops and the quantity of hops used in breweries are shown for each of the years 1962-63 to 1966-67. Exports of hops are negligible and are not recorded separately.

**HOPS: PRODUCTION AND DISPOSAL, AUSTRALIA  
1962-63 TO 1966-67**

Year	Production(a)		Imports	Net available supplies (b)	Quantity used in breweries
	Quantity	Gross value			
	cwt	\$'000	cwt	cwt	cwt
1962-63	33,629	2,570	1,337	34,966	38,202
1963-64	19,858	1,534	536	20,394	37,033
1964-65	27,893	2,372	9,521	37,414	39,517
1965-66	37,394	3,020	12,696	50,090	35,223
1966-67	28,907	2,531	2,683	31,590	31,347

(a) Excludes production in Western Australia, for which details are not available for publication.

(b) Disregards movements in stocks.

### Safflower

The cultivation of safflower in Australia has developed rapidly in recent years to make it one of the major oilseed crops. It is best cultivated, either in the warm temperate zones or as a winter crop in the tropical or sub-tropical regions, on moderately fertile, weed-free, clay or sandy loams. Adequate moisture is required up to the flowering stage, after which it is relatively drought resistant. The soil preparation and sowing techniques are similar to those employed for small grains; it is usually harvested by combine when the seed is hard and dry. The oil, produced by crushing, is used in the manufacture of margarine, soaps, paints, varnishes, enamels, and textiles.

Queensland is the main producer of safflower where suitable growing conditions exist particularly in the marginal wheat regions of Dawson-Callide Valleys, Fitzroy Basin, Central Highlands, and the Darling Downs. Suitable growing conditions also exist in New South Wales, Victoria and Western Australia, but, at present, production in the latter two States is relatively small.

**SAFFLOWER: AREA AND PRODUCTION, STATES AND TERRITORIES  
1962-63 TO 1966-67**

Year	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust. (a)
AREA (ACRES)									
1962-63	(b)	..	5,694	..	(b)	..	..	..	5,694
1963-64	113	(b)	18,141	..	1,125	..	..	..	19,379
1964-65	2,253	1,902	43,350	(b)	4	..	..	..	47,509
1965-66	2,539	935	56,727	(b)	75	..	..	..	60,276
1966-67	5,092	729	88,803	(b)	(b)	..	..	..	94,624
PRODUCTION (BUSHELS)(c)									
1962-63	(b)	..	90,021	..	(b)	..	..	..	90,021
1963-64	1,546	(b)	275,106	..	26,387	..	..	..	303,039
1964-65	33,373	20,218	643,524	(b)	280	..	..	..	697,395
1965-66	13,941	11,738	522,810	(b)	1,070	..	..	..	549,559
1966-67	71,823	7,336	1,290,087	(b)	(b)	..	..	..	1,369,246

(a) Incomplete; see individual States.

(b) Not available for publication.

(c) 40 lb per bushel.

Imports of crude safflower seed oil in 1965-66 and 1966-67 totalled 873,000 gallons and 1,267,000 gallons respectively. These imports came mainly from the United States of America.



### Vegetables for human consumption

#### Area, production and trade

Vegetables were initially grown on a large scale near the main cities, where there was ready access to reliable water supplies and to markets. Later, the expansion of irrigation areas and improvement in transport services resulted in their production being extended into many other areas. At present, because of the wide diversity of climatic conditions across Australia, supplies for main city markets are drawn from widely different areas, depending upon the times of maturity of the various crops. Apart from potatoes and onions, which are sold in some States through marketing boards, the bulk of vegetable trading takes place at the metropolitan markets of the cities concerned.

Details of the areas planted and production of individual kinds of vegetables are shown below for the seasons 1964-65 to 1966-67. Certain particulars shown are incomplete in that details for specific vegetables in some States are either not available or are not available for publication. For further information see the bulletin *Rural Industries*. Details of the estimated consumption of vegetables for a series of years ending 1966-67 are given in the chapter Miscellaneous.

#### FRESH VEGETABLES FOR HUMAN CONSUMPTION: AUSTRALIA 1964-65 TO 1966-67

Vegetable	1964-65		1965-66		1966-67	
	Area sown	Production	Area sown	Production	Area sown	Production
	acres	tons	acres	tons	acres	tons
Asparagus . . . . .	4,067	5,390	3,976	5,957	4,227	5,776
Beans, French and runner . . . . .	16,692	30,302	17,319	30,434	18,073	36,912
Beans, navy . . . . .	3,430	710	3,400	242	5,153	933
Beetroot . . . . .	1,893	16,519	2,081	17,248	2,558	22,426
Cabbages and brussel sprouts . . . . .	5,959	65,914	5,915	69,134	6,193	76,151
Carrots . . . . .	5,591	62,629	5,922	67,833	6,326	77,599
Cauliflowers . . . . .	6,941	74,262	6,511	73,967	6,364	77,168
Celery . . . . .	756	13,025	769	12,803	757	13,485
Cucumbers . . . . .	1,588	8,115	1,913	8,710	1,987	8,870
Lettuce . . . . .	4,710	22,386	4,976	23,303	5,046	24,324
Onions . . . . .	9,707	69,701	8,250	58,124	10,210	84,465
Parsnips . . . . .	1,314	13,311	1,336	13,966	1,278	15,163
Peas, blue . . . . .	3,973	2,718	5,502	2,741	4,373	2,992
Peas, green . . . . .	57,948	100,603	66,938	102,661	65,964	119,118
Potatoes . . . . .	87,919	508,019	96,311	639,000	99,328	642,967
Tomatoes . . . . .	16,315	147,194	16,705	159,707	17,791	172,965
Turnips, swede and white . . . . .	1,255	8,179	1,893	8,373	1,655	8,834
All other . . . . .	35,520	..	39,662	..	36,341	..
Total . . . . .	265,578	..	289,378	..	293,623	..

#### Processed vegetables

Total production of canned vegetables in 1966-67 amounted to 194,834,000 lb. The principal types produced were green peas (excluding mint-pro peas), 30,511,000 lb; green beans, 12,074,000 lb; baked beans (including pork and beans), 38,724,000 lb; asparagus, 9,475,000 lb; beetroot, 42,794,000 lb; and mushrooms, 8,213,000 lb.

The production of dehydrated vegetables, including split peas, during 1966-67 amounted to 14,627,000 lb, while the production of potato crisps, chips and flakes was 20,910,000 lb.

There has been rapid development in the quick-frozen vegetable industry. Data were collected for the first time in 1957-58, when 13,846,000 lb of frozen vegetables were produced, made up principally of 10,131,000 lb of peas and 2,540,000 lb of beans. In 1966-67 production had risen to 118,186,000 lb, of which 81,643,000 lb were peas and 18,600,000 lb were beans.

#### Exports and imports of vegetables

Overseas exports of fresh and frozen vegetables during 1966-67 amounted to 73,413,000 lb valued at \$3,960,000; dried vegetables, 9,612,000 lb valued at \$6,089,000; preserved vegetables, 4,346,000 lb valued at \$879,000; and other prepared or preserved vegetables, 133,000 lb valued at \$73,000.

Imports of fresh and frozen vegetables during 1966-67 amounted to 7,491,000 lb valued at \$1,100,000.

### Potatoes

This crop requires deep friable soils, which in Australia are usually basaltic, alluvial or swampy in origin. Fertiliser requirements, which are generally high, vary with the type of soil. Potatoes are killed by heavy frost, but require only moderate temperatures for growth. Mechanical planters and diggers are used to a variable extent depending upon a variety of factors including terrain, state of the soil and scale of operations. Seed certification schemes, which operate in all States except Queensland, provide a supply of seed which is free from viral, fungal and bacterial diseases. In Australia potatoes are used almost entirely for human consumption and not for the production of starch or alcohol. They are rarely used as stock feed.

*Area, production, and yield per acre.* Victoria possesses particular advantages for the growing of potatoes, as the rainfall is generally satisfactory and the climate is unfavourable to the spread of Irish blight; consequently, the crop is widely grown. The principal areas of that State are the central highlands and the south-western and Gippsland districts. Until 1958-59, Tasmania (where production is mainly in the north-west) came next in order of acreage sown, although production exceeded that of Victoria in some of the war years. Since then, however, acreage in New South Wales and Queensland has increased considerably, and there is now a greater area of potatoes in each of these States than in Tasmania. In New South Wales production is chiefly in the tablelands districts. A graph showing production since 1935-36 appears on page 996 of Year Book No. 49.

### POTATOES: AREA, PRODUCTION AND YIELD PER ACRE, STATES AND TERRITORIES, 1936-37 TO 1966-67

Period	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust
AREA (ACRES)									
Average for three years ended—									
1938-39 . . .	21,049	40,376	11,551	4,445	4,627	32,044	..	59	114,151
1948-49 . . .	20,440	53,862	10,795	6,084	6,753	38,643	..	103	136,680
1958-59 . . .	16,589	45,225	12,980	6,035	7,977	19,002	4	94	107,906
Year—									
1962-63 . . .	27,420	43,024	16,994	5,918	6,499	13,839	6	42	113,742
1963-64 . . .	24,352	39,626	15,886	5,459	5,835	10,806	(a)	23	(b)101,987
1964-65 . . .	20,530	32,931	14,005	5,247	5,797	9,393	(a)	16	(b)87,919
1965-66 . . .	21,913	34,333	16,080	5,748	6,229	11,993	1	14	96,311
1966-67 . . .	23,594	37,167	16,227	5,948	6,100	10,278	(a)	14	(b)99,328
PRODUCTION (TONS)									
Average for three years ended—									
1938-39 . . .	52,158	137,583	17,191	20,342	23,678	109,285	..	143	360,380
1948-49 . . .	62,701	191,590	26,470	32,149	38,722	148,389	..	598	500,619
1958-59 . . .	68,533	245,937	50,989	48,072	50,024	92,367	5	391	556,318
Year—									
1962-63 . . .	132,969	254,473	86,239	53,253	56,900	82,545	5	212	666,596
1963-64 . . .	98,308	200,384	90,201	51,195	55,402	66,420	(a)	122	(b)562,032
1964-65 . . .	75,659	183,665	82,389	48,400	60,739	57,062	(a)	105	(b)508,019
1965-66 . . .	104,647	240,786	97,744	56,471	62,865	76,400	4	83	639,000
1966-67 . . .	126,183	225,186	93,738	60,271	64,169	73,300	(a)	120	(b)642,967
YIELD PER ACRE (TONS)									
Average for three years ended—									
1938-39 . . .	2.48	3.41	1.49	4.58	5.12	3.41	..	2.42	3.16
1948-49 . . .	3.07	3.56	2.45	5.28	5.73	3.84	..	5.81	3.66
1958-59 . . .	4.13	5.44	3.93	7.97	6.27	4.86	1.25	4.16	5.16
Year—									
1962-63 . . .	4.85	5.91	5.07	9.00	8.76	5.96	0.83	5.05	5.86
1963-64 . . .	4.04	5.06	5.68	9.38	9.49	6.15	(a)	5.30	(b)5.51
1964-65 . . .	3.69	5.58	5.88	9.22	10.48	6.07	(a)	6.56	(b)5.78
1965-66 . . .	4.78	7.01	6.08	9.82	10.09	6.37	4.00	5.93	6.63
1966-67 . . .	5.35	6.06	5.78	10.13	10.52	7.13	(a)	8.57	(b)6.47

(a) Not available for publication.

(b) Incomplete; excludes Northern Territory.

*Potato marketing boards* were established in all States except Tasmania under separate State legislation after Commonwealth control of potato marketing under war-time legislation ceased at the end of 1948. The life of the Queensland Board was not extended when its term ended in 1954. The New South Wales Board was voted out by growers in 1956, and the Victorian Board also ceased functioning in that year. The Boards in South Australia and Western Australia are the only statutory boards still in operation.

*Value of potato crop.* The estimated gross value of the potato crop of each State for the 1966-67 season and the value per acre are shown in the following table.

POTATOES: VALUE OF CROP, STATES, 1966-67

		N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	Aust.(a)
Aggregate value	\$'000	8,414	15,291	5,423	3,138	4,959	3,999	41,233
Value per acre	\$	357	411	334	528	813	389	415

(a) Includes Northern Territory and Australian Capital Territory.

*Consumption and exports of potatoes.* The annual consumption of potatoes in Australia during each of the three years 1964-65 to 1966-67 amounted to 465,300 tons, 573,700 tons and 577,800 tons respectively or 92.4 lb, 111.7 lb and 110.5 lb respectively per head of population. These figures exclude the quantities used for seed, which averaged about 49,000 tons annually over this period. Details showing exports and imports for the years 1962-63 to 1966-67 are given in the following table.

POTATOES: EXPORTS AND IMPORTS, AUSTRALIA  
1962-63 TO 1966-67

Year	Exports		Imports	
	Quantity	Value	Quantity	Value
	tons	\$'000 f.o.b.	tons	\$'000 f.o.b.
1962-63	15,819	850	..	..
1963-64	12,722	643	..	..
1964-65	4,715	427	5,404	343
1965-66	10,064	626	7,208	455
1966-67	13,593	839	..	..

Western Australia has emerged in recent years as the principal exporting State, accounting for about two-thirds of the Australian total in 1966-67. Its principal markets are Papua and New Guinea, Singapore, and New Caledonia. New Zealand is the principal source of imports.

### Onions

*Area, production and yield per acre.* Australia's onion supply comes chiefly from Victoria and Queensland. The Victorian crop consists almost entirely of brown onions, and the bulk of the crop is grown in a small section of the Western Division of the State, where the volcanic ash soils have been found to be particularly suitable for onion growing on a commercial scale. Most of Queensland's onion production is grown in the Lockyer Valley and also consists mainly of brown varieties. A graph showing production since 1935-36 appears on page 996 of Year Book No. 49.

**ONIONS: AREA, PRODUCTION AND YIELD PER ACRE, STATES  
1936-37 TO 1966-67**

<i>Period</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>Aust.(a)</i>
<b>AREA (ACRES)</b>							
Average for three years ended—							
1938-39 . . .	126	5,634	1,187	521	122	8	7,604
1948-49 . . .	433	6,245	2,234	534	468	26	9,944
1958-59 . . .	491	4,614	3,655	635	413	29	9,846
Year—							
1962-63 . . .	800	4,634	3,796	944	509	79	10,765
1963-64 . . .	682	3,756	3,317	930	446	91	9,222
1964-65 . . .	803	3,825	3,422	1,146	428	83	9,707
1965-66 . . .	999	2,955	2,748	1,148	331	69	8,250
1966-67 . . .	1,256	3,295	3,495	1,631	413	120	10,210
<b>PRODUCTION (TONS)</b>							
Average for three years ended—							
1938-39 . . .	324	34,039	3,040	3,904	915	42	42,285
1948-49 . . .	1,703	41,156	10,489	5,032	3,831	153	62,388
1958-59 . . .	2,496	31,982	15,505	5,625	4,599	132	60,410
Year—							
1962-63 . . .	5,185	26,175	21,184	8,531	6,622	515	68,219
1963-64 . . .	4,998	17,946	20,412	8,736	6,814	372	59,278
1964-65 . . .	6,378	22,963	22,853	11,061	5,981	465	69,701
1965-66 . . .	8,764	17,115	17,728	10,069	3,948	500	58,124
1966-67 . . .	10,809	22,375	27,033	17,933	5,417	898	84,465
<b>YIELD PER ACRE (TONS)</b>							
Average for three years ended—							
1938-39 . . .	2.57	6.04	2.56	7.49	7.50	5.25	5.56
1948-49 . . .	3.93	6.59	4.70	9.42	8.19	5.88	6.27
1958-59 . . .	5.08	6.93	4.24	8.86	11.14	4.55	6.14
Year—							
1962-63 . . .	6.48	5.65	5.58	9.04	13.01	6.52	6.34
1963-64 . . .	7.33	4.78	6.15	9.39	15.28	4.09	6.43
1964-65 . . .	7.94	6.00	6.68	9.65	13.97	5.60	7.18
1965-66 . . .	8.77	5.79	6.45	8.77	11.93	7.25	7.04
1966-67 . . .	8.61	6.79	7.73	11.00	13.12	7.48	8.27

(a) Includes, for some of the years shown, the Northern Territory and the Australian Capital Territory.

*Value of onion crop.* The estimated gross value of the onion crop and the value per acre are shown in the following table for the 1966-67 season.

**ONIONS: VALUE OF CROP, STATES, 1966-67**

	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>Aust.</i>
Aggregate value \$'000	622	1,464	1,771	1,675	419	93	6,044
Value per acre \$	495	444	507	1,027	1,015	775	592

*Consumption and exports of onions.* The consumption of onions in Australia during 1966-67 was 79,000 tons or 15.1 lb per head of population. Onions are the only root crop, other than potatoes, in which any considerable overseas trade is carried on by Australia. In 1966-67 exports amounted to

8,816 tons, valued at \$525,000, and were shipped mainly to Japan and Singapore. The quantity of exports in 1965-66 was 1,609 tons, valued at \$172,000. Imports of onions amounted to 849 tons, valued at \$95,000, in 1966-67, and 1,538 tons, valued at \$136,000, in 1965-66. The principal country from which onions were imported was New Zealand.

### Fruit

The varieties of fruit grown differ in various parts of the States, ranging from pineapples, papaws and mangoes in the tropics to strawberries, raspberries and currants in the colder parts of the temperate zone. In New South Wales citrus fruit (oranges, lemons, etc.) and bananas are the principal crops, although apples, peaches, plums, pears, and cherries are grown extensively. The principal varieties grown in Victoria are apples, pears, peaches, oranges, and apricots. In Queensland apples, pineapples, bananas, oranges, mandarins, peaches, and plums are the varieties most largely cultivated. In South Australia, in addition to oranges, apples, peaches, apricots, and pears, almonds and olives are grown extensively. In Western Australia apples, oranges, plums, and pears are the chief varieties. In Tasmania apples occupy over three-quarters of the fruit-growing area, but small fruit, such as currants, raspberries and gooseberries, is grown extensively, the balance of the area being mainly taken up with pears and apricots.

#### Overseas marketing of fruits

The *Apple and Pear Organization Act 1938-1966* provides for the establishment of an Australian Apple and Pear Board comprising representatives of growers, exporters, employees, and the Commonwealth Government. A representative in London has also been appointed by the Board. An export levy to meet the expenses of the Board is provided for in the *Apple and Pear Export Charges Act 1938-1966*. The function of the Board is the organisation and control of exports of fresh apples and pears, and it has the power to regulate shipments, determine export quotas, allocate consignments from each State, and recommend the licensing of exporters. The Board contributes to apple and pear publicity activities overseas.

In January 1964 the *Canned Fruits Marketing Act 1963-1966* replaced the *Canned Fruits Export Control Act 1926-1959* under which the overseas marketing of canned fruit was initially organised (see Year Book No. 49, page 1050). The Australian Canned Fruits Board, which is constituted under the Act, determines the terms and conditions for overseas sales. The Board exercises this control through a system of export licences. The Board, whose membership was increased from five to eleven members and which was granted greater powers under the new Act, comprises representatives of the Commonwealth Government (one), canners of deciduous fruit (six), growers of deciduous fruit (three), and pineapple interests (one). The Board maintains a London office. The *Canned Fruits Export Charges Act 1926-1966* provides for a levy on exports to meet the Board's expenses, which include contributions to overseas publicity connected with the canned fruit industry. In 1963 an excise duty was imposed by the *Canned Fruits Excise Act 1963* on canned deciduous fruit entered for domestic consumption, and the proceeds of the duty are made available to the Board to assist in the promotion of overseas sales of canned deciduous fruit.

In 1959 the Australian Canned Fruit Sales Promotion Committee was established to promote the sale of canned deciduous fruit on the home market and overseas. The operations of the Committee are financed by a levy on fruit accepted by the canneries for the production of canned fruit. The Committee comprises representatives of growers and processors of canning fruit and a representative of the Commonwealth Government.

#### Area and production of fruit

In general the area under fruit in Australia has been increasing steadily during recent years.

#### FRUIT: AREA, STATES AND TERRITORIES, 1962-63 TO 1966-67

(Acres)

Year	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
1962-63	98,032	75,855	43,242	40,444	25,204	21,943	136	55	304,911
1963-64	98,670	76,796	44,681	41,686	25,670	22,134	149	54	309,840
1964-65	97,221	75,509	45,918	43,012	26,425	22,375	130	56	310,646
1965-66	97,212	75,001	47,715	43,986	26,715	22,426	110	42	313,207
1966-67	96,482	73,519	50,058	44,157	26,457	22,343	133	38	313,187

## FRUIT: AREA AND PRODUCTION, STATES AND TERRITORIES, 1966-67

<i>Fruit</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
AREA, BEARING AND NOT BEARING (ACRES)									
Apples . . .	18,945	22,154	13,710	5,937	15,654	18,540	..	33	94,973
Apricots . . .	2,026	3,264	470	4,845	287	421	..	..	11,313
Bananas . . .	20,154	..	5,524	..	506	..	29	..	26,213
Cherries . . .	3,156	2,012	10	591	46	69	..	..	5,884
Citrus—									
Oranges . . .	28,102	7,133	3,515	17,382	4,811	..	39	..	60,982
Mandarins . . .	2,500	601	2,648	974	613	..	2	..	7,338
Lemons and limes . . .	2,607	1,127	388	694	584	..	5	..	5,405
Other . . .	725	304	91	546	122	..	3	..	1,791
Nuts . . .	196	289	790	3,897	82	..	26	..	5,280
Peaches . . .	8,162	14,503	1,677	4,754	924	48	..	..	30,068
Pears . . .	3,169	16,818	987	1,920	1,080	1,584	..	..	25,558
Pineapples . . .	266	..	14,790	..	..	..	17	..	15,073
Plums . . .	1,814	1,569	1,319	353	1,122	51	..	..	10,157
Prunes . . .	3,076	263	..	589		1	..	..	
Small fruit . . .	51	963	190	155	13	1,608	..	..	2,980
Other fruit . . .	1,533	2,519	3,949	1,520	613	21	12	5	10,172
<b>Total . . .</b>	<b>96,482</b>	<b>73,519</b>	<b>50,058</b>	<b>44,157</b>	<b>26,457</b>	<b>22,343</b>	<b>133</b>	<b>38</b>	<b>313,187</b>

## PRODUCTION ('000 BUSHEL)

Apples . . .	3,329	4,357	1,496	1,544	2,387	6,301	..	3	19,418
Apricots . . .	473	530	42	1,307	34	21	..	..	2,405
Bananas . . .	3,921	..	809	..	169	..	2	..	4,901
Cherries . . .	118	121	..	41	2	5	..	..	287
Citrus—									
Oranges . . .	5,258	1,144	773	3,034	466	..	1	..	10,677
Mandarins . . .	180	64	357	70	33	..	..	..	705
Lemons and limes . . .	488	148	114	55	142	..	1	..	948
Peaches . . .	1,464	2,732	178	1,427	108	5	..	..	5,913
Pears . . .	667	4,701	101	530	154	404	..	..	6,557
Pineapples . . .	38	..	6,020	..	..	..	1	..	6,059
Plums . . .	182	148	127	105	123	8	..	..	1,204
Prunes . . .	491	21	..				..	..	

## Principal fruit crops

## PRINCIPAL FRUIT CROPS: AREA, PRODUCTION, AND GROSS VALUE OF PRODUCTION, AUSTRALIA, 1962-63 TO 1966-67

<i>Year</i>	<i>Apples</i>	<i>Apricots</i>	<i>Bananas</i>	<i>Oranges</i>	<i>Peaches</i>	<i>Pears</i>	<i>Pineapples</i>	<i>Plums and prunes</i>
AREA, BEARING AND NOT BEARING (ACRES)								
1962-63	91,380	11,847	30,392	57,301	30,226	25,945	10,495	10,828
1963-64	92,859	11,890	29,709	59,211	30,237	25,870	11,086	10,963
1964-65	94,870	11,274	26,762	60,497	30,387	26,079	11,582	10,515
1965-66	94,865	11,427	26,555	61,517	30,036	25,941	12,938	10,474
1966-67	94,973	11,313	26,213	60,982	30,068	25,558	15,073	10,157

**PRINCIPAL FRUIT CROPS: AREA, PRODUCTION AND GROSS VALUE OF  
PRODUCTION, AUSTRALIA, 1962-63 TO 1966-67—continued**

<i>Year</i>	<i>Apples</i>	<i>Apricots</i>	<i>Bananas</i>	<i>Oranges</i>	<i>Peaches</i>	<i>Pears</i>	<i>Pineapples</i>	<i>Plums and prunes</i>
<b>PRODUCTION ('000 BUSHELS)</b>								
1962-63	18,349	1,913	4,832	9,307	4,003	5,667	4,126	1,043
1963-64	19,285	1,610	5,324	8,735	4,366	6,916	4,445	1,039
1964-65	18,897	1,968	5,028	10,836	5,078	5,920	4,363	1,068
1965-66	19,783	1,778	4,694	9,137	5,508	7,485	4,924	952
1966-67	19,418	2,405	4,901	10,677	5,913	6,557	6,059	1,204
<b>GROSS VALUE OF PRODUCTION (\$'000)</b>								
1962-63	42,006	5,296	18,354	19,752	9,548	12,760	5,230	3,226
1963-64	44,862	4,802	16,442	20,834	10,084	14,900	5,150	4,036
1964-65	46,577	5,508	18,585	23,547	12,676	14,753	5,491	4,544
1965-66	47,631	5,119	20,409	22,037	13,795	17,674	6,165	3,419
1966-67	52,108	6,912	20,319	25,327	13,912	15,913	7,137	5,149

**Production and consumption of jams and jellies and preserved fruit**

In Australia considerable quantities of fruit are used in the production of jams and jellies and for preserving. During 1966-67 output of jams, conserves, fruit spreads, etc. amounted to 90,761,000 lb, while output of preserved fruit amounted to 611,552,000 lb. Of the latter figure, peaches accounted for 238,547,000 lb, pears 135,927,000 lb, and pineapples 65,813,000 lb.

In 1966-67, 8,725,000 cwt of fruit was recorded as used in factories classified to the sub-classes Oils, vegetable; Jam, fruit and vegetable canning; Condiments, coffee, spices; Aerated waters and cordials; and Dehydrated fruit and vegetables. Details of the estimated consumption of fruit and fruit products per head of population for a series of years ending 1966-67 are shown in the chapter Miscellaneous.

**Imports and exports of fruit and fruit products**

The imports of fresh fruit into Australia are negligible, while those of dried fruit consist mainly of dates obtained almost entirely from Iraq and Iran. A considerable export trade in both fresh and dried fruit is carried on by Australia with overseas countries. The values of the shipments in 1966-67 amounted to \$27,211,000 and \$23,185,000 respectively. Apples constitute the bulk of the fresh fruit exported, although exports of pears and citrus fruit are considerable.

**FRESH AND FROZEN FRUIT: EXPORTS, AUSTRALIA, 1962-63 TO 1966-67**

<i>Year</i>	<i>Apples</i>		<i>Pears</i>		<i>Citrus</i>		<i>Total value (a)</i>
	<i>Quantity</i>	<i>Value</i>	<i>Quantity</i>	<i>Value</i>	<i>Quantity</i>	<i>Value</i>	
	'000 bus	\$'000 f.o.b.	'000 bus	\$'000 f.o.b.	'000 bus	\$'000 f.o.b.	\$'000 f.o.b.
1962-63	7,206	23,290	1,071	3,500	862	2,566	29,968
1963-64	8,212	24,036	1,666	5,294	961	2,986	33,156
1964-65	7,051	20,989	1,461	5,297	1,082	3,382	30,543
1965-66	8,363	25,863	2,089	7,464	1,210	3,685	37,819
1966-67	6,877	18,280	1,441	4,819	1,222	3,779	27,211

(a) Includes exports of all other fresh and frozen fruit.

The quantity and value of overseas imports and exports of dried fruit, other than raisins and currants, for the years 1962-63 to 1966-67 are shown on the following page.

**DRIED TREE FRUIT(a): IMPORTS AND EXPORTS, AUSTRALIA  
1962-63 TO 1966-67**

Year	Imports(b)		Exports	
	Quantity	Value	Quantity	Value
	'000 lb	\$'000 f.o.b.	'000 lb	\$'000 f.o.b.
1962-63 . . .	8,939	592	6,603	1,903
1963-64 . . .	10,262	604	8,479	1,988
1964-65 . . .	8,454	601	9,415	1,808
1965-66 . . .	8,145	557	11,907	2,450
1966-67 . . .	8,936	671	8,038	2,037

(a) Excludes sultanias, raisins and currants dealt with separately under Vineyards (see page 912). (b) Dates and figs only.

Exports of jams and jellies in 1966-67 were 8,731,000 lb, valued at \$1,227,000, compared with 10,346,000 lb, valued at \$1,504,000 in 1965-66. Imports of jams and jellies in 1966-67 were 1,045,000 lb, valued at \$247,000, compared with 1,304,000 lb, valued at \$268,000 in 1965-66.

Large quantities of canned or bottled fruit are normally exported from Australia, the quantity recorded in 1966-67 being 324,970,000 lb, valued at \$39,995,000. Exports in 1966-67 were made up principally of peaches (138,426,000 lb), pears (97,731,000 lb), fruit salad (29,553,000 lb), pineapples (19,181,000 lb), and apricots (17,846,000 lb). In addition, the exports of pulped fruits during 1966-67 amounted to 2,733,000 lb valued at \$491,000.

The total value of canned or bottled fruit (including fruit juices) imported into Australia during 1966-67 was \$953,000. The value of exports of fruit juices in 1966-67 was \$787,000.

### Vineyards

Grapes require a warm to hot climate and a predominantly winter rainfall. Freedom from late spring frosts is essential. They are grown for wine-making, drying and, to a minor extent, for table use. In Australia wine is produced very largely from irrigated crops, as are dried fruits. Some of the better known wine producing areas are the Murray Valley (South Australia and Victoria), Barossa Valley and Southern Vales Areas (South Australia), the Murrumbidgee Irrigation Areas and the Hunter Valley (New South Wales), the Mildura, Rutherglen and Stawell districts of Victoria, and the Swan Valley (Western Australia). Nearly all the dried fruit is produced along the River Murray and its tributaries, with small localised areas in the other States.

#### Area of vineyards

The area under vineyards in the 1966-67 season in Victoria and South Australia constituted 77 per cent of the total area of vineyards.

**VINEYARDS: AREA(a), STATES, 1936-37 TO 1966-67  
(Acres)**

Period	N.S.W.	Vic.	Qld	S.A.	W.A.	Aust.
Average for three years ended—						
1938-39 . . .	16,824	42,071	2,670	57,185	6,197	124,947
1948-49 . . .	16,482	44,114	3,099	58,971	9,965	132,631
1958-59 . . .	17,210	44,823	2,926	57,199	8,967	131,125
Year—						
1962-63 . . .	17,704	45,662	3,237	58,266	8,685	133,554
1963-64 . . .	18,715	46,501	3,276	58,679	8,629	135,800
1964-65 . . .	20,464	47,996	3,299	58,857	8,310	138,926
1965-66 . . .	21,292	48,617	3,268	58,730	8,215	140,122
1966-67—						
Drying . . .	8,145	40,433	..	11,476	3,126	63,180
Table . . .	2,925	3,109	3,064	223	1,304	10,625
Wine . . .	10,187	5,622	240	45,381	3,515	64,945
Total . . .	21,257	49,164	3,304	57,080	7,945	138,750

(a) Bearing and not bearing.



**Wine industry**

Australia produces wine of every type and also brandy. In recent years there has been a distinct trend towards greater consumption and production of unfortified or table wines. Until 1957-58 production of these wines (which include burgundy, claret, riesling, sauterne, and sparkling wines) was less than half that of the fortified varieties (sherries, ports, etc.). By 1966-67 production of table wines had reached a volume almost equal to that of fortified varieties.

The *Wine Overseas Marketing Act* 1929-1966 was introduced to place the overseas marketing of wine on an orderly basis. The Australian Wine Board, consisting of representatives from wineries and distilleries, grape-growers and the Commonwealth Government, supervises the sale and distribution of Australian wine exported and recommends conditions under which export licences should be issued. The Board also engages in wine publicity and trade promotion activities both in Australia and overseas. In London the Board maintains an Australian Wine Centre, which is a medium for promoting interest in Australian wines and brandy. It is also a retail shop for the sale of these products. The *Wine Grapes Charges Act* 1929-1966 provides for the imposition of a levy on all grapes used in Australia for the manufacture of wine, brandy and spirit used for fortifying wine. The proceeds of the levy are used to meet the Board's projects in Australia and overseas and to defray the administrative expenses of the Board, which has no other source of income.

**Production and consumption of wine and brandy**

In 1966-67 the total production of wine (beverage and distillation) in Australia was 41.6 million gallons, while total consumption of beverage wine was 17.5 million gallons (1.49 gallons per head of population). Similar particulars for 1965-66 are 34.0 million gallons and 15.3 million gallons (1.33 gallons per head of population) respectively.

**WINE: PRODUCTION(a), STATES, 1936-37 TO 1966-67**  
(<sup>'000</sup> gallons)

<i>Period</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Aust.</i>
Average for three years ended—						
1938-39 . .	2,712	1,359	31	14,021	396	18,519
1948-49 . .	4,178	3,040	31	25,906	689	33,844
1958-59 . .	3,974	2,435	36	25,190	743	32,378
Year—						
1962-63 . .	5,858	2,433	28	20,785	789	29,893
1963-64 . .	6,030	3,705	33	27,102	666	37,536
1964-65 . .	6,404	3,458	24	28,022	613	38,520
1965-66 . .	6,439	2,982	24	23,884	627	33,956
1966-67 . .	7,893	3,368	37	29,638	705	41,642

(a) Net factory and farm production of beverage and distillation wine excluding the liquid gallonage of spirits added in wine fortifying.

**BRANDY: PRODUCTION, SOUTH AUSTRALIA  
AND AUSTRALIA, 1936-37 TO 1966-67**  
(Proof gallons)

<i>Period</i>	<i>S.A.</i>	<i>Aust.(a)</i>
Average for three years ended—		
1938-39 . .	446,251	505,474
1948-49 . .	648,641	714,688
1958-59 . .	1,009,040	1,149,032
Year—		
1962-63 . .	994,420	1,128,997
1963-64 . .	1,052,850	1,219,968
1964-65 . .	1,183,351	1,400,100
1965-66 . .	1,167,309	1,371,217
1966-67 . .	650,618	791,163

(a) Includes New South Wales and Victoria, for which separate details are not available for publication.

### Exports and imports of wine and brandy

Principal markets for exports of Australian wine are the United Kingdom, Canada and New Zealand. During 1966-67 these countries received 1,055,406 gallons, 371,157 gallons and 81,003 gallons respectively. Exports of Australian-produced wine for the five years ended 1966-67 are shown in the following table.

WINE: EXPORTS, AUSTRALIA, 1962-63 TO 1966-67

Year	Quantity (gallons)			Value (\$ f.o.b.)		
	Sparkling	Other	Total	Sparkling	Other	Total
1962-63	17,245	1,594,004	1,611,249	92,444	2,649,314	2,741,758
1963-64	10,373	1,526,468	1,536,841	62,118	2,679,054	2,741,172
1964-65	16,035	1,976,443	1,992,478	96,056	3,425,420	3,521,476
1965-66	34,888	1,922,186	1,957,074	170,859	3,364,368	3,535,227
1966-67	64,897	1,709,205	1,774,102	251,276	2,917,361	3,168,637

Imports of wine for 1966-67 amounted to 189,409 gallons valued at \$828,000, compared with 145,861 gallons valued at \$647,000 in the previous year. During 1966-67 Italy supplied 91,295 gallons valued at \$298,000, France 34,786 gallons valued at \$267,000 and the Federal Republic of Germany 17,500 gallons valued at \$103,000.

Exports of Australian-produced brandy in 1966-67 amounted to 121,458 proof gallons, valued at \$534,000. Imports of brandy, mainly from France, amounted to 88,914 proof gallons, valued at \$535,000.

### Dried vine fruit industries

The dry period from November to March in the lower Murray valley makes this an ideal area for dried vine fruit. Harvesting for drying takes place at the end of summer. The sun-drying process is often accelerated by using a dip of cold potash.

The *Dried Fruits Export Control Act* 1924-1966 was passed to organise overseas marketing of Australian dried vine fruit. The Australian Dried Fruits Control Board, consisting of growers' representatives, members with commercial experience in marketing dried fruits and a Government representative, controls the sale and distribution of dried fruit exports, recommends the licensing of exporters and contributes to dried vine fruit publicity activity overseas. In conjunction with its London office, the Board has improved dried fruit marketing overseas by its system of appraisal, regulation of shipments and advertising. The *Dried Fruits Export Charges Act* 1924-1965 provides for a levy on exports of dried fruit to defray costs and expenses incurred by the Board.

For details of the bulk purchase agreements between the Governments of the United Kingdom and Australia which operated during the period 1946-53 see Year Book No. 40, page 888. From 1 December 1953 exports to the United Kingdom have been on a trader to trader basis.

In June 1963 Australian, Greek and Turkish dried vine fruit interests concluded an agreement to maintain minimum prices for sultanas on world markets. The agreement, which aims at international price stability, is periodically reviewed. A permanent committee of the contracting parties was established in London for the purpose of supervising the working of the agreement, and a sub-committee of the permanent committee was established in Hamburg in 1964.

The Dried Vine Fruits Stabilization Scheme was introduced under the *Dried Vine Fruits Stabilization Act* 1964-1966 to stabilise seasonal returns to growers of currants, sultanas and raisins. Its main features are as follows.

Growers are guaranteed an average return from seasonal sales of currants, sultanas and raisins equal to the average cost of production of each variety less \$10.00 a ton.

The maximum quantities for which returns are guaranteed each season are 13,500 tons of currants, 75,000 tons of sultanas and 11,000 tons of raisins.

Growers are required to contribute to separate varietal stabilisation funds when the average return to the industry from seasonal sales of a variety exceeds cost of production by more than \$10.00 a ton, with a limit on such contributions of \$20.00 a ton.

When the quantity received for packing in any season does not reach 8,000 tons of currants, 50,000 tons of sultanas or 6,000 tons of raisins, growers are not required to contribute to the stabilisation fund for the variety concerned.

Contributions are to be made by the Commonwealth to raise average returns to the guaranteed price when there is insufficient industry money in a stabilisation fund for this purpose.

Limits are set to the accumulation of money in the stabilisation funds. These are \$1,000,000 in the case of both the currant and raisin stabilisation funds, and \$4,000,000 in the case of the sultana stabilisation fund.

Where these limits are exceeded during the operation of the scheme, the excess will be used first to reimburse the Government for any contribution it may have made to a fund; any balance will be repaid to growers on a first-in first-out basis.

The scheme is to operate for five years. At the end of the fifth year any credit balance in the stabilisation funds will be used, in the first instance, to reimburse the Government for unrepaid contributions (if any). If the scheme is not renewed any remaining money will be returned to growers.

Growers' contributions for the scheme are collected under the *Dried Vine Fruits Contributory Charges Act 1964-1966* and the *Dried Vine Fruits Contributory Charges (Collection) Act 1964-1966*.

#### DRIED VINE FRUIT: PRODUCTION, STATES, 1936-37 TO 1966-67 (Tons)

Period	N.S.W.		Vic.		S.A.		W.A.		Aust.	
	Raisins (a)	Cur- rants	Raisins (a)	Cur- rants	Raisins (a)	Cur- rants	Raisins (a)	Cur- rants	Raisins (a)	Cur- rants
Average for three years ended—										
1938-39 . . .	5,464	1,163	39,810	8,953	13,215	9,009	723	2,179	59,212	21,304
1948-49 . . .	5,429	994	40,027	7,380	8,811	5,243	580	3,179	54,847	16,796
1958-59 . . .	10,300	705	53,178	4,294	11,115	4,432	118	1,746	74,711	11,177
Year—										
1962-63 . . .	8,560	463	44,059	2,536	11,007	2,607	51	1,225	63,677	6,831
1963-64 . . .	13,563	709	66,138	3,934	13,159	4,533	121	2,166	92,981	11,342
1964-65 . . .	12,841	632	66,153	4,477	16,325	5,044	75	2,364	95,394	12,517
1965-66 . . .	11,480	449	59,418	3,127	11,915	3,153	116	1,306	82,929	8,035
1966-67 . . .	14,108	643	69,628	3,588	13,544	3,773	67	1,353	97,347	9,357

(a) Includes sultanas and lexias.

#### DRIED VINE FRUIT(a): EXPORTS, AUSTRALIA, 1962-63 TO 1966-67

Year	Raisins, sultanas and lexias		Currants		Total	
	Quantity	Value	Quantity	Value	Quantity	Value
		\$'000		\$'000		\$'000
	tons	f.o.b.	tons	f.o.b.	tons	f.o.b.
1962-63 . . . . .	56,696	16,058	4,208	1,141	60,904	17,199
1963-64 . . . . .	57,451	17,442	5,512	1,601	62,963	19,043
1964-65 . . . . .	63,197	20,324	6,532	1,968	69,729	22,292
1965-66 . . . . .	74,704	24,070	6,102	1,918	80,805	25,988
1966-67 . . . . .	63,561	19,720	4,301	1,428	67,862	21,148

(a) Excludes quantities exported as mincemeat.

The chief countries importing Australian dried vine fruit are the United Kingdom, Canada, the Federal Republic of Germany, New Zealand, and Ireland. The quantities exported to these countries in 1966-67 were 27,184 tons, 16,578 tons, 7,926 tons, 6,313 tons, and 2,797 tons respectively.

#### Table grapes

Grapes for table use are grown in all States except Tasmania, but the area of this type was only about 7 per cent of the productive area of vines in 1966-67. The quantities of table grapes produced during the season 1966-67 in each State are shown on page 864.

## PASTORAL PRODUCTION

## Livestock numbers

A detailed account of the various enumerations of livestock in Australia made prior to 1860 was given on page 748 of Year Book No. 35. Since 1860 annual enumerations have been made, based, with few exceptions, on actual collections made through the agency of the State police or by post. Particulars concerning the numbers of each of the principal kinds of livestock in Australia, at decennial intervals from 1860 to 1960, and from 1963 onwards in single years, are given in the following table, and are shown continuously since 1870 on the graph on plate 55 following.

## LIVESTOCK: AUSTRALIA, 1860 TO 1967

('000)

Year	Horses	Cattle	Sheep	Pigs	Year	Horses	Cattle	Sheep	Pigs
1860	432	3,958	20,135	351	1940	1,699	13,080	119,305	1,455
1870	717	4,276	41,594	543	1950	1,057	14,640	112,891	1,123
1880	1,069	7,527	62,184	816	1960	640	16,503	155,174	1,424
1890	1,522	10,300	97,881	891	1963	547	18,549	158,626	1,440
1900	1,610	8,640	70,603	950	1964	536	19,055	164,981	1,468
1910	2,166	11,745	98,066	1,026	1965	520	18,816	170,622	1,660
1920	2,416	13,500	81,796	764	1966	n.a.	17,936	157,563	1,747
1930	1,793	11,721	110,568	1,072	1967	479	18,270	164,237	1,804

While livestock numbers (particularly sheep) have increased substantially since 1860, marked fluctuations have taken place during the period, mainly on account of widespread droughts which have from time to time left their impressions on the pastoral history of Australia. These occurred in 1868, 1877, 1883-84, 1892, 1893, 1895, 1901-02, 1912, 1914, 1918, 1919, 1922-23, 1925-26, 1927-28, 1929-30, 1940-41, 1944-45 to 1946-47, and 1965-67. The years in which the numbers of livestock attained their peaks are as follows: horses, 1919 (2,527,000); cattle, 1964 (19,055,000); sheep, 1965 (170,622,000); and pigs, 1967 (1,804,000).

The distribution throughout Australia of sheep, beef cattle, dairy cattle, and pigs at 31 March 1963 is shown in the maps on pages 1049 and 1050 and facing pages 1082 and 1083 of Year Book No. 50.

The numbers of horses, cattle, sheep, and pigs in each State and Territory are shown later in this chapter.

## Value of pastoral production

Values of pastoral production are shown for 1966-67 and earlier years in the following tables. Further details of the source of the information and an explanation of the terms used in this compilation will be found in the chapter Miscellaneous. Maintenance costs and depreciation have not been deducted; consequently the net values are inflated to the extent of these amounts.

## GROSS, LOCAL AND NET VALUES OF PASTORAL PRODUCTION: STATES AND TERRITORIES, 1966-67

(\$'000)

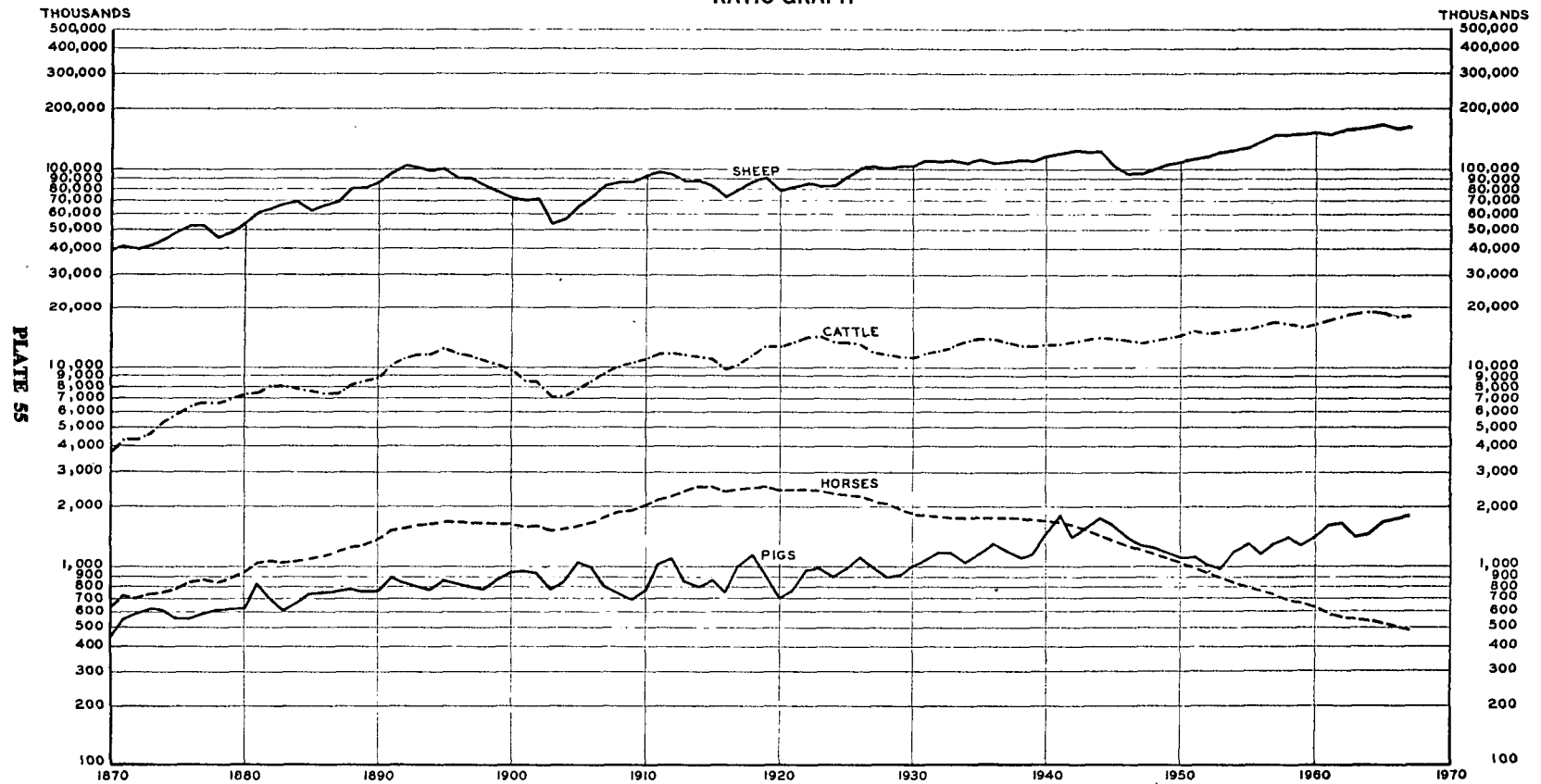
State or Territory	Gross production valued at principal markets	Marketing costs	Local value of production	Value of materials used in process of production	Net value of production(a)
New South Wales . . . . .	454,016	38,772	415,244	(b)63,756	351,488
Victoria . . . . .	376,196	32,805	343,391	28,249	315,142
Queensland . . . . .	276,402	20,798	255,604	33,426	222,178
South Australia . . . . .	169,226	9,690	159,536	24,928	134,608
Western Australia . . . . .	159,857	11,973	147,884	21,835	126,049
Tasmania . . . . .	37,540	2,606	34,933	13,367	21,566
Northern Territory . . . . .	10,983	1,727	9,256	n.a.	9,256
Australian Capital Territory . . . . .	1,846	147	1,699	138	1,561
<b>Australia . . . . .</b>	<b>1,486,066</b>	<b>118,518</b>	<b>1,367,547</b>	<b>185,699</b>	<b>1,181,848</b>

(a) No deduction has been made for depreciation and maintenance.

(b) No allowance has been made for costs of power, power kerosene, petrol and other oils.

# LIVESTOCK: AUSTRALIA, 1870 TO 1967

RATIO GRAPH



NOTE. VERTICAL SCALE IS LOGARITHMIC, AND THE CURVES RISE AND FALL ACCORDING TO RATE OF INCREASE OR DECREASE; ACTUAL NUMBERS ARE INDICATED BY SCALE.

**NET VALUE OF PASTORAL PRODUCTION(a): STATES AND TERRITORIES  
1962-63 TO 1966-67**

<i>Year</i>	<i>N.S.W.(b)</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
<b>NET VALUE (\$'000)</b>									
1962-63	403,660	265,126	200,522	103,990	82,580	15,084	5,992	1,744	1,078,698
1963-64	503,090	323,696	235,774	125,978	123,544	19,566	6,890	2,040	1,340,578
1964-65	451,368	309,668	220,988	110,054	101,069	21,040	5,372	1,741	1,221,300
1965-66	356,470	346,230	198,898	123,757	129,773	22,319	9,742	1,347	1,188,536
1966-67	351,488	315,142	222,178	134,608	126,049	21,566	9,256	1,561	1,181,848

**NET VALUE PER HEAD OF POPULATION**

	<b>(\$)</b>								
1962-63	100.39	88.03	128.26	104.15	106.22	42.11	127.60	25.07	99.45
1963-64	123.34	105.32	147.82	123.09	154.66	53.94	137.77	26.51	121.22
1964-65	108.96	98.74	135.83	104.60	123.68	57.43	101.76	20.63	108.28
1965-66	84.68	108.40	119.81	114.39	154.99	60.39	175.79	14.54	103.35
1966-67	82.26	96.97	131.62	121.93	146.21	57.68	159.36	15.62	100.94

(a) No deduction has been made for depreciation and maintenance. (b) No allowance has been made for costs of power, power kerosene, petrol and other oils.

**Indexes of quantum and price of pastoral production, 1962-63 to 1966-67**

The quantum indexes shown in the following table relate to gross output of farm products valued at constant prices. The quantities of each farm product produced each year have been revalued at the unit gross value for the period 1936-37 to 1938-39. The price indexes relate to average 'prices' of farm products realised in the principal markets of Australia. Average quantities of each product marketed in the period 1946-47 to 1950-51 have been used as fixed weights. For further details of the methods of calculating these indexes and of the weights used see the chapter Miscellaneous.

**INDEXES OF QUANTUM(a) AND PRICE OF PASTORAL PRODUCTION  
AUSTRALIA, 1962-63 TO 1966-67**

(Base: Average 3 years ended June 1939 = 100)

	<i>1962-63</i>	<i>1963-64</i>	<i>1964-65</i>	<i>1965-66</i>	<i>1966-67</i>
<b>Quantum(a) produced—</b>					
Wool	170	183	183	169	180
Other products	154	158	158	157	151
<i>Total, pastoral</i>	<i>163</i>	<i>172</i>	<i>172</i>	<i>163</i>	<i>167</i>
Per head of population	103	107	105	97	98
<b>Price—</b>					
Wool	449	531	437	458	433
Other products	451	480	496	567	593
<i>Total, pastoral</i>	<i>450</i>	<i>511</i>	<i>460</i>	<i>501</i>	<i>496</i>

(a) Index of value at constant prices, i.e. quantities revalued at average unit values of base years 1936-37 to 1938-39.

## Sheep

### Distribution throughout Australia

With the exception of a short period in the early eighteen-sixties, when the flocks of Victoria outnumbered those of New South Wales, the latter State has occupied the premier position in sheep-raising, although its relative importance has declined in recent years, due, among other factors, to heavy losses caused by drought conditions in 1965-66. Concurrently, there has been a marked increase in the sheep population of Western Australia, where figures have doubled in little more than a decade to give that State third position of importance in terms of sheep numbers.

A map showing the distribution of sheep in Australia at 31 March 1963 appears on page 1049 of Year Book No. 50. Graphs showing the number of sheep in Australia from 1870 onwards appear on plates 55 and 56 of this Year Book (pages 914 and 924).

### SHEEP: NUMBERS IN STATES AND TERRITORIES, 1937 TO 1967

('000)

<i>Period</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
<b>Average for three years ended—</b>									
1939 . . .	51,202	17,845	21,889	8,916	8,972	2,460	23	251	111,558
1949 . . .	46,525	17,900	16,442	8,793	10,368	2,060	24	227	102,339
1959 . . .	67,006	26,615	22,537	15,285	15,609	3,259	25	265	150,601
<b>At 31 March—</b>									
1963 . . .	70,021	27,472	22,811	15,737	18,727	3,570	9	279	158,626
1964 . . .	71,764	28,413	24,337	16,403	20,165	3,600	10	289	164,981
1965 . . .	72,396	30,437	24,016	17,289	22,392	3,793	9	290	170,622
1966 . . .	61,396	30,968	18,384	17,993	24,427	4,127	9	258	157,563
1967 . . .	63,848	31,239	19,305	17,864	27,370	4,321	8	281	164,237

The percentage distribution of sheep and lambs in the several States in 1967 was: New South Wales, 39; Victoria, 19; Queensland, 12; South Australia, 11; Western Australia, 17; and Tasmania, 3.

### Movement in sheep numbers

#### SHEEP AND LAMBS: ANALYSIS OF MOVEMENT IN NUMBERS, AUSTRALIA 1962-63 TO 1966-67

('000)

<i>Year ended 31 March</i>	<i>Numbers at beginning of season</i>	<i>Lambs marked</i>	<i>Net exports</i>	<i>Sheep and lambs slaughtered (a)</i>	<i>Estimated deaths on farms (b)</i>	<i>Numbers at close of season</i>
1963 . . .	157,712	45,146	247	33,944	10,041	158,626
1964 . . .	158,626	47,818	312	33,240	7,911	164,981
1965 . . .	164,981	47,608	307	33,549	8,111	170,622
1966 . . .	170,622	40,330	273	33,671	19,445	157,563
1967 . . .	157,563	47,830	341	33,350	7,465	164,237

(a) Includes an estimate for numbers boiled down.

(b) Balance figure; excludes lambs which died before marking.

Comparisons of Australian flock numbers with those of certain other principal sheep-producing countries are given on page 930.

## Classification of sheep according to age, sex, and breed

## SHEEP, BY AGE AND SEX: AUSTRALIA, 31 MARCH 1963 TO 1967

('000)

Description	1963	1964	1965	1966	1967
Rams, 1 year and over . . . . .	1,979	1,986	2,047	2,002	2,013
Breeding ewes (including ewes intended for mating) . . . . .	70,936	72,862	75,580	73,626	76,618
Other ewes, 1 year and over . . . . .	8,878	8,631	8,952	7,397	7,117
Wethers, 1 year and over . . . . .	44,267	46,203	49,284	45,649	44,186
Lambs and hoggets, under 1 year . . . . .	32,566	35,299	34,759	28,890	34,302
<b>Total, sheep and lambs . . . . .</b>	<b>158,626</b>	<b>164,981</b>	<b>170,622</b>	<b>157,563</b>	<b>164,237</b>

Particulars of the principal breeds of sheep at 31 March 1965 (details are collected on a triennial basis) are shown in the following table.

## SHEEP, BY PRINCIPAL BREED: STATES AND TERRITORIES, 31 MARCH 1965

('000)

Breed	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Merino . . . . .	56,232	14,148	23,655	14,581	20,533	351	9	245	129,754
Other recognised breeds . . . . .	7,601	7,486	129	1,218	788	2,352	..	13	19,587
Merino comeback(a) . . . . .	1,163	2,160	47	284	287	419	..	4	4,364
Crossbreds(b) . . . . .	7,400	6,643	185	1,206	784	671	..	27	16,917
<b>Total . . . . .</b>	<b>72,396</b>	<b>30,437</b>	<b>24,016</b>	<b>17,289</b>	<b>22,392</b>	<b>3,793</b>	<b>9</b>	<b>290</b>	<b>170,622</b>

(a) Merino comeback is the progeny of a crossbred Merino ewe and a Merino ram, i.e. finer than half-bred. (b) Half-bred and coarser.

## Exports and imports of sheep

The overseas exports of live sheep from Australia are of comparatively minor importance. On 27 November 1929 the export of stud Merino sheep was prohibited, except with the approval of the Minister for Primary Industry. Exports of sheep are now principally for slaughter overseas. Consignments for this purpose in recent years were made chiefly from Western Australia to Kuwait and Singapore. In 1966-67 the number of sheep exported was 340,382, valued at \$3,254,000 (1965-66, 290,960, valued at \$2,513,000). Since June 1958 an embargo has been imposed on the import of sheep in order to prevent the introduction of the disease 'blue-tongue'.

## Cattle

## Objects of cattle-raising in Australia

Cattle-raising is carried out in all States, the main object in certain districts being the production of stock suitable for slaughtering purposes and in others the raising of profitable dairy herds. While dairy cattle are restricted mainly to coastal districts, beef cattle are more widely distributed, particularly in the eastern States, and are raised in areas unsuitable for dairy cattle, such as the tropical area of northern Queensland, the Northern Territory and the Kimberley district in the north of Western Australia.

## Distribution throughout Australia

Although cattle numbers declined after 1957 because of drought conditions and heavy slaughtering, they began to rise again in 1960 and in 1964 reached a record level of 19,055,000. Again because of drought in the eastern States, this figure declined to 17,936,000 in 1966, but recovered to 18,270,000 in 1966-67.

A graph showing the number of cattle in Australia from 1870 onwards appears on plate 55, page 914.



## CATTLE: NUMBERS IN STATES AND TERRITORIES, 1937 TO 1967

('000)

Period	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Average for three years ended—									
1939 . . .	3,040	1,861	6,002	324	767	260	882	8	13,144
1949 . . .	3,122	2,153	5,971	443	830	244	1,006	9	13,778
1959 . . .	3,770	2,722	7,177	598	985	367	1,173	10	16,802
At 31 March—									
1963 . . .	4,569	3,225	7,233	679	1,298	444	1,087	14	18,549
1964 . . .	4,789	3,301	7,402	694	1,299	450	1,105	15	19,055
1965 . . .	4,619	3,316	7,393	697	1,258	451	1,068	14	18,816
1966 . . .	4,153	3,397	6,888	690	1,271	492	1,032	13	17,936
1967 . . .	4,146	3,528	6,919	687	1,357	522	1,097	14	18,270

The percentage of cattle in each State and Territory during 1967 was: New South Wales, 23; Victoria, 19; Queensland, 38; South Australia, 4; Western Australia, 7; Tasmania, 3; and Northern Territory, 6.

Maps showing the distribution of beef and dairy cattle in Australia appear on page 1050 and facing page 1082 of Year Book No. 50, and maps showing the distribution in earlier years were published in previous issues of the Year Book.

## CATTLE: NUMBERS, AUSTRALIA, 1963 TO 1967

('000)

	Bulls one year and over	Cows and heifers one year and over	Calves under one year	Other	Total
31 March—					
1963 . . .	379	10,936	4,079	3,155	18,549
1964 . . .	377	11,138	4,253	3,286	19,055
1965 . . .	369	11,130	4,068	3,248	18,816
1966 . . .	351	10,609	3,744	3,232	17,936
1967 . . .	367	10,742	4,064	3,097	18,270

## Classification of cattle

## CATTLE, BY PURPOSE, AGE AND SEX: STATES AND TERRITORIES 31 MARCH 1967

('000)

Classification	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.(a)	A.C.T.	Aust.
Bulls (1 year and over) used or intended for service—									
Dairy breeds . . .	18	40	15	6	3	4	..	..	87
Beef breeds . . .	64	35	110	10	22	5	32	..	279
Total bulls . . .	83	75	126	16	26	9	32	..	367
Cattle used or intended for production of—									
Milk or cream for sale—									
Cows—In milk . . .	525	889	450	90	39	149	.. {	1 }	2,881
Dry . . .	144	322	148	59	64				
Heifers—Springing (within 3 months of calving) . . .									
Other (1 year and over) . . .	165	347	139	22	22	48	..	..	796
Calves (under 1 year) . . .				25	28				
Milk or cream for use on rural holdings—	127	326	105	37	32	44	..	..	672
House cows and heifers . . .	92	28	37	7	9	6	..	..	180
Total cattle, production of milk, etc. . .	1,052	1,913	880	239	194	247	1	2	4,528
Cattle for other purposes(b)—									
Cows and heifers (1 year and over) . . .	1,634	750	2,935	239	583	113	626	6	6,886
Calves (under 1 year)(c) . . .	894	495	1,277	131	280	101	209	4	3,392
Other (1 year and over), i.e. steers, bullocks, speyed cows, etc. . .	483	295	1,701	62	274	51	229	1	3,097
Total cattle, other purposes . . .	3,011	1,540	5,913	431	1,137	266	1,064	11	13,375
Total cattle and calves for all purposes . . .	4,146	3,528	6,919	687	1,357	522	1,097	14	18,270

(a) As at 30 June 1966.

(b) Mainly for meat production.

(c) Includes vealers, and bull calves intended for service.

**CATTLE, BY PURPOSE, AGE AND SEX: AUSTRALIA, 31 MARCH 1964 TO 1967**  
(<sup>'000</sup>)

<i>Classification</i>	<i>1964</i>	<i>1965</i>	<i>1966</i>	<i>1967</i>
<b>Bulls (1 year and over) used or intended for service—</b>				
Dairy breeds . . . . .	99	95	90	87
Beef breeds . . . . .	278	274	261	279
<i>Total bulls</i> . . . . .	<i>377</i>	<i>369</i>	<i>351</i>	<i>367</i>
<b>Cattle used or intended for production of—</b>				
Milk or cream for sale—				
Cows—In milk . . . . .	3,078	3,012	2,908	2,881
Dry . . . . .				
Heifers—Springing (within 3 months of calving) . . . . .	821	843	823	796
Other (1 year and over) . . . . .				
Calves (under 1 year) . . . . .	718	690	681	672
Milk or cream for use on rural holdings—				
House cows and heifers . . . . .	218	202	186	180
<i>Total cattle, production of milk, etc.</i> . . . .	<i>4,835</i>	<i>4,747</i>	<i>4,598</i>	<i>4,528</i>
<b>Cattle for other purposes(a)—</b>				
Cows and heifers (1 year and over) . . . . .	7,021	7,073	6,692	6,886
Calves (under 1 year)(b) . . . . .	3,536	3,378	3,063	3,392
Other (1 year and over), i.e. steers, bullocks, speyed cows, etc. . . . .	3,286	3,248	3,232	3,097
<i>Total cattle, other purposes</i> . . . . .	<i>13,842</i>	<i>13,699</i>	<i>12,987</i>	<i>13,375</i>
<b>Total cattle and calves for all purposes</b> . . . . .	<b>19,055</b>	<b>18,816</b>	<b>17,936</b>	<b>18,270</b>

(a) Mainly for meat production. (b) Includes vealers, and bull calves intended for service.

For beef cattle and dairy cattle numbers prior to 1964 see pages 1056 and 1078 respectively of Year Book No. 50.

#### Exports and imports of cattle

In 1966-67 the number of cattle exported was 5,480, valued at \$1,108,000 (1965-66, 7,315 valued at \$932,000). Prior to June 1958 small numbers of cattle were imported, consisting mainly of valuable animals for stud purposes. Since that date an embargo has been imposed on the import of cattle in order to prevent the introduction of the disease 'blue-tongue'.

#### Comparison with other countries

The following table shows the number of cattle in Australia and in some of the principal cattle-raising countries of the world at the latest available date.

#### CATTLE: NUMBERS IN VARIOUS COUNTRIES

*Source (for countries other than Australia): World Agricultural Production and Trade, United States Department of Agriculture*  
(<sup>'000</sup>)

<i>Country</i>	<i>Year and month</i>	<i>Number p</i>
India(a) . . . . .	1962 (May) . . . . .	236,000
United States of America . . . . .	1967 (January) . . . . .	108,645
U.S.S.R. . . . .	1967 (January) . . . . .	97,100
Brazil . . . . .	1967 (December) . . . . .	90,244
China (mainland)(a) . . . . .	1960 (December) . . . . .	65,400
Argentina . . . . .	1965 (June) . . . . .	45,000
Pakistan(a) . . . . .	1961 (Estimate) . . . . .	30,300
Mexico . . . . .	1966 (Spring) . . . . .	23,294
Ethiopia . . . . .	1963 (Estimate) . . . . .	22,000
France . . . . .	1967 (October) . . . . .	21,184
Australia . . . . .	1967 (March) . . . . .	18,270
Colombia . . . . .	1967 (October) . . . . .	17,932
Turkey(a) . . . . .	1967 (December) . . . . .	15,022
Germany, Federal Republic of . . . . .	1967 (December) . . . . .	13,973
United Kingdom . . . . .	1967 (December) . . . . .	12,171
South Africa . . . . .	1967 (June) . . . . .	11,920

(a) Includes buffaloes.

## Horses

The number of horses in Australia reached a peak of 2,527,000 in 1919. Since then it has declined, because of mechanisation of transport and farming, and the number recorded at 31 March 1967 was 479,000. In future, particulars of horses will be collected in all States at triennial intervals only.

A graph showing the number of horses in Australia since 1870 appears on plate 55, page 914.

### HORSES: NUMBERS IN STATES AND TERRITORIES, 1963 TO 1967

('000)

31 March—	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
1963 . .	166	58	212	25	39	8	38	1	547
1964 . .	163	56	206	(a)25	39	8	38	1	(b)536
1965 . .	158	56	201	(a)24	37	7	36	1	(b)520
1966 . .	151	n.a.	190	n.a.	35	n.a.	37	1	n.a.
1967 . .	146	55	182	16	35	7	38	1	479

(a) Estimated. (b) See South Australia.

### Overseas trade in horses

Exports of Australian-bred horses in 1966-67 numbered 840, valued at \$1,416,000, made up of horses for breeding (163 valued at \$434,000), horses for racing (550 valued at \$915,000, shipped principally to Singapore, Hong Kong and New Zealand), and horses for other purposes (127 valued at \$67,000). Horses imported into Australia in 1966-67 (831 valued at \$2,560,000) were mainly from New Zealand and the United Kingdom.

## Pastoral products: wool

With about one-sixth of the world's woolled sheep, Australia produces almost one-third of the world's wool and more than half the world's fine-quality Merino wool. The bulk of the production is exported, mainly as greasy wool, although substantial amounts of scoured and carbonised wool, wool on sheep skins and small quantities of semi-manufactured wool are also shipped. The important position held by Australia among the principal sheep and wool producing countries of the world is shown in the table on page 930.

### Wool marketing

Details of past wool marketing schemes and agreements, including the 1914-18 War Imperial Purchase Scheme, the British Australian Wool Realization Association Ltd, the 1939-45 War Acquisition Scheme, Joint Organization, and Minimum Reserve Price Plan, are given in previous issues of the Year Book.

More than ninety per cent of the Australian wool clip is disposed of at auction. (During both world wars, however, auction selling was suspended and replaced by bulk purchase schemes.) There are fourteen recognised wool-selling centres, namely Sydney, Goulburn, Newcastle, Albury, Melbourne, Geelong, Ballarat, Portland, Brisbane, Adelaide, Perth, Albany, Hobart, and Launceston. At these centres wool-selling brokers operate large stores where wool received from growers is held awaiting sale.

Each year a wool-selling programme is drawn up jointly by the selling brokers and wool-buyers on the basis of the expected clip. Selling dates and the quantities to be offered are then determined for each centre. Before each sale the selling brokers, who act as agents for the wool-growers, display a representative portion of the wool to be sold on show floors for buyers' inspection and valuation. Auction sales are attended by buyers purchasing on behalf of wool users in more than fifty countries.

### Wool Marketing Committee of Inquiry

In 1961 the Commonwealth Government appointed an independent committee to inquire into the marketing and promotion of Australian wool and related matters (see Year Book No. 48, page 977, for further details). The Committee presented its report to the Government in 1962. Its most important recommendation was that wool promotion, research and testing should be brought under the control of a single body, which should also act as an advisory authority on wool marketing. This recommendation was implemented under the *Wool Industry Act* 1962-1967 which set up the Australian Wool Board.

### Australian Wool Board

This Board consists of a chairman, six woolgrower representatives, three members with special qualifications, and a representative of the Commonwealth Government. The first chairman of the

Board was appointed by the Minister for Primary Industry after consultation with the Australian Wool Industry Conference (*see below*), but subsequent chairmen are to be appointed on the nomination of the Board. The six woolgrower representatives are appointed by the Minister on the nomination of the Wool Industry Conference, and the three members with special qualifications are appointed from a panel of names submitted by the Conference. The Act provides that the latter members must be experienced in one of the following fields: wool marketing and manufacturing, research, finance, and commerce.

When the Board came into being on 1 May 1963 it took over the functions of the Australian Wool Bureau. On 1 July 1963 the Australian Wool Testing Authority became part of the Board, and on 1 January 1964 the Board took over the functions of the Wool Research Committee. Information on these three former instrumentalities appears in Year Book No. 48, pages 977-81.

Following the organisational changes carried out under the Wool Industry Act, the functions of the Board embrace the following activities.

*Wool promotion in Australia and overseas by publicity and other means.* Promotion overseas is carried out through the International Wool Secretariat, which is maintained jointly by the Wool Boards of Australia, New Zealand and South Africa.

*Provision of a testing service for wool and wool products.* This service is administered by a subsidiary board retaining the name Australian Wool Testing Authority.

*Administration of wool research.* The Board is responsible for preparing annual programmes of research expenditure which are subject to the approval of the Minister for Primary Industry. Two committees established by the Board, the Wool Production Research Advisory Committee and the Wool Textile Research Advisory Committee, assist in this task.

*Investigation into all aspects of wool marketing on a continuing basis.* The Wool Marketing Committee, an ancillary body appointed by the Board, assists in carrying out this function. The Board is required to report to the Australian Wool Industry Conference on its findings and advise it on measures which should be adopted to meet changing marketing conditions. However, the Board has no executive powers over marketing.

In July 1964 the Board, after an investigation by the Wool Marketing Committee, made recommendations to the Australian Wool Industry Conference for the introduction of a Reserve Price Plan for wool, which were put to woolgrowers in a referendum in December 1965. However, the plan was rejected by 53.4 per cent of the enfranchised woolgrowers who voted. For details *see* Year Book No. 52, page 945.

Following the rejection of the Reserve Price Plan at this referendum, the Board continued with its investigations and on 31 October 1967 presented its second report on wool marketing to the Australian Wool Industry Conference. The report included proposals for the establishment of an Australian Wool Marketing Authority to enforce standards of clip preparation, administer the elimination of one, two, and three bale lots, conduct a price averaging plan for these wools and others voluntarily submitted, and conduct, in conjunction with wool selling brokers, a system of supply management involving chiefly wools in the price averaging plan. The report also recommended a system of financial advances for woolgrowers and the establishment of an organisation of woolgrowers, brokers, and buyers to conduct and control the sale of wool at auction.

*Maintenance and administration of the wool stores which were entrusted to the Board by the Commonwealth Government.* Further details concerning these stores appear in Year Book No. 48, page 978.

*Other activities approved by the Minister for the benefit of the wool industry, including the operation of the Wool Statistical Service and the registration of wool classers.* The wool Statistical Service (described in more detail in Year Book No. 48, pages 977-8) provides comprehensive statistics on the Australian wool clip, while the registration of wool classers is designed to improve the standards of wool classing in Australia.

At present the main sources of finance for the various activities of the Board are a levy paid by woolgrowers and contributions by the Commonwealth Government.

### **The Australian Wool Industry Conference**

This body was formed by woolgrowers in October 1962 to meet the need for an organisation with sufficient authority to speak on behalf of the woolgrowing industry as a whole. It is not a statutory body and consists of twenty-five members each from the Australian Woolgrowers' and Graziers' Council and the Australian Wool and Meat Producers' Federation, and, from October 1965, five members from the Australian Primary Producers' Union. The fifty-five member conference is presided over by an independent chairman.

The Conference makes recommendations to the Commonwealth Government on policy matters concerning the wool industry. Under the Wool Industry Act it is the responsibility of the Conference

to nominate woolgrower representatives for appointment to the Australian Wool Board and to prepare panels of names from which the three Board members with special qualifications are selected. Under the Wool Tax Acts (*see below*) the Conference is also responsible for recommending to the Commonwealth Government what rates of levy should be paid by woolgrowers to finance the activities of the Wool Board.

#### **Wool levy**

Since 1936 a statutory levy has been collected from woolgrowers to finance wool promotion activities. The initial rate of 5c a bale was increased at the request of woolgrowers to 20c a bale in 1945 and 40c a bale in 1952, the latter rate continuing until 1960. Further details regarding the operation of this levy prior to 1957 appear in Year Book No. 48, page 978.

Under legislation passed in 1957 provision was also made for the payment by woolgrowers of a contribution for wool research which was fixed at 20c a bale. In 1960 the wool promotion levy was raised to 50c a bale, and the following year it was increased further to \$1 a bale. The operation of this rate was subsequently extended for 1962–63 and 1963–64.

On 1 July 1964 the basis for collecting the woolgrowers' combined levy for wool promotion and research was changed from a flat rate per bale to a percentage deduction from the gross value of shorn wool sold. A maximum rate of 2 per cent was fixed, but provision was made for a lower rate to be prescribed, if appropriate. For 1964–65 the rate was set at 1.875 per cent, which involved a substantial increase in payments by woolgrowers for promotion (from \$1 per bale to the equivalent of \$2.70 per bale), while the research component of the levy was left unaltered at 20c per bale. In 1965–66 the levy was set at 2 per cent and it remained at the maximum rate for 1966–67.

The imposition and collection of the combined levy from woolgrowers is governed by six complementary Acts, the Wool Tax Acts (Nos 1 to 5) 1964 and the *Wool Tax Administration Act* 1964–1966.

#### **Commonwealth Government's contributions to wool research and promotion, 1945 to 1967**

In 1945 the Commonwealth Government commenced contributing on a statutory basis to wool research. Initially the contribution was at the rate of 20c a bale, but this was doubled in 1957 to 40c a bale. At this rate the Commonwealth Government contributed about \$2,000,000 to wool research in 1965–66, and a similar sum was provided in 1966–67.

Prior to 1964–65 the Commonwealth Government had not contributed to wool promotion. However, following representations made by the Australian Wool Industry Conference, the Commonwealth Government undertook to provide assistance to the Australian Wool Board to finance its commitment to the vastly expanded wool promotion activities of the International Wool Secretariat. The five-year wool promotion programme, announced by the Secretariat, envisaged an increase in the Wool Board's annual contribution to overseas wool promotion campaigns from the then level of \$5,000,000 to about \$20,000,000.

From 1 July 1964 the Commonwealth Government agreed to match on a \$1 for \$1 basis any increase in contributions by woolgrowers for wool promotion in excess of the levy of \$1 a bale then in force, and the Wool Industry Conference agreed to increase the growers' levy to the equivalent of \$2.70 a bale, which resulted in a Commonwealth commitment of \$1.70 a bale. In aggregate this commitment required a Commonwealth contribution for promotion of about \$8,500,000 a year. This arrangement operated until 30 June 1967.

#### **Revised financial arrangements for wool research and promotion**

For the year 1967–68 the rate of levy paid by woolgrowers under the Wool Tax Acts remained unaltered at 2 per cent of the gross value of shorn wool sold. The Commonwealth Government has agreed that, for the three-year period commencing 1 July 1967, it will match, on a \$1 for \$1 basis, the total funds contributed by woolgrowers for research and promotion, up to a maximum of \$14,000,000 per annum. Effect has been given to this decision by an amendment to the Wool Industry Act, which has also been amended to change the allocation, as between research and promotion, both of funds collected from woolgrowers and the Government's contribution. Provision has been made for these funds to be apportioned annually between research and promotion by the Minister for Primary Industry on the recommendation of the Australian Wool Industry Conference according to actual requirements.

#### **Wool production**

Wool as shorn from the sheep contains an appreciable amount of grease, dirt and other extraneous matter, and is termed 'greasy wool'. The quantity of grease and other matter in a fleece differs not only between countries, but between districts in the same country. It fluctuates with the vagaries of the season, and with the breed and the condition of the sheep. To allow for this factor, the weight of

greasy wool is sometimes given on a 'clean' basis, i.e. minus the estimated amount of impurities. The net wool fibre content of greasy wool, expressed as a percentage, is termed 'clean yield'.

From 1946-47 to 1952-53 the Australian Wool Realisation Commission, and from 1953-54, the Wool Statistical Service, have assessed annually the clean yield of the Australian wool clip. During the period of assessment the clean yield showed a continuous rise up to 1951-52, when it reached 57.5 per cent. It has since fluctuated between 55.7 per cent and 57.7 per cent. It was 56.9 per cent in 1966-67.

Wool scoured, washed and carbonised in Australia before export, however, has a clean yield somewhat lower than for the whole clip, because the grade of greasy wool treated locally for export as scoured, washed or carbonised contains quantities of dirty and low-grade wool. The quantity of scoured wool exports during 1966-67 was about 9 per cent of the total raw wool exports (excluding wool exported on skins) in terms of greasy. For the clean yield of Australian scoured wools exported a standard factor of 93 per cent is taken.

The production of wool in the States and Territories varies broadly in accordance with the number of sheep depastured and with seasonal conditions which affect clip per head (*see* page 925). In general, however, South Australia obtains from its large-framed Merinos a much heavier fleece per sheep than the Australian average. In addition, as a result of better management (improved pastures, fodder conservation, better breeding, control of diseases, etc.), the long-term trend has been towards higher fleece weights.

The following table shows details of total wool (i.e. shorn, dead and fellmongered, and exported on skins) produced by each of the States and Territories during the years 1962-63 to 1966-67 compared with averages for the three-year periods ended 1938-39, 1948-49 and 1958-59. A graph showing the production of wool in relation to sheep numbers from 1870 onwards appears on plate 56 following.

**PRODUCTION OF WOOL (GREASY BASIS): STATES AND TERRITORIES, 1936-37 TO 1966-67**  
(<sup>'000</sup> lb)

<i>Period</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
<b>Average for three years ended—</b>									
1938-39 . . .	478,595	169,256	169,325	88,699	73,141	15,728	35	1,822	996,601
1948-49 . . .	439,363	200,229	151,679	108,126	95,031	16,272	305	1,927	1,012,932
1958-59 . . .	633,938	298,302	217,062	187,225	160,402	30,141	277	2,371	1,529,718
<b>Year—</b>									
1962-63 . . .	693,734	316,705	233,638	207,344	184,123	34,561	100	2,343	1,672,548
1963-64 . . .	731,316	334,288	255,386	210,500	216,574	34,007	91	2,552	1,784,714
1964-65 . . .	706,061	361,530	251,426	215,736	207,035	39,671	89	2,475	1,784,023
1965-66 . . .	579,475	366,943	192,773	232,296	247,530	41,858	88	1,873	1,662,836
1966-67 . . .	622,745	378,457	203,664	239,202	272,575	43,153	88	2,454	1,762,338

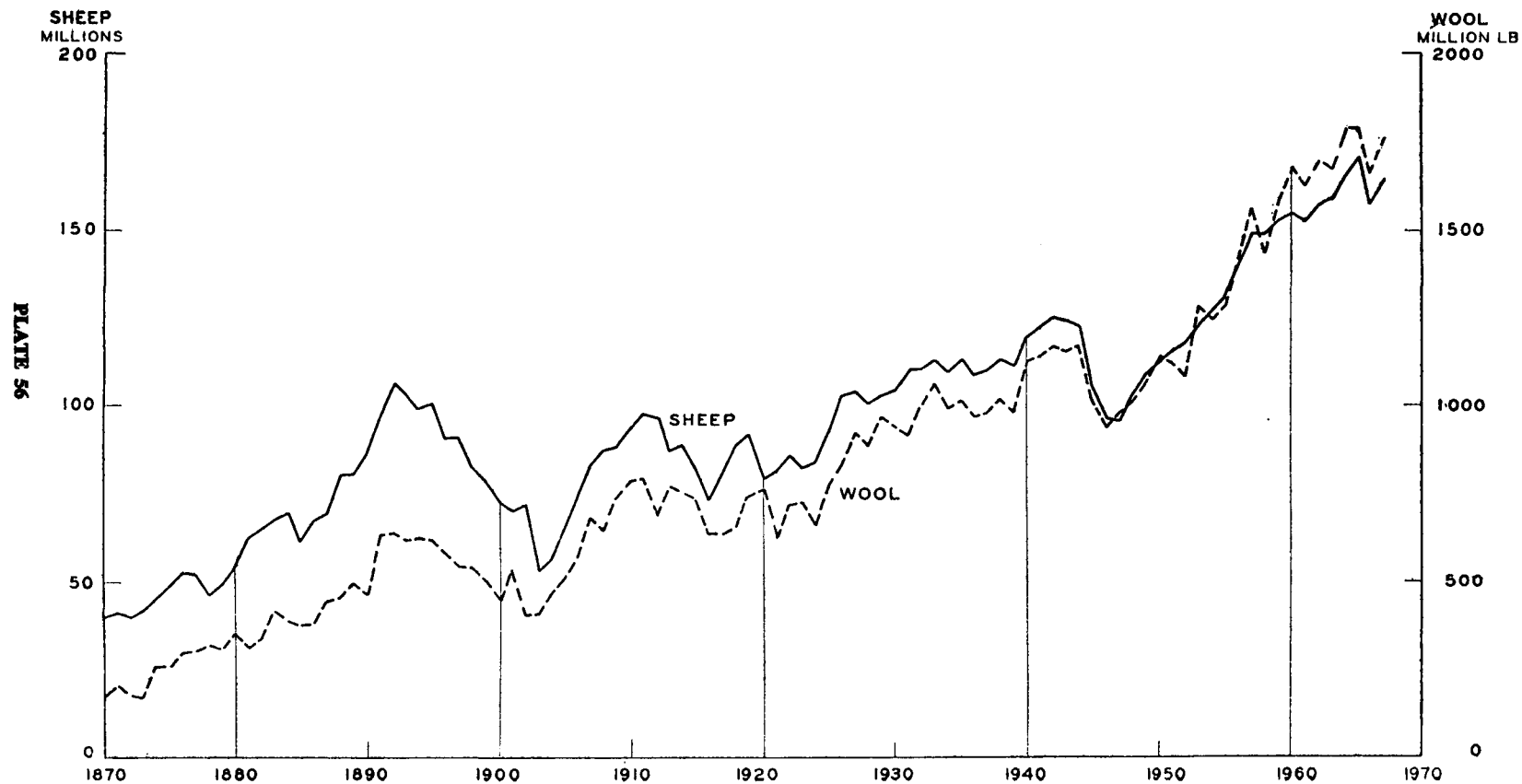
The bulk of the Australian wool production (about 91 per cent in recent years) is shorn from live sheep. The remainder is obtained by fellmongering (about 2 per cent) or is exported on skins (about 7 per cent). The following table shows details of total wool production according to method of obtaining wool, and also the gross value of wool produced. Gross value is based, for shorn wool, upon the average price realised for greasy wool sold at auction and, for skin wools, on prices recorded by fellmongers and skin exporters.

**QUANTITY (GREASY BASIS) AND VALUE OF WOOL PRODUCED**  
**AUSTRALIA, 1936-37 TO 1966-67**

<i>Period</i>	<i>Shorn (including crutchings)</i>	<i>Dead and fell- mongered</i>	<i>Exported on skins</i>	<i>Total production</i>	
				<i>Quantity</i>	<i>Value</i>
	<sup>'000</sup> lb	<sup>'000</sup> lb	<sup>'000</sup> lb	<sup>'000</sup> lb	<sup>\$</sup> '000
<b>Average for three years ended—</b>					
1938-39 . . .	889,338	49,280	57,983	996,601	106,850
1948-49 . . .	902,007	50,660	60,265	1,012,932	305,072
1958-59 . . .	1,411,424	36,804	81,490	1,529,718	788,290
<b>Year—</b>					
1962-63 . . .	1,515,932	32,854	123,762	1,672,548	800,524
1963-64 . . .	1,631,962	28,688	124,064	1,784,714	1,023,442
1964-65 . . .	1,629,412	26,865	127,746	1,784,023	840,552
1965-66 . . .	1,503,457	24,411	134,968	1,662,836	808,437
1966-67 . . .	1,602,229	24,841	135,269	1,762,338	812,230

# SHEEP NUMBERS AND WOOL PRODUCTION

AUSTRALIA, 1870 TO 1967



## Average fleece weight

AVERAGE WEIGHT OF FLEECES SHORN (SHEEP AND LAMBS)  
STATES AND TERRITORIES, 1962-63 TO 1966-67

(lb)

State or Territory	1962-63	1963-64	1964-65	1965-66	1966-67
<b>SHEEP</b>					
New South Wales . . . . .	9.94	10.19	9.81	8.65	10.01
Victoria . . . . .	9.59	10.09	10.08	9.63	9.90
Queensland . . . . .	9.83	10.41	9.65	8.79	9.94
South Australia . . . . .	12.29	12.89	12.49	12.72	12.75
Western Australia . . . . .	10.09	11.46	10.06	10.74	10.67
Tasmania . . . . .	9.44	9.14	10.64	10.34	10.22
Northern Territory . . . . .	10.94	10.36	9.26	8.13	8.13
Australian Capital Territory . . . . .	8.88	9.59	9.07	7.33	9.81
<b>Australia . . . . .</b>	<b>10.11</b>	<b>10.60</b>	<b>10.15</b>	<b>9.63</b>	<b>10.39</b>
<b>LAMBS</b>					
New South Wales . . . . .	3.34	3.39	3.34	2.99	3.21
Victoria . . . . .	2.82	2.76	2.97	2.72	2.90
Queensland . . . . .	3.85	3.99	3.78	3.56	3.55
South Australia . . . . .	3.63	3.71	3.79	3.73	3.90
Western Australia . . . . .	2.55	2.91	2.69	2.90	2.98
Tasmania . . . . .	2.35	2.12	2.31	2.48	2.54
Northern Territory . . . . .	5.00	4.34	3.88	3.00	3.00
Australian Capital Territory . . . . .	1.80	1.61	1.93	1.82	1.64
<b>Australia . . . . .</b>	<b>3.20</b>	<b>3.26</b>	<b>3.24</b>	<b>3.03</b>	<b>3.19</b>

## Classification of wool according to quality

The following table provides a detailed analysis of wool sold at auction, according to quality, for the years 1962-63 to 1966-67. These data are compiled by the Wool Statistical Service on the basis of catalogues of auction sales. 'Quality' ('64's, 60's, 58's,' etc.) is a measure of the fineness and texture of wool for spinning purposes. Broadly, it means the maximum number of hanks of yarn, each of 560 yards length, which can be spun from 1 lb of combed wool. For instance, wool of 64's quality is of a fineness and texture which will produce 64 hanks, each of 560 yards, from 1 lb of tops (combed wool) of that particular wool.

CLASSIFICATION OF GREASY WOOL SOLD AT AUCTION(a): AUSTRALIA  
1962-63 TO 1966-67

(Bales of approximately 300 lb)

Predominating quality	1962-63		1963-64		1964-65		1965-66		1966-67	
	Quantity	Per cent	Quantity	Per cent	Quantity	Per cent	Quantity	Per cent	Quantity	Per cent
70's and finer . . . . .	138,238	3.0	132,620	2.7	145,267	2.9	149,305	3.3	114,406	2.4
64/70's . . . . .	413,195	8.9	373,658	7.6	409,279	8.2	402,134	8.8	292,158	6.2
64's . . . . .	582,315	12.5	567,559	11.6	620,453	12.5	576,499	12.7	470,153	9.9
64/60's . . . . .	469,010	10.1	482,770	9.9	486,575	9.7	373,796	8.2	403,917	8.5
60/64's . . . . .	1,043,674	22.4	1,149,957	23.4	1,108,668	22.2	896,070	19.7	1,002,088	21.1
60's and 60/58's . . . . .	854,771	18.4	964,274	19.7	930,821	18.7	900,760	19.8	1,016,979	21.5
<b>Total, 60's and finer . . . . .</b>	<b>3,501,203</b>	<b>75.3</b>	<b>3,670,838</b>	<b>74.9</b>	<b>3,701,063</b>	<b>74.2</b>	<b>3,298,564</b>	<b>72.5</b>	<b>3,299,701</b>	<b>69.6</b>
58's . . . . .	527,493	11.3	566,904	11.6	586,708	11.8	591,790	13.0	660,570	13.9
56's . . . . .	353,344	7.6	382,384	7.8	406,878	8.2	386,169	8.5	461,182	9.7
50's . . . . .	135,256	2.9	141,638	2.9	153,079	3.1	133,574	2.9	178,587	3.8
Below 50's . . . . .	45,631	1.0	45,675	0.9	51,534	1.0	44,887	1.0	61,289	1.3
Oddments . . . . .	86,058	1.9	92,622	1.9	82,742	1.7	94,268	2.1	81,725	1.7
<b>Grand total . . . . .</b>	<b>4,648,985</b>	<b>100.0</b>	<b>4,900,061</b>	<b>100.0</b>	<b>4,982,004</b>	<b>100.0</b>	<b>4,549,252</b>	<b>100.0</b>	<b>4,743,054</b>	<b>100.0</b>

(a) All greasy wool sold at auction except 'wool re-offered account buyer'.



**Price and value**

During 1966-67 the price of greasy wool sold in the selling centres of Australia averaged 47.4c per lb compared with the average price of 50.1c per lb in 1965-66 and 47.8c per lb in 1964-65. These prices are as compiled by the National Council of Wool Selling Brokers and represent the average price realised for all greasy wool, of whatever type or quality, marketed during the years indicated.

Fluctuation in Australian wool prices has a marked effect on the nation's rural and national income. In 1945-46 the gross value of wool production was \$117,194,000, representing 17.4 per cent of the gross value of production of all rural industries, while in 1950-51, when prices reached a peak, wool was valued at \$1,303,804,000 or 55.6 per cent of the total value of production for all rural industries. The value of wool production fluctuated considerably in subsequent years. In 1966-67 it was \$812,230,000, 21.2 per cent of the gross value of production of rural industries.

**ESTIMATED GROSS VALUE OF TOTAL WOOL PRODUCTION(a)**  
**STATES AND TERRITORIES, 1962-63 TO 1966-67**  
**(\$'000)**

Season	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
1962-63	332,340	158,012	115,462	92,514	82,988	17,772	40	1,396	800,524
1963-64	416,834	208,700	141,458	113,410	119,862	21,352	50	1,776	1,023,442
1964-65	336,675	176,041	117,218	94,328	95,804	19,051	39	1,396	840,552
1965-66	278,295	193,797	90,961	103,638	118,198	22,405	41	1,105	808,437
1966-67	286,293	180,946	93,190	104,588	124,821	20,983	39	1,370	812,230

(a) Includes shorn, dead and fellmongered wool and wool exported on skins.

**Stocks of wool**

Stocks of raw wool held in Australia at 30 June 1967 amounted to 301.1 million lb (greasy basis), of which 67.0 million lb (42.4 million lb as greasy and 24.6 million lb as scoured and carbonised) was held by woollen mills, wool scourers and fellmongers, and 234.1 million lb, assumed to be all greasy, was held by brokers. Of the wool held by brokers, 74.1 million lb was unsold wool and 160.0 million lb was sold wool held awaiting shipment. These stocks exclude wool on skins, since this wool is not recorded as production until fellmongered in Australia or exported on skins.

**Consumption of wool**

Statistics of raw wool consumption published in recent years for the purposes of broad international comparisons are based on the quantities of scoured or carbonised wool used on the woollen and worsted systems (mill consumption), plus quantities used in such processes as felting. Consumption estimates compiled on this basis have obvious defects, as they disregard overseas trade in semi-processed wool (e.g. tops and yarns) as well as woollen goods. Estimates of raw wool used on the woollen and worsted systems and by felt manufacturers in Australia are shown in the following table for the years 1962-63 to 1966-67.

Some additional information on wool scouring activities has become available from 1964-65. Greasy, scoured, and clean equivalent factors derived from this source have therefore been calculated on a slightly different basis from that previously used. For this reason details from 1964-65 appearing below may not be strictly comparable with figures for earlier years.

**ESTIMATED CONSUMPTION OF RAW WOOL: AUSTRALIA, 1962-63 TO 1966-67**  
**('000 lb)**

Year	Greasy basis			Clean equivalent		
	Used on woollen and worsted systems	Used for felt manufacture (including hats)	Total	Used on woollen and worsted systems	Used for felt manufacture (including hats)	Total
1962-63	120,238	3,868	124,106	72,295	1,837	74,132
1963-64	124,591	3,568	128,159	74,441	1,695	76,136
1964-65(a)	121,621	2,826	124,447	71,764	1,342	73,106
1965-66(a)	126,119	1,990	128,109	74,418	945	75,363
1966-67(a)p	125,268	644	125,912	73,916	306	74,222

(a) Particulars for 1964-65 and later years may not be strictly comparable with figures for earlier periods; see text above.

As considerable quantities of tops, noils and yarn are exported from Australia, the series on raw wool consumption shown on page 926 is over-stated to this extent. The series 'Estimated consumption of processed wool in Australia' provides a more reliable indication of wool consumption in Australia, as allowance has been made for exports of wool in semi-processed form. This series is shown in the following table for the years 1962-63 to 1966-67. Briefly, the series measures consumption of wool in terms of yarn used in Australian mills and other factories to produce woollen cloth and other woollen goods, yarn used for hand knitting purposes, and scoured wool used for felt manufacture. No allowance has been made for overseas trade in woollen piece goods, clothing, etc., because of the obvious difficulties of estimating accurately the wool content of these products. For the reasons stated in the preceding paragraph, details from 1964-65 appearing below may not be strictly comparable with figures for earlier years.

**ESTIMATED CONSUMPTION OF PROCESSED WOOL: AUSTRALIA**  
1962-63 TO 1966-67  
(<sup>'000</sup> lb)

Year	<i>Greasy basis</i>			Total	<i>Clean equivalent</i>			Total
	<i>Worsted yarn used (a)(b)</i>	<i>Woollen yarn used (b)</i>	<i>Scoured wool used for felt manufacture (including hats)</i>		<i>Worsted yarn used (a)(b)</i>	<i>Woollen yarn used (b)</i>	<i>Scoured wool used for felt manufacture (including hats)</i>	
1962-63	45,967	31,835	3,868	81,670	27,135	19,753	1,837	48,725
1963-64	45,733	31,061	3,568	80,362	26,686	19,150	1,695	47,531
1964-65(c)	47,172	40,575	2,826	90,573	27,233	24,408	1,342	52,983
1965-66(c)	46,792	34,107	1,990	82,889	27,089	20,568	945	48,602
1966-67(c) p	38,329	42,182	644	81,155	22,191	25,438	306	47,935

(a) Includes hand knitting yarns used. (b) Includes wool content of yarns containing a mixture of wool and other fibres. (c) Particulars for 1964-65 and later years may not be strictly comparable with figures for earlier periods; see text on page 926.

### Quantities of wool exported

Of the total shipments of greasy and slipe wool in 1966-67, 36 per cent went to Japan, 11 per cent to Italy, 11 per cent to the United Kingdom, 8 per cent to France and 7 per cent to Belgium-Luxembourg.

**EXPORTS OF GREASY AND SLIPE WOOL: AUSTRALIA, 1962-63 TO 1966-67**  
(<sup>'000</sup> lb actual weight)

<i>Country of consignment</i>	<i>1962-63</i>	<i>1963-64</i>	<i>1964-65</i>	<i>1965-66</i>	<i>1966-67</i>
Japan . . . . .	386,956	433,944	424,175	467,587	492,456
Italy . . . . .	119,409	127,556	95,175	137,405	151,749
United Kingdom . . . . .	204,412	229,308	192,961	133,696	145,828
France . . . . .	131,769	138,798	122,283	130,903	106,208
Belgium-Luxembourg . . . . .	98,572	101,699	106,391	88,802	98,546
Germany, Federal Republic of . . . . .	74,474	86,350	85,944	91,006	71,170
United States of America . . . . .	46,314	27,590	67,093	72,720	55,721
Poland . . . . .	21,662	22,600	22,983	28,441	30,651
India . . . . .	6,617	12,908	18,858	9,241	29,583
U.S.S.R. . . . .	49,445	45,595	50,681	29,542	29,205
Yugoslavia . . . . .	15,236	16,754	14,182	17,143	23,577
Other . . . . .	124,102	139,699	135,673	117,853	133,207
<b>Total . . . . .</b>	<b>1,278,968</b>	<b>1,382,801</b>	<b>1,336,399</b>	<b>1,324,339</b>	<b>1,367,901</b>

**EXPORTS OF SCOURED AND WASHED, AND CARBONISED WOOL  
AUSTRALIA, 1962-63 TO 1966-67**  
(<sup>0</sup>000 lb actual weight)

<i>Country of consignment</i>	<i>1962-63</i>	<i>1963-64</i>	<i>1964-65</i>	<i>1965-66</i>	<i>1966-67</i>
United Kingdom . . . . .	17,497	17,566	12,812	14,521	16,835
United States of America . . . . .	25,469	23,063	27,834	27,671	16,180
Italy . . . . .	8,582	8,340	6,292	7,928	8,041
Germany, Federal Republic of . . . . .	7,314	7,517	8,997	7,531	7,100
Iran . . . . .	3,173	2,428	3,513	4,668	4,650
Japan . . . . .	5,796	4,891	4,122	5,594	4,205
Canada . . . . .	2,981	3,398	4,966	2,925	3,767
France . . . . .	4,251	3,205	3,268	2,877	2,915
Hong Kong . . . . .	459	1,435	792	2,439	2,816
U.S.S.R. . . . .	..	..	..	..	2,500
China, Republic of (Formosa) . . . . .	1,010	2,011	1,853	1,858	1,487
Belgium-Luxembourg . . . . .	1,541	1,413	2,466	1,703	1,320
Other . . . . .	23,840	12,950	10,538	9,048	8,053
<b>Total . . . . .</b>	<b>101,913</b>	<b>88,217</b>	<b>87,453</b>	<b>88,763</b>	<b>79,869</b>

**EXPORTS OF CARDED OR COMBED WOOL, NOILS AND WOOLWASTE  
AUSTRALIA, 1962-63 TO 1966-67**  
(<sup>0</sup>000 lb actual weight)

	<i>1962-63</i>	<i>1963-64</i>	<i>1964-65</i>	<i>1965-66</i>	<i>1966-67</i>
Carded or combed—Tops . . . . .	21,631	25,932	19,232	22,909	23,975
Other . . . . .	10	177	17	175	..
Noils . . . . .	4,794	5,006	4,066	3,734	4,114
Waste—Soft wool . . . . .	3,121	2,661	2,393	2,734	2,585
Hard wool . . . . .	3,181	3,448	2,595	2,891	

The following table shows the estimated greasy and clean weights of exports of raw and semi-processed wool for the years 1962-63 to 1966-67. As the figures in the following table are in terms of 'greasy' or 'clean' basis, they differ from those in the preceding tables which represent actual weight shipped.

By reason of the availability, from 1964-65, of additional information on wool scouring activities, to which reference has already been made (*see* page 926), greasy equivalents of scoured and carbonised exports calculated from these data for 1964-65 and later years may not be strictly comparable with figures for earlier periods.

**EXPORTS OF WOOL—GREASY AND CLEAN BASES: AUSTRALIA  
1962-63 TO 1966-67**  
(<sup>0</sup>000 lb)

	<i>1962-63</i>	<i>1963-64</i>	<i>1964-65</i>	<i>1965-66</i>	<i>1966-67p</i>
<b>GREASY BASIS</b>					
Raw wool—					
Greasy and slipe . . . . .	1,279,334	1,383,271	1,336,920	1,324,763	1,368,237
Scoured and washed and carbonised . . . . .	191,208	162,272	(a)145,531	(a)141,780	(a)127,586
Exported on skins . . . . .	123,762	124,064	127,746	134,968	135,269
<b>Total raw wool . . . . .</b>	<b>1,594,304</b>	<b>1,669,607</b>	<b>1,610,197</b>	<b>1,601,511</b>	<b>1,631,092</b>
Semi-processed wool—					
Tops . . . . .	39,368	46,445	34,041	42,382	44,687
Yarn . . . . .	436	707	354	530	263
<b>Total raw and semi-processed wool . . . . .</b>	<b>1,634,108</b>	<b>1,716,759</b>	<b>1,644,592</b>	<b>1,644,423</b>	<b>1,676,042</b>

(a) May not be strictly comparable with figures for years earlier than 1964-65; *see* text on page 926.

**EXPORTS OF WOOL—GREASY AND CLEAN BASES: AUSTRALIA**  
 1962-63 TO 1966-67—*continued*  
 ('000 lb)

	1962-63	1963-64	1964-65	1965-66	1966-67p
<b>CLEAN EQUIVALENT</b>					
Raw wool . . . . .	912,148	969,007	935,755	926,812	951,373
Semi-processed wool . . . . .	23,394	27,389	19,819	24,816	25,996
<b>Total . . . . .</b>	<b>935,542</b>	<b>996,396</b>	<b>955,574</b>	<b>951,628</b>	<b>977,369</b>

**Value of wool exported**

The value of wool (other than wool on sheepskins) exported from Australia during 1966-67 was 28 per cent of the total value of exports of merchandise of Australian origin, while the proportion for the five years ended 1966-67 averaged 32 per cent. The value for the five years ended 1966-67, together with the principal countries to which wool was exported, is shown in the following table.

**VALUE OF WOOL EXPORTS: AUSTRALIA(a), 1962-63 TO 1966-67**  
 (\$'000)

<i>Country of consignment</i>	1962-63	1963-64	1964-65	1965-66	1966-67
Japan . . . . .	222,234	282,172	242,549	259,731	274,321
United Kingdom . . . . .	114,004	153,528	110,015	79,857	85,214
Italy . . . . .	65,260	84,014	54,515	76,630	82,229
France . . . . .	66,538	83,134	61,799	64,990	53,554
United States of America . . . . .	45,904	41,240	62,233	68,749	50,611
Germany, Federal Republic of . . . . .	40,940	55,830	50,179	51,174	40,552
Belgium-Luxembourg . . . . .	37,906	48,268	42,664	34,059	39,822
U.S.S.R. . . . .	29,142	33,990	31,681	18,588	18,341
Other . . . . .	136,784	178,704	150,215	131,066	161,807
<b>Total . . . . .</b>	<b>758,712</b>	<b>960,880</b>	<b>805,850</b>	<b>784,844</b>	<b>806,451</b>

(a) Excludes wool exported on sheepskins.

**World sheep numbers and wool production**

The following table shows particulars of the woolled sheep numbers and total production of wool, in terms of greasy, in the principal wool-producing countries of the world, together with estimates of world production of Merino, crossbred, and carpet type wool for the latest available years.

In 1966-67 Australia produced 30 per cent of the world total of all types of wool. Other principal wool producers were New Zealand with 12 per cent of the world total, Argentina, 8 per cent, South Africa, 5 per cent, and United States of America, 4 per cent. Production in the U.S.S.R., China, and eastern European countries together amounted to 20 per cent.

Australia's wool clip is predominantly Merino. New Zealand and Argentina produce mainly crossbred wool, while the clip of the U.S.S.R. is largely of the carpet type.

### ESTIMATED WORLD WOOLED SHEEP NUMBERS AND PRODUCTION OF WOOL, 1964-65 TO 1966-67

(Source for countries other than Australia: Reports published by the Commonwealth Secretariat, London)

Country	Sheep numbers (million)			Wool production (million lb—greasy basis)		
	1964-65	1965-66	1966-67 (a)	1964-65	1965-66	1966-67
Australia . . . . .	171	158	164	1,784	1,663	1,762
New Zealand . . . . .	54	57	60	623	695	709
Argentina . . . . .	48	49	49	419	430	441
South Africa . . . . .	37	37	37	296	329	300
United States of America . . . . .	25	25	24	255	241	236
Uruguay . . . . .	22	22	22	187	183	176
United Kingdom . . . . .	30	30	29	127	129	131
U.S.S.R., China, eastern Europe(b) . . . . .	231	236	242	1,101	1,138	1,178
Other . . . . .	315	317	318	893	917	925
<b>World total . . . . .</b>	<b>933</b>	<b>931</b>	<b>945</b>	<b>5,685</b>	<b>5,725</b>	<b>5,858</b>

Type of wool—

Apparel type—

Merino . . . . .	2,318	2,265	2,320
Crossbred . . . . .	2,160	2,230	2,272
Carpet type . . . . .	1,207	1,230	1,266

(a) Provisional. (b) This group comprises Albania, Bulgaria, China and Dependencies, Czechoslovakia, East Germany, Hungary, Outer Mongolia, Poland, Rumania, Tibet, and U.S.S.R.

#### Principal importing countries and sources of supply

The following table, prepared from information published by the Commonwealth Secretariat, furnishes, in respect of the principal importing countries, details of their imports of wool for 1966 together with the chief sources of supply. The quantities imported refer to the actual weight of wool, without distinguishing between greasy and scoured, except in the case of the United States of America, where estimated clean content of raw wool is quoted.

#### PRINCIPAL WOOL IMPORTING COUNTRIES AND SOURCES OF SUPPLY, 1966

(Source: Information published by the Commonwealth Secretariat, London)

(Million lb)

Importing country	Quantity imported from(a)—					Total imports
	Australia	New Zealand	Argentina	South Africa	Other countries	
United Kingdom . . . . .	139.6	135.9	62.4	40.6	143.1	521.6
Japan . . . . .	476.6	75.6	28.5	42.8	9.6	633.1
France . . . . .	137.5	107.3	28.4	53.2	20.0	346.4
Italy . . . . .	127.9	26.0	17.7	40.4	89.2	301.2
Belgium . . . . .	84.7	42.8	26.9	0.3	49.7	204.4
Germany, Federal Republic of . . . . .	81.3	27.9	16.2	42.5	47.7	215.6
United States of America(b) . . . . .	65.9	76.9	54.8	22.4	56.7	276.7

(a) Actual weight of greasy and scoured wool. (b) Imports are in terms of estimated clean content of greasy and scoured wool. Actual weight of total United States of America imports was 376.0 million lb.

As a considerable transit trade exists between European countries, it must not be assumed that the whole of the imports recorded by these countries is retained for their own consumption. The countries chiefly concerned with the transit trade are the United Kingdom and Belgium.

## Pastoral products: meat

### Australian Meat Board

The Australian Meat Board, which was re-constituted under the *Meat Industry Act 1964–1966*, is the body responsible for controlling the external marketing of Australian beef, mutton and lamb. Powers and membership of the Board prior to its re-constitution in 1964 are set out on page 801 of Year Book No. 40. The Board's primary function is to ensure that Australian meat exports are marketed in a manner which will safeguard the long-term interests of the Australian meat industry. It consists of representatives of producers, exporters and the Commonwealth Government, and an independent Chairman.

The Board regulates overseas marketing of Australian meat by means of an export licensing system. It has power of control over the kinds of meat that may be exported by licensed exporters to particular places, or to particular agents and representatives. The Board also has power to undertake measures to promote the sale and consumption of meat both in Australia and overseas, and it may purchase and sell meat in its own right for the purpose of market development. However, the exercise of this power is limited to activities aimed at meeting special marketing problems or circumstances which preclude the effective participation of private traders. The Board may also purchase and sell meat, with the approval of the Minister for Primary Industry, for the purpose of administering any international arrangements to which Australia may be a party.

### Meat research schemes

In November 1965 the Commonwealth Parliament passed legislation providing for the extension of the cattle and beef research scheme to cover beef, mutton and lamb research. Details of the beef research scheme were set out on page 1050 of Year Book No. 51. Under the new legislation the Cattle and Beef Research Committee was re-constituted as the Meat Research Committee, its powers and functions being similar to those of the former Committee extended to include mutton and lamb research. The Meat Research Committee consists of twelve members—seven meat producer representatives, the Chairman of the Australian Meat Board, one representative from the Universities engaged in meat research, the Commonwealth Scientific and Industrial Research Organization, the Australian Agricultural Council, and the Department of Primary Industry. The new Committee came into being in March 1966 and the Cattle and Beef Research Committee ceased to exist from that date.

The scheme is financed from the Livestock Slaughter Levy (*see below*). The Commonwealth makes a matching contribution on a \$1 for \$1 basis to meet expenditure on research. The research is conducted by such bodies as the universities, C.S.I.R.O., State Departments of Agriculture and the Bureau of Agricultural Economics.

The Minister for Primary Industry has approved a beef research programme of \$2,100,000 and a mutton and lamb research programme of \$295,000 for 1967–68.

### The Livestock Slaughter Levy

The *Livestock Slaughter Levy Act 1964–1966* imposed a levy on all cattle (over 200 lb dressed weight), sheep and lambs slaughtered within Australia for human consumption. These levies, operative from 1 August 1964, replace the charge formerly imposed on meat exports. The proceeds of the levies under the Livestock Slaughter Levy Act are for the purposes of meat market development (including the financing of the operations of the Australian Meat Board) and for research into the technical, scientific and economic problems of the beef, mutton and lamb industries. The maximum rate of levy for cattle is 75 cents per head, of which no more than 20 cents is for beef research, and, for sheep and lambs, 7.50 cents, of which a maximum of 3.33 cents is for mutton and lamb research. The present operative rate for cattle is 32 cents (20 cents for beef research) and for sheep and lambs, 3.00 cents (1.75 cents for mutton and lamb research).

### United Kingdom long-term purchase arrangements

Details of the long-term meat contracts with the United Kingdom from 1939 to 1952 and of the Fifteen Year Meat Agreement (1952–67) are given on page 710 of Year Book No. 41 and in earlier issues. In September 1953 the trade in meat between the United Kingdom and Australia reverted to private traders. The main features of the arrangements were given in Year Book No. 47, page 960. Details of minimum prices operating and deficiency payments received in recent years under private trading appear in Year Book No. 48 (page 973) and No. 50 (page 1068).

On 30 September 1967 the Fifteen Year Meat Agreement expired, and no new agreement has been negotiated. However, Australia still retains guaranteed duty-free entry for meat and a number of tariff preferences in the United Kingdom market under the provisions of the United Kingdom-Australia Trade Agreement.

### Lamb Guarantee Scheme

Since the 1962-63 lamb export season the Australian Meat Board has guaranteed exporters a minimum price on all lambs 36 lb and under shipped to the United Kingdom. For the 1962-63 and 1963-64 seasons these prices were set at 15.0c per lb f.o.b. for the period September to November and 13.8c per lb for the following three months. For the 1964-65 and 1965-66 lamb export seasons the corresponding prices were 15.8c per lb and 14.6c per lb. For the 1966-67 season the prices were set at 16.0c per lb and 14.5c per lb, and for 1967-68 and 1968-69, 17.0c per lb and 15.8c per lb. The higher guaranteed price for the initial period is aimed at stimulating early shipments of lamb, because normally the most opportune time for selling Australian lamb in the United Kingdom market is early in the export season. Any commitment by the Board is payable from moneys accrued in the Lamb Deficiency Payments Account under the Fifteen Year Meat Agreement.

### United States-Australia Meat Agreement

In February 1964 the Governments of Australia and the United States concluded an agreement for the regulation of beef, veal and mutton exports from Australia to the United States with the object of promoting the orderly development of the trade in these classes of meat between the two countries. The agreement sought to preserve approximately the current pattern of trade in beef and mutton and to permit Australia to obtain a reasonable share of the expected market growth. Under the agreement Australia undertook to limit its exports of beef, veal and mutton to the United States to 242,000 tons in 1964. In the succeeding two years (1965 and 1966) exports were permitted to increase at a compound rate of 3.7 per cent. The agreement provides for a triennial review of the growth factor, the first of which was to take place before 1 October 1966, but no review has been held.

In August 1964 the United States Congress passed a Bill providing for the imposition of quotas on imports of beef and veal, mutton and goatmeat from all sources, for 1965 and subsequent years, if imports of these items are estimated by the United States Department of Agriculture to equal or exceed 110 per cent of a basic quantity. The basic quantity, 323,840 tons, is approximately the average of imports from 1959 to 1963. This quantity may be increased or decreased in any future calendar year by a percentage equal to that by which the United States average annual commercial production of beef and veal, mutton and goatmeat has changed since the base period 1959-1963. For this purpose the level of domestic production is the average of estimated commercial production for the year in which quotas may be applied and the two preceding years. An increase of 31.0 per cent in the basic quantity was set for 1968, providing for allowable imports of approximately 434,200 tons (403,800 tons in 1967) and an import ceiling, at which quotas would be established, of about 466,600 tons (444,200 tons in 1967). On the basis of the first official estimate of United States meat imports during 1968 the United States Secretary for Agriculture announced on 29 December 1967 that it would not be necessary to invoke meat import quotas for 1968. However, if a later quarterly estimate in 1968 indicated that the import ceiling would be equalled or exceeded, then quotas could be imposed.

### Cattle slaughtered

#### CATTLE (INCLUDING CALVES) SLAUGHTERED STATES AND TERRITORIES, 1936-37 TO 1966-67 (<sup>'000</sup>)

Period	Slaughtering passed for human consumption									Total slaugh- terings includ- ing boiled down
	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.	
Average for three years ended—										
1938-39 . . .	1,169	881	1,178	163	131	49	5	3	3,579	3,628
1948-49 . . .	1,094	759	1,119	168	146	42	14	4	3,346	3,378
1958-59 . . .	1,745	1,313	1,689	274	216	116	24	11	5,388	5,463
Year—										
1962-63 . . .	1,809	1,562	1,804	254	308	158	24	12	5,931	5,995
1963-64 . . .	1,930	1,760	1,857	279	373	176	50	12	6,437	6,484
1964-65 . . .	2,157	1,879	1,960	275	327	174	59	13	6,844	6,902
1965-66 . . .	1,780	1,829	1,888	277	315	154	69	11	6,323	6,371
1966-67 . . .	1,455	1,706	1,677	265	301	170	67	10	5,650	5,701

## Production of beef and veal

**PRODUCTION OF BEEF AND VEAL (CARCASS WEIGHT)  
STATES AND TERRITORIES, 1936-37 TO 1966-67**

(Tons)

<i>Period</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
Average for three years ended—									
1938-39 . . .	181,057	122,758	199,340	26,074	27,743	10,222	1,336	560	569,089
1948-49 . . .	160,702	106,219	206,403	27,043	29,521	8,687	3,024	763	542,361
1958-59 . . .	247,508	176,161	304,984	41,166	41,058	19,454	5,130	2,013	837,475
Year—									
1962-63 . . .	263,054	213,908	313,786	36,420	55,934	23,694	5,061	2,080	913,937
1963-64 . . .	286,417	227,877	327,481	39,759	66,025	25,909	9,872	2,158	985,498
1964-65 . . .	303,419	246,129	326,128	37,268	56,983	26,270	11,699	2,179	1,010,075
1965-66 . . .	244,527	238,904	313,747	36,513	58,089	23,011	14,798	1,795	931,384
1966-67 . . .	209,403	224,983	295,810	38,754	54,811	24,695	14,572	1,711	864,739

## Consumption of beef and veal

The highest post-war consumption of beef and veal (including canned beef and veal) was 132.7 lb per head in 1956-57. With the buoyant overseas market for beef and the high prices ruling in Australia during the following four years, consumption per head fell substantially, and in 1960-61 amounted to only 88.3 lb. In 1966-67 consumption per head was 89.0 lb, of which 84.0 lb was carcass meat and 5.0 lb was canned meat (in terms of carcass equivalent).

**PRODUCTION AND DISPOSAL OF BEEF AND VEAL (CARCASS WEIGHT)  
AUSTRALIA, 1936-37 TO 1966-67**

<i>Period</i>	<i>Net change in stocks</i>	<i>Pro- duction</i>	<i>Exports (a)</i>	<i>For canning</i>	<i>Apparent consumption in Australia</i>	
					<i>Total</i>	<i>Per head per year</i>
	'000 tons	'000 tons	'000 tons	'000 tons	'000 tons	lb
Average for three years ended—						
1938-39 . . .	n.a.	569	121	18	430	140.3
1948-49 . . .	+ 2	542	102	67	373	109.1
1958-59 . . .	+ 5	837	209	85	538	123.8
Year—						
1962-63 . . .	+ 1	914	385	45	483	99.8
1963-64 . . .	+ 2	985	423	43	517	104.8
1964-65 . . .	+ 6	1,010	457	48	499	99.2
1965-66 . . .	..	931	412	44	476	92.6
1966-67 . . .	- 5	865	384	46	439	84.0

(a) Includes carcass equivalent of boneless beef exported and all fresh and frozen meat shipped as ships' stores.

## Exports of beef and veal

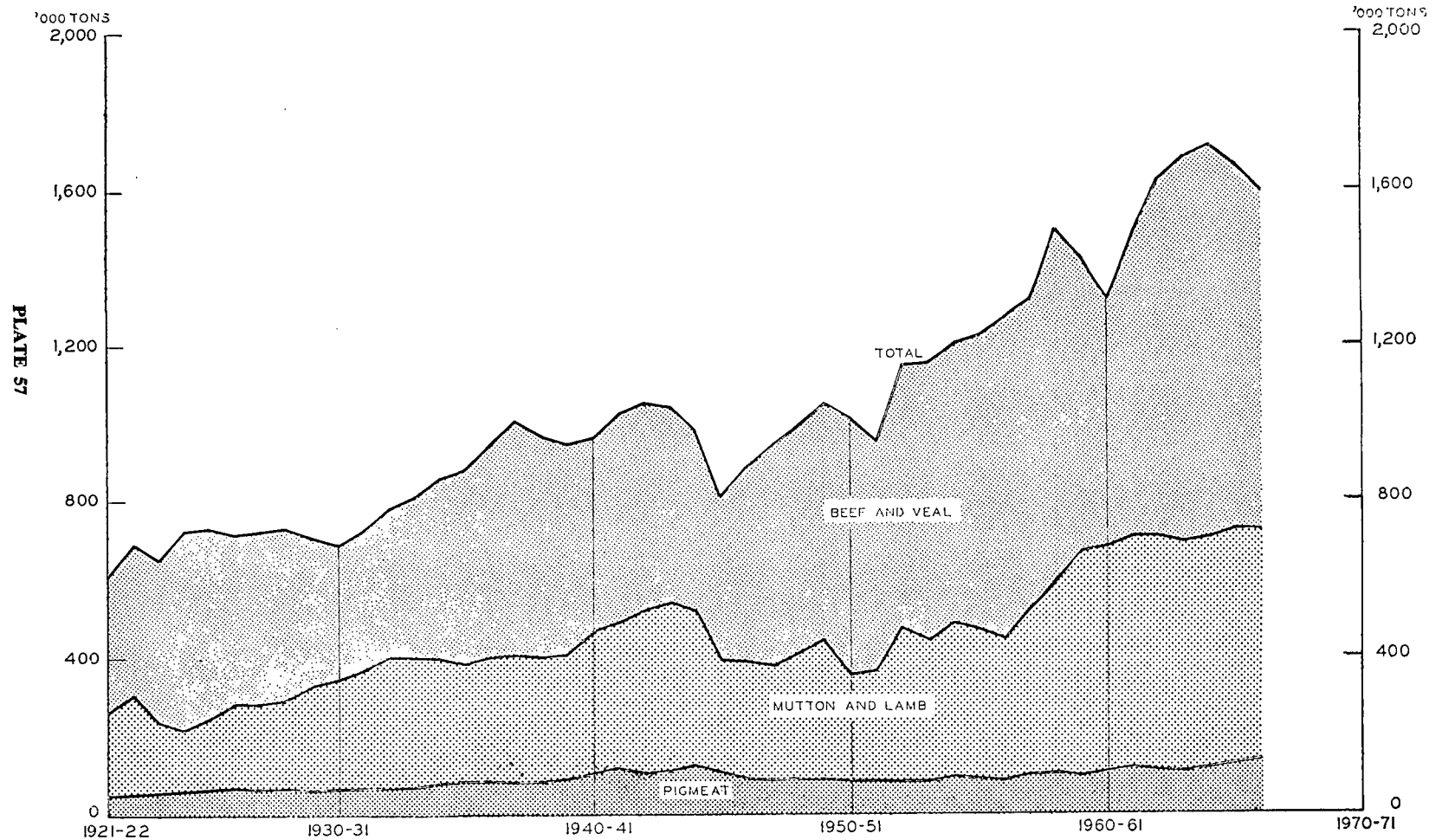
In 1966-67 chilled beef exports were 173,000 lb valued at \$72,000, while frozen beef exports amounted to 562,157,000 lb valued at \$192,249,000.

While beef and veal were previously shipped largely in carcass form, there has been in recent years a substantial increase in the amount of boneless beef exported. From 1958-59 to 1966-67 the quantity of boneless beef shipped exceeded that exported in carcass form. The trade in boneless beef has been developed principally with the United States of America. Since 1958-59 the United States has surpassed the United Kingdom as the principal market for Australian beef exports, the United Kingdom now occupying second place. The total value of beef and veal shipped to these two countries during 1966-67 was \$145,211,000 and \$29,444,000 respectively.



# PRODUCTION OF MEAT: AUSTRALIA

1921-22 TO 1966-67



**EXPORTS OF FROZEN AND CHILLED BEEF AND VEAL(a): AUSTRALIA  
1962-63 TO 1966-67**

Year	<i>Exports of frozen and chilled beef</i>		<i>Exports of frozen veal</i>		<i>Exports of frozen and chilled beef and frozen veal</i>	
	Quantity	Value	Quantity	Value	Quantity	Value
	'000 lb	\$'000 f.o.b.	'000 lb	\$'000 f.o.b.	'000 lb	\$'000 f.o.b.
1962-63 . . . . .	576,504	155,962	7,624	2,074	584,128	158,036
1963-64 . . . . .	620,613	173,731	9,489	2,791	630,102	176,522
1964-65 . . . . .	679,989	192,404	27,919	7,958	707,908	200,363
1965-66 . . . . .	593,350	189,762	19,260	5,714	612,610	195,477
1966-67 . . . . .	562,330	192,321	15,889	5,922	578,219	198,243

(a) Actual weight shipped, not carcass equivalent.

**Sheep slaughtered**

**SHEEP (INCLUDING LAMBS) SLAUGHTERED: STATES AND TERRITORIES  
1936-37 TO 1966-67  
( '000)**

Period	<i>Slaughtering passed for human consumption</i>								<i>Total slaughtering including boiled down</i>
	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	
Average for three years ended—									
1938-39 . . . . .	6,520	7,891	1,088	1,762	1,216	364	..	25	18,866
1948-49 . . . . .	6,367	6,413	1,066	1,863	1,458	396	3	47	17,613
1958-59 . . . . .	7,857	9,058	1,429	2,917	2,059	775	3	71	24,169
Year—									
1962-63 . . . . .	11,719	12,830	2,125	3,467	2,467	1,095	3	108	33,813
1963-64 . . . . .	11,934	12,628	2,407	2,996	2,137	1,127	3	117	33,349
1964-65 . . . . .	11,739	12,543	2,933	3,100	2,056	987	4	111	33,472
1965-66 . . . . .	11,192	13,332	2,769	3,474	2,535	1,164	2	92	34,560
1966-67 . . . . .	9,989	13,160	2,154	3,358	2,580	1,159	2	93	32,496

**Production of mutton and lamb**

**PRODUCTION OF MUTTON AND LAMB (CARCASS WEIGHT)  
STATES AND TERRITORIES, 1936-37 TO 1966-67  
(Tons)**

Period	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Average for three years ended—									
1938-39 . . . . .	103,884	136,927	20,121	30,574	20,928	6,129	2	413	318,978
1948-49 . . . . .	109,084	111,677	18,587	34,772	23,846	7,214	64	839	306,083
1958-59 . . . . .	135,256	164,580	25,845	50,415	35,373	14,077	77	1,240	426,863
Year—									
1962-63 . . . . .	198,873	237,645	35,483	58,919	41,236	19,386	68	1,849	593,459
1963-64 . . . . .	202,057	231,769	40,209	52,864	36,690	20,079	72	1,986	585,726
1964-65 . . . . .	195,236	230,318	47,984	55,392	35,839	18,123	88	1,856	584,836
1965-66 . . . . .	184,523	240,697	45,515	60,738	44,695	21,097	46	1,517	598,828
1966-67 . . . . .	173,857	243,597	37,744	62,476	46,381	20,902	45	1,621	586,623

**Consumption of mutton and lamb**

In 1959-60 consumption of mutton and lamb, at 103 lb per head of population, showed a rise of approximately 16 lb per head over the previous year and exceeded that of beef and veal for the first time on record. Subsequently, it showed a continuous decline until 1966-67 when it rose slightly to 83.9 lb per head, an increase of 1.1 lb per head over the previous year. Since 1962-63 consumption of mutton and lamb has been below that of beef and veal, the difference in 1966-67 being 0.1 lb per head.

**PRODUCTION AND DISPOSAL OF MUTTON AND LAMB  
(CARCASS WEIGHT): AUSTRALIA, 1936-37 TO 1966-67**

Period	Net change in stocks ( <sup>'000</sup> tons)	Production ( <sup>'000</sup> tons)	Exports (a) ( <sup>'000</sup> tons)	For canning ( <sup>'000</sup> tons)	Apparent consumption in Australia	
					Total ( <sup>'000</sup> tons)	Per head per year (lb)
MUTTON						
Average for three years ended—						
1938-39 . .	n.a.	201	17	..	184	60.0
1948-49 . .	-1	177	15	8	154	45.1
1958-59 . .	..	268	27	19	222	51.0
Year—						
1962-63 . .	-2	363	107	8	249	51.4
1963-64 . .	+2	361	112	9	238	48.1
1964-65 . .	+5	361	116	10	231	45.9
1965-66 . .	+4	390	141	9	236	46.0
1966-67 . .	-5	350	132	7	216	41.4
LAMB						
Average for three years ended—						
1938-39 . .	n.a.	118	72	..	46	15.0
1948-49 . .	-2	130	45	..	86	25.2
1958-59 . .	..	159	31	..	128	29.3
Year—						
1962-63 . .	+1	231	27	..	203	42.0
1963-64 . .	..	225	21	..	205	41.5
1964-65 . .	+1	224	26	..	197	39.2
1965-66 . .	+3	209	18	..	189	36.8
1966-67 . .	-3	237	18	..	221	42.5

(a) Includes carcass equivalent of boneless mutton exported.

**Exports of frozen mutton and lamb**

**EXPORTS OF FROZEN MUTTON AND LAMB(a): AUSTRALIA, 1962-63 TO 1966-67**

Year	Exports of frozen mutton		Exports of frozen lamb		Exports of frozen mutton and lamb	
	Quantity	Value	Quantity	Value	Quantity	Value
	<sup>'000</sup> lb	<sup>\$'000</sup> f.o.b.	<sup>'000</sup> lb	<sup>\$'000</sup> f.o.b.	<sup>'000</sup> lb	<sup>\$'000</sup> f.o.b.
1962-63 . . .	136,741	23,304	56,615	10,362	193,356	33,666
1963-64 . . .	149,918	24,752	41,606	7,718	191,524	32,470
1964-65 . . .	162,964	29,517	54,132	10,832	217,096	40,349
1965-66 . . .	176,424	37,242	35,574	8,176	211,998	45,417
1966-67 . . .	177,359	35,339	33,161	7,979	210,520	43,318

(a) Actual weight shipped, not carcass equivalent.

In 1966-67 the principal buyers of Australian frozen mutton and lamb were Japan (62,263,000 lb, valued at \$10,795,000); the United States of America (50,927,000 lb, valued at \$11,566,000); Canada (41,939,000 lb, valued at \$9,581,000); and the United Kingdom (20,273,000 lb, valued at \$4,436,000).

**Consumption of meat and meat products**

The apparent consumption of meat (including cured and canned meat) and edible offal per head of population in Australia is shown in the table below for the years 1962-63 to 1966-67 in comparison with the averages for the three year periods ended 1938-39, 1948-49 and 1958-59.

**MEAT (INCLUDING CURED AND CANNED) AND EDIBLE OFFAL  
AVAILABLE FOR CONSUMPTION: AUSTRALIA, 1936-37 TO 1966-67**  
(lb per head per year)

<i>Period</i>	<i>Beef and veal (a)</i>	<i>Mutton (a)</i>	<i>Lamb (a)</i>	<i>Pork (a)</i>	<i>Offal</i>	<i>Canned meat (b)</i>	<i>Bacon and ham (c)</i>	<i>Carcass equivalent of meat and meat products (d)</i>
<b>Average for three years ended—</b>								
1938-39 . .	140.3	60.0	15.0	8.5	8.4	2.1	10.2	250.9
1948-49 . .	109.1	45.1	25.2	7.1	8.9	2.6	11.7	215.7
1958-59 . .	123.8	51.0	29.3	10.1	11.4	4.1	7.1	242.4
<b>Year—</b>								
1962-63 . .	99.8	51.4	42.0	11.9	12.4	4.2	7.4	233.9
1963-64 . .	104.8	48.1	41.5	11.5	12.8	4.1	7.3	234.8
1964-65 . .	99.2	45.9	39.2	11.8	12.3	4.6	7.5	225.0
1965-66 . .	92.6	46.0	36.8	13.3	11.5	4.5	7.6	216.4
1966-67 . .	84.0	41.4	42.5	13.5	10.9	5.0	8.0	210.3

(a) Carcass weight. (b) Canned weight. (c) Cured carcass weight. (d) Includes offal.

**Other pastoral products****Tallow**

Details of tallow consumption are collected from the principal factories using tallow. Recorded usage of inedible tallow in factories classified to industry sub-classes Industrial and heavy chemicals and acids, and Soap and candles, for the five years 1962-63 to 1966-67 was as follows: 1962-63, 1,086,000 cwt; 1963-64, 1,077,000 cwt; 1964-65, 1,157,000 cwt; 1965-66, 1,061,000 cwt; 1966-67, 1,007,000 cwt. These figures are, however, deficient to the extent that no allowance has been made for small unrecorded amounts used in other types of establishments. Details of edible tallow consumed in factories are not available.

Particulars of exports of edible and inedible tallow of Australian origin are shown in the following table for the five years 1962-63 to 1966-67.

**TALLOW: EXPORTS, AUSTRALIA, 1962-63 TO 1966-67**  
(cwt)

	<i>1962-63</i>	<i>1963-64</i>	<i>1964-65</i>	<i>1965-66</i>	<i>1966-67</i>
Edible . . .	120,944	135,425	96,611	51,869	244,377
Inedible . . .	2,229,230	1,976,000	1,846,543	1,243,684	1,612,166
<b>Total . . .</b>	<b>2,350,174</b>	<b>2,111,425</b>	<b>1,943,154</b>	<b>1,295,553</b>	<b>1,856,543</b>

**Overseas trade in hides and skins**

The value of cattle and horse hides, sheep and other skins, and skin pieces sent overseas during 1966-67 amounted to \$87,710,000, compared with a total of \$88,501,000 in 1965-66 and \$79,534,000 in 1964-65.

Of the total exports of sheepskins with wool during 1966-67, amounting to 195,349,000 lb valued at \$62,074,000, 118,493,000 lb valued at \$35,507,000 (57 per cent of total value) were shipped to France, 45,071,000 lb valued at \$16,808,000 (27 per cent) to Italy, and 9,509,000 lb valued at \$2,564,000 (4 per cent) to the United Kingdom. In the previous year France received 62 per cent (by value) of all sheepskins with wool exported, Italy 21 per cent and the United Kingdom 4 per cent. The exports of sheepskins with wool during each of the years 1962-63 to 1966-67 were as follows.

**EXPORTS OF SHEEPSKINS WITH WOOL: AUSTRALIA  
1962-63 TO 1966-67**

	1962-63	1963-64	1964-65	1965-66	1966-67
Number . . . '000	26,795	27,913	27,248	28,952	27,578
Value . . . \$'000	55,484	73,696	59,621	63,042	62,074

In 1966-67 a total of 1,188,000 sheepskins without wool were exported, valued at \$783,000. Of these, sheepskins without wool to the value of \$108,000 (14 per cent) were shipped to France; \$91,000 (12 per cent) to the United States of America and \$43,000 (5 per cent) to the Netherlands.

The export trade in cattle hides and calfskins during 1966-67 was distributed among the main importing countries as follows: Japan \$7,756,000; Italy, \$2,743,000; and the Federal Republic of Germany \$2,721,000. The total quantity exported was 119,338,000 lb, valued at \$20,960,000.

The exports of furred skins in 1966-67 were valued at \$2,335,000, of which kangaroo and wallaby skins constituted \$1,426,000 and rabbit and hare skins \$666,000. In 1965-66 they accounted for \$1,266,000 and \$818,000 respectively, out of a total of \$2,196,000. The skins were shipped principally to the United States of America, the United Kingdom, the Federal Republic of Germany, and Italy; the values shipped to each in 1966-67 being: United States of America, \$1,514,000; United Kingdom, \$256,000; Federal Republic of Germany, \$161,000; and Italy, \$122,000.

The quantity of cattle hides, including calfskins, imported into Australia during the year 1966-67 amounted to 2,041,000 lb, valued at \$387,000. The chief sources of supply were New Zealand and the Pacific Islands.

## OTHER RURAL INDUSTRIES: DAIRYING, POULTRY AND BEE-FARMING

### The dairying industry

The introduction of cattle into Australia and the early history of the dairying industry are treated in some detail in earlier issues of the Year Book. Australian dairy cattle have shown steady improvement in quality, as demonstrated by yield, over the years. This is attributable to improved breeding, associated with herd recording, and better feeding, resulting from the use of improved pastures. Better farming methods, arising from the development of modern farm machinery and the application of the results of research, have also played a part in the increased yields.

The Australian dairying industry is conducted under conditions ranging from tropical to temperate and Mediterranean type climates, and nowhere is it necessary to house cattle in the winter months. Most Australian dairy cattle are fed only on pasture and pasture products, and this accounts for average yields being somewhat lower than in those countries where stock are fed heavily on concentrated feed. In general, dairy farming is confined to the coastal and near coastal regions where rainfall and topography are favourable. These conditions are found in parts of the eastern, southern and southwestern coasts. Inland districts include the lower north-east of Victoria, the south-western slopes of New South Wales, the fertile Darling Downs in Queensland, and the irrigated districts of the Riverina in New South Wales and northern Victoria.

The manufacturing and processing sections of the industry are highly organised and are well advanced technologically. Certain techniques and equipment developed in Australia are being adopted overseas. Dairy experts of the various State agricultural departments give instruction in approved methods of production, and inspect animals, buildings and marketable produce, with the result that a high standard of cleanliness and technology prevails in the industry.

### Marketing of dairy products

The export trade is regulated by the terms of the *Commonwealth Customs Act 1901-1967* and the *Commonwealth Commerce (Trade Descriptions) Act 1905-1966* and regulations thereunder. This legislation requires that the true trade descriptions, etc. be marked on all produce intended for export, while official inspection ensures the maintenance of purity and quality. Upon request of the exporter the goods are given a certificate by the inspector.

Details of the *Dairy Produce Export Control Act 1924-1966* and of the Australian Dairy Produce Board constituted under it were given in earlier issues of the Year Book (see No. 48, pages 999-1000). The administrative expenses of the Australian Dairy Produce Board and other sundry expenditure were met from the proceeds of a levy imposed by the *Dairy Produce Export Charges Act 1964* (see Year Book No. 51, page 1070). In 1965 this Act, together with the *Dairy Produce Levy Act 1958*, was replaced by the *Butterfat Levy Act 1965-1966* (see page 940).

### Equalisation schemes

Reference is made to the butter and cheese equalisation schemes in Year Book No. 48, pages 998-9. Particulars of the returns realised on local and overseas sales and of the average equalisation rate for the years ended June 1963 to 1968 are given on page 947 of this issue. Details are also given on page 946 of the wholesale prices of butter and cheese for home consumption as determined by the Commonwealth Dairy Produce Equalisation Committee Ltd.

An equalisation scheme for casein similar to that for butter and cheese has been operated since 1952 by the Commonwealth Dairy Produce Equalisation Committee Ltd. Average realisations per cwt under the scheme were \$15.908 in 1962-63, \$16.101 in 1963-64, \$17.381 in 1964-65, \$24.918 in 1965-66, and \$23.556 in 1966-67. The interim equalisation value for 1967-68 has been fixed at \$22.00 per cwt.

### Commonwealth subsidies and stabilisation plans

*Butter and cheese.* Under the provisions of the various Dairy Industry Assistance Acts, the first of which was passed in 1942, the Commonwealth Government has provided subsidies on milk supplied for the manufacture of butter and cheese. Subsidies were paid on a seasonal basis prior to 1 April 1946, but from that date have been on a flat rate basis. Subsidies are distributed by the Commonwealth Dairy Produce Equalisation Committee Ltd, through factories, to milk producers by payments on butter and cheese manufactured. Details of the three five-year stabilisation plans which operated up to 30 June 1962 will be found in Year Book No. 49, page 1084. Information regarding the plan which operated during the five years ended 30 June 1967 appears in Year Book No. 52, page 961.

A new five-year stabilisation plan came into operation on 1 July 1967. All the features of the previous plan have been retained. The fixed bounty of \$27,000,000 payable in each year of the plan on butter, cheese and butterfat products containing 40 per cent or more butterfat is continued.

The underwriting of final minimum equalised returns on butter and cheese, each year, is also continued. Returns to producers which have been underwritten at 33c per lb on commercial butter each year since the inception of the underwriting arrangement in 1958 have been raised to 34c per lb for the 1967-68 season.

Amounts realised on exports of butter and cheese were, in 1948-49 and 1949-50, in excess of the f.o.b. equivalent of the then guaranteed return and were credited to the Dairying Industry Stabilisation Fund, which was established in July 1948 for the purpose of stabilising returns from exports. During 1951-52 the Stabilisation Fund met the deficiency in respect of all exports which did not earn sufficient to meet the basic return to the factory. From 1 July 1952 to 30 June 1957 it was available to the industry to be used, in whatever manner it considered desirable, to make good any deficiency in respect of all exports other than the 20 per cent provided for under the Commonwealth Government's Five-year Stabilisation Plan. The Act was amended in 1957 to enable the Board to use the fund for such other purposes as are approved by the Minister for Primary Industry, and this amendment was later extended by the *Dairying Industry Act 1962* to the present time. The amount standing to the credit of the Dairying Industry Stabilisation Fund at 30 June 1967 totalled approximately \$4,452,000. The major portion of the fund represents capital and other investments in milk recombining plants now established by the Board in Bangkok, Singapore and Manila.

*Processed milk products.* Subsidy on milk supplied for the manufacture of processed milk products was also payable from 1942 until 30 June 1948, and again from 1 July 1949 to 30 June 1952. The Commonwealth Government provided, under the *Processed Milk Products Bounty Act 1962*, for the payment of a maximum amount of \$700,000 as a bounty on exports of processed milk products in 1962-63. The bounty is to continue under present legislation until 30 June 1972, the maximum amounts made available being \$1,000,000 for 1963-64 and \$800,000 for each subsequent year.

*Whole milk.* In addition to the subsidies referred to above, the Commonwealth Government subsidised the production of whole milk consumed directly from 1943-44 to 1948-49. Details of the amounts distributed during each year will be found in Year Book No. 38, page 1031.

#### Extension, research and promotion of the dairying industry

*Dairy Industry Extension Grant.* An annual grant of \$500,000, to be expended by State Governments for the purpose of promoting improved farming practices in the dairying industry, was first made by the Commonwealth Government for the five years from 1 July 1948. The grant was renewed at the same level until 30 June 1963 when it was increased to \$700,000 per annum. On 1 July 1966 the Dairy Industry Extension Grant was incorporated in the Commonwealth Extension Services Grant, and assistance to the State agricultural departments for extension services to the dairying industry will be maintained from funds from this source until 1970-71 at least.

*Dairy industry research and sales promotion.* At the request of the Australian Dairy Industry Council, legislation was enacted in 1958 to provide for a sales promotion campaign for butter and cheese in Australia and also for research into industry problems. The legislation provided for a statutory levy on the manufacture of butter and cheese (the Dairy Produce Levy) which was initially set at rates of 0.104c per lb for butter and 0.052c per lb for cheese, the proceeds being divided equally between research and sales promotion. The rates of levy operative from November 1959 were 0.156c per lb for butter and 0.078c per lb for cheese, of which two-thirds was allocated to sales promotion and one-third to research.

In August 1964 the legislation was amended to include butter powder, at the same rates as for butter, and butteroil and ghee at 0.065c per lb for research and 0.130c per lb for sales promotion. In 1965 the Dairy Produce Levy Act was repealed and replaced by the *Butterfat Levy Act 1965-1966* which provides for the amalgamation of the three levies into one levy on butterfat used in the manufacture of butter, cheese and related products. The maximum rate of levy in the Act is 60 cents per cwt of butterfat, and the prescribed rate operative from 1 July 1967 is 53 cents per cwt (22 cents for promotion, 21 cents for administration and overseas market development, and 10 cents for research).

The Commonwealth Government agreed to contribute one half of the costs incurred on approved projects included in the programme of research, with a maximum contribution of \$1 for \$1 against funds raised by way of levy and allocated to research. The sales promotion programme is financed solely by the levy. The following table lists the amounts of levies collected for research and sales promotion during the five years 1962-63 to 1966-67.

#### BUTTERFAT LEVY: AMOUNTS COLLECTED FOR RESEARCH AND SALES PROMOTION, 1962-63 TO 1966-67

(\$)

	1962-63(a)	1963-64(a)	1964-65(a)	1965-66	1966-67
Research(b) . . .	263,500	264,200	262,800	310,200	406,100
Sales promotion . . .	527,000	528,400	543,000	823,600	893,700
<b>Total collected(b)</b>	<b>790,500</b>	<b>792,600</b>	<b>805,800</b>	<b>1,133,800</b>	<b>1,299,800</b>

(a) Collected under Dairy Produce Levy Act.  
Commonwealth Government.

(b) Excludes amounts contributed by the

The scheme is administered by the Australian Dairy Produce Board, which, in respect of research, is advised by a statutory committee, the Dairy Produce Research Committee.

## Cattle for milk production

## DAIRY BREED BULLS, AND COWS AND HEIFERS USED OR INTENDED FOR PRODUCTION OF MILK OR CREAM, 31 MARCH 1964 TO 1967

		Cows and heifers used or intended for production of milk or cream for sale						
		Bulls, dairy breed (a)	Cows		Heifers		Under one year	House cows and heifers (c)
			In milk	Dry	1 year and over			
31 March—					Spring- ing(b)	Other		
1967—								
New South Wales	.	18,261	524,668	143,529	164,829		126,914	91,982
Victoria	.	40,410	889,347	321,896	347,146		326,244	28,035
Queensland	.	15,354	450,477	148,318	138,847		104,956	37,351
South Australia	.	5,950	89,694	58,811	21,867	25,261	37,137	6,655
Western Australia	.	3,324	38,691	64,229	21,509	28,395	31,941	9,426
Tasmania	.	3,890	149,148		47,521		44,494	5,762
Northern Territory	.	15	322		226		97	27
Australian Capital Territory	.	31	1,154		170		174	437
Australia	.	87,235	2,880,681		795,771		671,957	179,675
1966	.	90,009	2,908,372		822,887		681,033	185,589
1965	.	95,012	3,011,832		843,212		690,267	202,138
1964	.	99,270	3,078,075		821,286		717,895	218,098

(a) Used or intended for service; excludes bull calves (under 1 year). (b) Within three months of calving. (c) Kept primarily for rural holdings' own milk supply.

For particulars relating to dairy cattle numbers up to 1963 see page 1078 of Year Book No. 50.

A map showing the distribution of dairy cattle in Australia at 31 March 1963 appears facing page 1082 of Year Book No. 50.

## Milking machines

MILKING MACHINES ON RURAL HOLDINGS: NUMBER OF UNITS(a)  
STATES AND TERRITORIES, 1963 TO 1967

31 March—	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
1963	43,089	97,372	46,674	18,836	10,514	12,701	n.a. {	84	(b)229,270
1964	42,970	98,321	45,072	19,057	10,157	13,382		83	(b)229,042
1965	42,209	101,994	44,074	19,135	10,055	13,806		93	231,389
1966	41,796	105,003	42,199	18,833	9,780	15,894		94	233,625
1967	41,433	108,664	40,878	18,143	9,664	16,414		94	235,325

(a) The number of units indicates the number of cows that can be milked simultaneously, i.e. the cow capacity of installed milking machines. (b) Excludes the Northern Territory.

## Production of milk

The quantity of milk produced by a dairy cow can be as high as 1,000 gallons a year, and varies greatly with breed, locality and season. For all dairy cows and for all seasons for Australia prior to 1916 production averaged considerably less than 300 gallons per annum. Largely owing to an improvement in the quality of the cattle and the increased application of scientific methods the 300 gallon average has been exceeded in each year since 1924. In the last five years an average of 476 gallons per cow per annum has been obtained. In 1966-67 the average yield was a record 520 gallons. The annual average yields per cow shown in the following table are obtained by dividing the total production of whole milk for the year ended June by the mean of the number of cows in milk and dry and house cows at 31 March of that year and of the preceding year. They are, in effect, based on



the approximate number of cows which were in milk during any part of the year. The average shown is, therefore, less than that for cows which were yielding during the greater part of the year, but it may be accepted as sufficiently reliable to show the general trend.

**AVERAGE MILK PRODUCTION PER COW: STATES AND TERRITORIES  
1936-37 TO 1966-67**

(Gallons)

Period	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.(a)
Average for three years ended—									
1938-39 . . .	315	439	298	442	353	349	n.a.	349	354
1948-49 . . .	310	506	267	565	370	419		328	371
1958-59 . . .	322	522	267	513	406	537		420	393
Year—									
1962-63 . . .	364	586	312	586	442	570	n.a.	479	452
1963-64(b) . . .	368	587	307	587	448	577	230	557	456
1964-65(b) . . .	347	613	306	614	490	589	248	547	467
1965-66(b) . . .	378	616	316	602	508	578	234	524	483
1966-67(b) . . .	423	p643	366	624	480	591	268	561	p520

(a) Excludes the Northern Territory before 1963-64. (b) Due to the introduction of a new cattle classification, may not be comparable with earlier years.

In the following table particulars of the production of whole milk in the various States and Territories are shown for the years 1962-63 to 1966-67 compared with the averages for the three years ended 1938-39, 1948-49 and 1958-59. In 1966-67, the production of whole milk in Australia reached a record level of 1,599 million gallons, which was 5 per cent above the previous record of 1965-66. Victoria is the principal milk-producing State, and in 1966-67 the output from that State, 791 million gallons, represented 49 per cent of total production. Output from New South Wales in 1966-67 was 323 million gallons (20 per cent of the total) and that of Queensland 238 million gallons (15 per cent). Production in the remaining States and Territories accounted for 16 per cent.

**TOTAL PRODUCTION OF WHOLE MILK: STATES AND TERRITORIES  
1936-37 TO 1966-67**

('000 gallons)

Period	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.(a)
Average for three years ended—									
1938-39 . . .	319,003	403,152	275,898	68,429	42,358	32,803	n.a.	363	1,142,006
1948-49 . . .	280,460	445,517	252,469	92,587	49,004	32,638		573	1,153,248
1958-59 . . .	307,514	578,529	240,446	84,185	54,218	65,032		929	1,330,853
Year—									
1962-63 . . .	324,113	667,562	245,067	95,378	56,029	78,518	n.a.	1,090	1,467,757
1963-64 . . .	322,547	694,990	239,827	97,523	57,162	83,124	76	1,146	1,496,395
1964-65 . . .	291,931	745,896	230,289	102,330	61,883	87,343	98	1,094	1,520,864
1965-66 . . .	300,740	750,915	221,086	98,398	61,865	87,890	92	1,026	1,522,013
1966-67 . . .	322,995	p790,941	238,134	98,727	55,611	91,418	97	1,095	p1,599,018

(a) Excludes the Northern Territory before 1963-64.

**UTILISATION OF WHOLE MILK: STATES AND TERRITORIES, 1966-67**

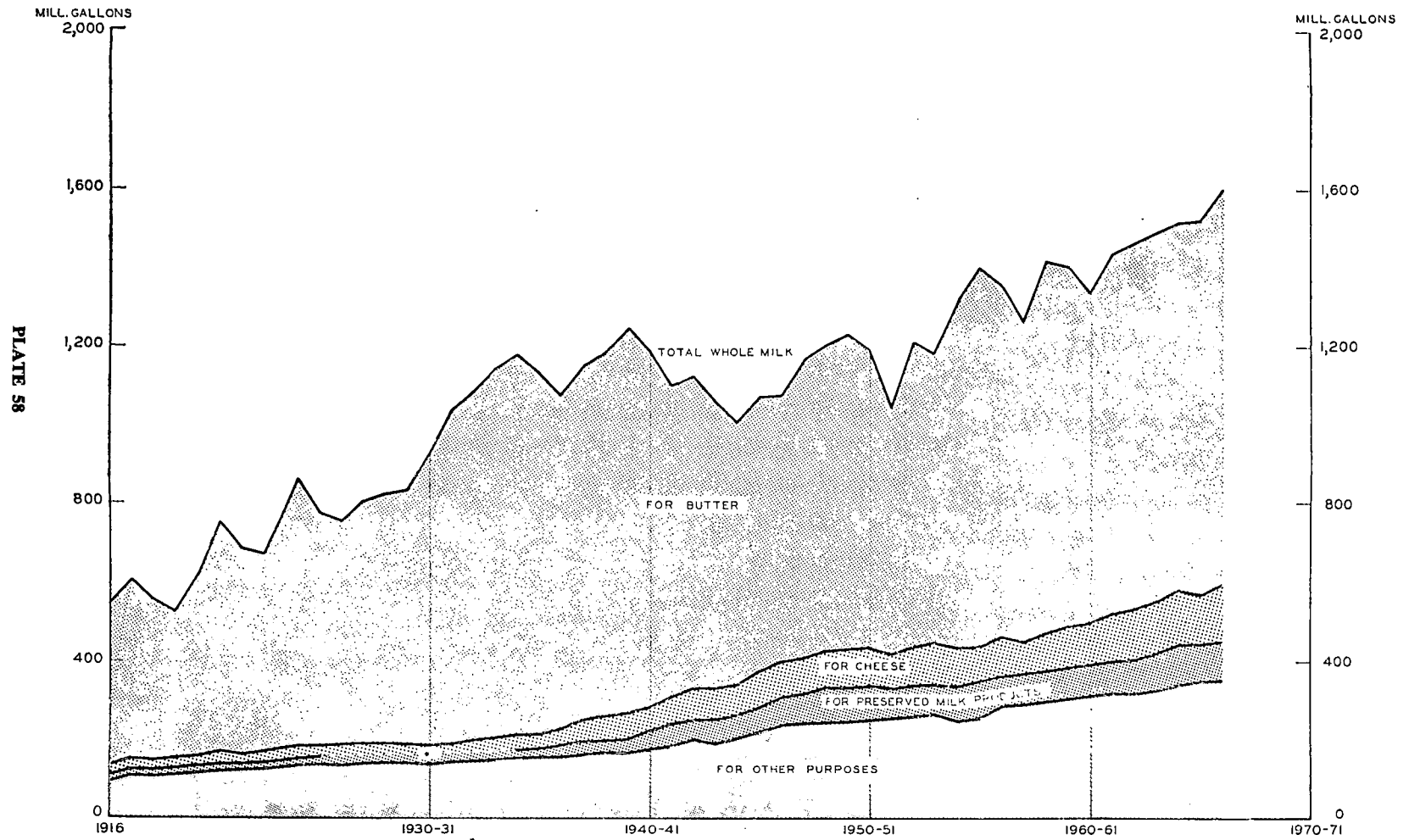
('000 gallons)

	N.S.W.	Vic.p	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.p
Milk used for—									
Butter . . .	163,683	559,627	150,834	29,458	29,429	66,520	..	..	999,551
Cheese . . .	9,956	63,959	22,669	37,710	3,755	8,411	..	..	146,460
Preserved milk products . . .	17,337	67,018	64,631	31,559	273 22,154	16,487	97	1,095	101,354 351,653
Other purposes . . .	132,019	100,337							
Total . . .	322,995	790,941	238,134	98,727	55,611	91,418	97	1,095	1,599,018

In 1966-67, 62.5 per cent of the total milk supply was used for butter, 9.2 per cent for cheese, 6.3 per cent for preserved milk products, and 22.0 per cent for other purposes.

# MILK PRODUCTION AND UTILIZATION: AUSTRALIA

1916 TO 1966-67



**PRODUCTION AND UTILISATION OF WHOLE MILK: AUSTRALIA**  
**1936-37 TO 1966-67**  
('000 gallons)

Period	Total production	Quantity used for—			
		Factory butter (a)	Factory cheese (a)	Preserved milk products	Other purposes (b)
Average for three years ended—					
1938–39	1,142,006	891,742	54,934	33,226	162,104
1948–49	1,153,248	738,377	91,642	78,739	244,490
1958–59	1,330,853	865,347	90,561	79,687	295,258
Year—					
1962–63	1,467,757	932,041	130,503	83,167	322,046
1963–64	1,496,395	940,787	130,431	92,235	332,942
1964–65	1,520,864	938,796	135,733	96,973	349,362
1965–66	1,522,013	949,270	126,575	93,189	352,979
1966–67p	1,599,018	999,551	146,460	101,354	351,653

(a) Prior to 1964-65, includes milk equivalent of farm production. (b) Principally fluid milk for domestic purposes. Includes, from 1964-65, milk used for farm production of butter and cheese.

**Production of butter, cheese and preserved milk products**

The establishment of large central butter factories, either on a co-operative or independent basis, has resulted in a considerable reduction in the cost of manufacture. The product is also of a more uniform quality, and whereas formerly the average quantity of milk used per pound of hand-made butter was about three gallons, factory butter requires only about two gallons. In addition, subsidy payments by the Commonwealth Government are made only on factory-produced butter. As a result the production of farm-made butter has declined to negligible proportions. A similar position exists in the cheese-making industry.

In 1966-67 factories classified to industry sub-classes Butter factories, Cheese factories, and Condensed and processed milk factories numbered 328 and were distributed among the States as follows: New South Wales, 69; Victoria, 117; Queensland, 61; South Australia, 41; Western Australia, 17; and Tasmania, 23. More details regarding numbers of factories, output, etc., are given in the chapter Manufacturing Industry.

Factory production of butter in 1966-67 at 489,217,000 lb was a record. It was 29,000,000 lb (6.3 per cent) more than the amount produced in 1965-66, and 28,000,000 lb (6.1 per cent) more than the previous post-war record production of 1955-56.

**BUTTER PRODUCTION IN FACTORIES: STATES, 1936-37 TO 1966-67**  
('000 lb)

Period	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	Aust.
Average for three years ended—							
1938-39 . . . . .	111,250	137,908	117,907	17,868	12,999	8,812	406,744
1948-49 . . . . .	70,323	131,522	94,624	20,223	14,856	10,044	341,591
1958-59 . . . . .	75,784	196,356	85,413	16,820	15,259	23,784	413,417
Year—							
1962-63 . . . . .	80,568	227,207	81,661	16,395	15,596	29,338	450,765
1963-64 . . . . .	80,880	231,499	79,220	16,587	15,491	30,616	454,292
1964-65 . . . . .	67,081	248,506	73,546	17,215	17,387	31,143	454,878
1965-66 . . . . .	73,901	250,680	70,189	16,160	18,133	31,370	460,433
1966-67 . . . . .	86,392	266,907	74,375	15,092	14,394	32,056	489,217

Factory production of cheese in 1966-67 reached a record level of 153,834,000 lb, which was 16,000,000 lb (11.5 per cent) more than the previous record of 1964-65.

**CHEESE PRODUCTION IN FACTORIES: STATES, 1936-37 TO 1966-67**  
(<sup>'000</sup> lb)

<i>Period</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>Aust.</i>
Average for three years ended—							
1938-39 . . .	7,347	16,141	11,357	15,380	957	3,190	54,371
1948-49 . . .	5,342	38,927	19,972	26,844	2,171	1,436	94,692
1958-59 . . .	9,784	39,440	15,331	25,128	2,524	750	92,958
Year—							
1962-63 . . .	12,366	57,274	22,851	33,967	3,223	1,440	131,120
1963-64 . . .	12,142	56,397	21,263	34,236	3,373	2,994	130,405
1964-65 . . .	9,785	60,975	19,095	38,836	4,051	5,265	138,008
1965-66 . . .	9,786	58,158	17,773	36,281	2,712	6,590	131,300
1966-67 . . .	12,023	67,907	23,071	38,598	3,807	8,427	153,834

Preserved milk products are manufactured mainly in Victoria, which produced 63 per cent of the total (in terms of whole milk equivalent) in 1966-67. New South Wales accounted for 18 per cent and the remaining States for 19 per cent.

**PRODUCTION OF PRESERVED MILK PRODUCTS: AUSTRALIA**  
1962-63 TO 1966-67  
(<sup>'000</sup> lb)

<i>Product</i>	<i>1962-63</i>	<i>1963-64</i>	<i>1964-65</i>	<i>1965-66</i>	<i>1966-67</i>
Condensed, concentrated and evaporated milk—					
Full cream—					
Sweetened(a) . . .	75,533	95,744	102,479	73,985	61,510
Unsweetened . . .	64,409	71,964	89,390	88,482	91,700
Skim . . .	19,203	25,712	21,936	22,047	24,974
Ice cream mixes (liquid) . . .	8,612	11,896	10,810	15,198	15,422
Infants' and invalids' food(b) . . .	38,465	44,105	45,179	45,280	49,348
Casein . . .	36,236	37,360	39,768	50,712	45,812
Powdered milk—					
Full cream—					
Spray . . .	37,829	40,069	41,561	42,888	46,276
Roller . . .	1,874	2,109	2,108	2,172	1,742
Skim—					
Without added ingredients—					
Spray . . .	76,689	70,189	82,624	84,018	162,351
Roller . . .	10,845	12,783	14,704	14,466	13,153
With added ingredients—					
Baker's powder . . .	4,808	4,854	5,264	5,577	5,401
Other . . .	1,834	4,303	5,231	8,281	7,679
Buttermilk or mixed skim and buttermilk—					
Spray . . .	2,543	4,650	4,702	8,345	12,829
Roller . . .	18,258	17,060	16,183	17,555	19,689
<i>Total powdered milk . . .</i>	<i>154,680</i>	<i>156,019</i>	<i>172,378</i>	<i>183,301</i>	<i>269,120</i>

(a) Includes 'coffee and milk'. (b) Includes malted milk and milk sugar (lactose).

**Wholesale prices of butter and cheese in Australia**

Details of prices operating in each of the States since 1 July 1956 are shown in the following table. The prices included are those determined by the Commonwealth Dairy Produce Equalisation Committee Ltd for choicest grade bulk butter and cheese.

**WHOLESALE PRICES OF BUTTER AND CHEESE: AUSTRALIA**  
(*\$ per cwt*)

<i>Date from which prices became effective</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>
<b>Butter—</b>						
1 July 1956 . . . . .	46.67	46.67	46.55	46.43	46.67	46.67
1 July 1958 . . . . .	48.53	48.53	48.42	48.42	48.53	48.53
1 July 1960 . . . . .	50.17	50.17	50.05	50.17	50.17	50.17
19 June 1964 . . . . .	51.80	51.80	51.80	51.80	51.80	51.80
14 February 1966 . . . . .	52.08	52.08	52.08	52.08	52.08	52.08
<b>Cheese—</b>						
1 July 1956 . . . . .	28.23	28.23	28.23	28.12	28.23	28.23
1 July 1958 . . . . .	29.17	29.17	29.17	29.17	29.17	29.17
1 July 1960 . . . . .	29.63	29.63	29.63	29.63	29.63	29.63
19 June 1964 . . . . .	30.57	30.57	30.57	30.57	30.57	30.57
14 February 1966 . . . . .	30.80	30.80	30.80	30.80	30.80	30.80
7 November 1966 . . . . .	33.04	33.04	33.04	33.04	33.04	33.04

**Local consumption of butter and cheese**

Following the cessation of butter rationing after the 1939–45 War, consumption per head rose to 31.2 lb in 1951–52. However, in later years it gradually declined, and in 1965–66, at 21.7 lb per head, it reached its lowest level since the war. Consumption of cheese per head rose steadily in recent years and in 1965–66 reached a record level of 7.9 lb. This figure declined slightly in 1966–67.

**PRODUCTION AND DISPOSAL OF BUTTER AND CHEESE**  
**AUSTRALIA, 1936–37 TO 1966–67**

Period	Change in stocks (a) (‘000 tons)	Production (b) (‘000 tons)	Exports (c) (‘000 tons)	Apparent consumption in Australia	
				Total (‘000 tons)	Per head per year (lb)
BUTTER					
Average for three years ended—					
1938–39 . . . . .	n.a.	190.8	89.4	101.4	32.9
1948–49 . . . . .	–3.6	157.1	76.0	84.7	24.8
1958–59 . . . . .	–0.6	187.4	69.6	118.4	27.2
Year—					
1962–63 . . . . .	+7.1	202.4	80.6	114.7	23.7
1963–64 . . . . .	–2.3	203.8	91.0	115.1	23.3
1964–65 . . . . .	–6.9	203.1	96.8	113.2	22.5
1965–66 . . . . .	+8.9	205.6	85.1	111.6	21.7
1966–67p . . . . .	–0.3	218.4	104.7	114.1	21.8
CHEESE					
Average for three years ended—					
1938–39 . . . . .	n.a.	24.9	11.5	13.4	4.4
1948–49 . . . . .	–0.8	42.3	24.3	18.8	5.5
1958–59 . . . . .	+2.8	41.6	13.8	25.0	5.7
Year—					
1962–63 . . . . .	+0.2	58.7	26.0	32.4	6.7
1963–64 . . . . .	–5.3	58.2	27.9	35.6	7.2
1964–65 . . . . .	–3.5	61.6	27.3	37.8	7.5
1965–66 . . . . .	–7.6	58.6	25.4	40.7	7.9
1966–67p . . . . .	+2.4	68.7	25.6	40.7	7.8

(a) Balance figure for 1946–47 and subsequent years; includes allowance for imports.  
 (b) Factory production only from 1964–65. (c) Includes ships' stores; figures for butter include ghee and butter concentrate expressed as butter.

**Average returns from butter and cheese sold**

The table below shows rates realised on local, interstate and overseas sales and the average equalisation and subsidy rates in operation for the years ended June 1963 to 1968.

**BUTTER AND CHEESE: RATES REALISED ON SALES, AVERAGE EQUALISATION  
RATES AND RATES OF COMMONWEALTH SUBSIDY UNDER DAIRYING  
INDUSTRY ACTS, 1962-63 TO 1967-68**

(Source: Commonwealth Dairy Produce Equalisation Committee Ltd)

(\$ per cwt)

Year	Rates realised on sales				Average equalisa- tion rate	Rate of subsidy	Rate of overall return to manu- facturer
	Intrastate	Interstate	Manu- facturing	Overseas			
Butter—							
1962-63 . . .	48.49	46.49	31.62	32.67	41.15	6.15	47.30
1963-64 . . .	48.65	47.03	31.40	33.82	41.73	6.10	47.83
1964-65 . . .	50.08	48.18	31.63	34.08	42.25	6.09	48.33
1965-66 . . .	50.06	47.47	32.26	30.63	40.27	6.01	46.28
1966-67 . . .	(a)	(a)	(a)	(a)	(b)39.30	5.66	(b)44.96
1967-68 . . .	(a)	(a)	(a)	(a)	(b)37.35	(b)5.86	(b)43.21
Cheese—							
1962-63 . . .		(c)28.39		20.28	24.22	2.33	26.56
1963-64 . . .		(c)28.54		21.13	25.51	2.36	27.87
1964-65 . . .		(c)29.32		22.11	26.00	2.23	28.23
1965-66 . . .		(c)29.43		23.18	25.98	2.36	28.34
1966-67 . . .		(a)		(a)	(b)26.48	2.04	(b)28.52
1967-68 . . .		(a)		(a)	(b)23.50	(b)1.90	(b)25.40

(a) Not yet available. (b) Interim rates. (c) As cheddar.

The distribution between factory and farm of the overall return to manufacturers for butter is shown in the following table.

**COMMERCIAL BUTTER: AVERAGE OVERALL RETURNS  
AUSTRALIA, 1962-63 TO 1967-68**

(Source: Commonwealth Dairy Produce Equalisation Committee Ltd)

(Cents per lb)

Year	Average overall returns on commercial butter		
	Rate of overall return to manufacturer	Estimated manufacturing cost	Return to dairy farmer
1962-63 . . .	42.234	4.449	37.785
1963-64 . . .	42.705	4.449	38.256
1964-65 . . .	43.154	4.449	38.705
1965-66 . . .	41.324	4.449	36.875
1966-67 . . .	(a)40.141	4.583	35.558
1967-68 . . .	(a)38.583	4.583	34.000

(a) Interim rates.

**Overseas trade in dairy products**

The production of butter and cheese in Australia is considerably in excess of local requirements, and consequently a substantial surplus is available for export overseas. In normal circumstances the extent of this surplus is chiefly dependent upon seasonal conditions.

Exports of butter in 1966-67 amounted to 205.5 million lb, compared with 167.6 million lb in 1965-66. Exports of cheese in these years were 57.2 million lb and 55.8 million lb respectively. As in previous years, the principal importing country for Australian butter was the United Kingdom, which received 78 per cent of total exports. In 1966-67 Japan replaced the United Kingdom as the principal importing country for Australian cheese with 37 per cent of total shipments.

All butter and cheese exported comes under the provisions of the Exports (Dairy Produce) Regulations and is subject to supervision, inspection and examination by officers appointed for that purpose. These commodities are graded according to quality, which has been fixed by regulation as follows: flavour and aroma, 50 points; texture, 30 points; and condition, 20 points. Butter and cheese graded at 93 to 100 points is of choicest quality; at 90 to 92 points, first quality; at 86 to 89 points, second quality; and at 80 to 85 points, pastry or cooking quality or, in the case of cheese, third quality.

In the following table particulars are given of the relative proportions of butter and cheese graded for export according to quality. Further details, which include actual quantities by States, are to be found in *Rural Industries*, 1965-66, Bulletin No. 4.

**BULK BUTTER AND CHEESE GRADED FOR EXPORT: AUSTRALIA, 1964-65 TO 1966-67**  
(Per cent)

Grade	Butter			Cheese		
	1964-65	1965-66	1966-67	1964-65	1965-66	1966-67
Choicest . . . . .	73.4	73.7	77.3	6.1	6.9	22.5
First quality . . . . .	21.0	20.7	17.5	87.0	86.7	74.7
Second and third quality(a) . . . . .	5.7	5.7	5.2	6.9	6.4	2.8
<b>Total . . . . .</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

(a) Includes rejected.

Exports of butter, cheese and other milk products of Australian origin are shown in the following table.

**EXPORTS OF DAIRY PRODUCTS: AUSTRALIA, 1964-65 TO 1966-67**

Product	Quantity ('000 lb)			Value (\$'000 f.o.b.)		
	1964-65	1965-66	1966-67	1964-65	1965-66	1966-67
Butter(a) . . . . .	202,240	167,625	205,550	62,165	49,989	55,094
Cheese(b) . . . . .	60,929	55,777	57,195	14,197	13,470	15,262
Other milk products—						
Preserved, condensed, concentrated, etc.—						
Sweetened . . . . .	78,070	44,661	35,781	10,362	5,650	4,601
Unsweetened . . . . .	11,678	14,228	14,543	1,328	1,619	1,656
Infants' and invalids' food (essentially of milk)(c) . . . . .	16,523	13,301	10,698	4,752	3,811	3,244
Casein . . . . .	36,624	43,342	42,470	6,145	10,183	9,545
Dried or powdered—						
Full cream . . . . .	18,737	20,181	28,282	5,248	5,161	7,515
Skim . . . . .	56,098	42,018	118,279	5,885	5,333	15,095

(a) Excludes butter concentrate, ghee, and ships' stores.    (b) Excludes ships' stores.    (c) Includes malted milk.

### Pigs

At 31 March 1967 the number of pigs in Australia reached a record level of 1,804,000 which represented an increase of 57,000 (3.3 per cent) on numbers recorded at 31 March 1966 and 6,000 (0.3 per cent) more than the previous record at 31 March 1941.

## PIGS: NUMBERS IN STATES AND TERRITORIES, 1937 TO 1967

Period	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Average for three years ended—									
1939 . . .	374,963	285,465	299,707	74,329	74,657	42,802	404	481	1,152,808
1949 . . .	366,267	261,922	375,191	101,934	91,862	43,184	424	554	1,241,338
1959 . . .	377,510	263,363	405,702	99,632	135,404	61,389	2,543	160	1,345,703
At 31 March—									
1963 . . .	391,999	297,791	402,498	144,976	130,791	70,002	1,842	92	1,439,991
1964 . . .	391,300	322,051	388,144	153,415	128,140	82,534	1,806	121	1,467,511
1965 . . .	448,661	378,055	406,028	195,873	137,192	92,021	2,182	(a)	(b)1,660,012
1966 . . .	479,768	383,509	417,235	223,586	144,022	96,156	2,275	(a)	(b)1,746,551
1967 . . .	513,575	350,691	467,572	222,334	160,983	85,654	2,791	(a)	(b)1,803,600

(a) Not available for publication. (b) Incomplete; excludes Australian Capital Territory.

A long-term comparison of pig numbers is given in the division Pastoral Production of this chapter (see page 913). A map showing the distribution of pigs in Australia at 31 March 1963 faces page 1083 of Year Book No. 50 and a graph showing the number of pigs in Australia from 1870 onwards appears on plate 55 of this Year Book (see page 914).

## PIGS SLAUGHTERED: STATES AND TERRITORIES, 1936-37 TO 1966-67

('000)

Period	Slaughtering passed for human consumption								Total slaughtering (including boiled down)	
	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.		
Average for three years ended—										
1938-39 . . .	562	503	530	155	109	65	1		1,925	1,961
1948-49 . . .	440	371	448	154	138	54	1		1,606	1,615
1958-59 . . .	594	439	474	159	191	94	5		1,956	1,968
Year—										
1962-63 . . .	688	528	604	235	237	115	2	7	2,416	2,424
1963-64 . . .	636	531	606	214	185	124	2	7	2,305	2,313
1964-65 . . .	674	599	623	241	182	135	3	5	2,461	2,468
1965-66 . . .	774	703	640	298	195	146	2	9	2,769	2,777
1966-67 . . .	849	698	666	316	214	149	2	9	2,903	2,912

## Production of pigmeat, bacon and ham

PRODUCTION OF PIGMEAT (CARCASS WEIGHT): STATES AND TERRITORIES  
1936-37 TO 1966-67

(Tons)

Period	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Average for three years ended—									
1938-39 . . .	25,558	24,569	23,522	7,538	4,322	2,893	5	43	(a)88,450
1948-49 . . .	27,182	22,308	22,856	8,993	8,500	2,916	24	36	92,815
1958-59 . . .	28,272	23,097	23,180	8,778	9,624	4,156	84	209	97,400
Year—									
1962-63 . . .	30,283	25,086	29,619	11,810	11,731	5,461	69	328	114,387
1963-64 . . .	28,717	25,306	29,919	11,163	9,852	5,927	73	326	111,283
1964-65 . . .	31,509	28,048	31,259	12,656	9,861	6,585	90	218	120,226
1965-66 . . .	35,343	33,195	31,394	15,223	10,444	7,023	93	428	133,143
1966-67 . . .	38,283	33,094	33,255	15,947	11,584	7,164	87	386	139,800

(a) Excludes trimmings from baconer carcasses.



Production of bacon and ham amounted to 50,092 tons in 1966-67. This amount was 8.4 per cent above the amount of 46,220 tons produced in 1965-66 but 10.9 per cent below the record output of 56,246 tons attained in 1944-45.

**PRODUCTION OF BACON AND HAM (CURED CARCASS WEIGHT)(a): STATES**  
1936-37 TO 1966-67  
(Tons)

<i>Period</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>Aust.</i>
Average for three years ended—							
1938-39 .	10,396	7,556	8,759	2,940	1,838	1,022	32,511
1948-49 .	14,436	10,787	9,846	4,580	4,209	1,196	45,054
1958-59 .	11,132	8,302	10,294	3,275	2,987	1,078	37,068
Year—							
1962-63 .	12,827	9,004	11,449	3,355	3,844	1,182	41,661
1963-64 .	13,503	8,629	10,843	3,605	3,792	1,166	41,538
1964-65 .	13,923	9,366	11,086	3,822	3,998	1,171	43,366
1965-66 .	15,055	9,357	12,342	4,106	4,298	1,062	46,220
1966-67 .	15,366	p9,787	14,670	4,403	4,624	1,242	p50,092

(a) Pressed and canned bacon and ham have been converted to cured carcass weight for periods subsequent to 1948-49.

**Consumption of pigmeat, bacon and ham**

The apparent consumption of pigmeat increased from 13.3 lb per head in 1965-66 to 13.5 lb per head in 1966-67 and equalled the highest post-war consumption, which occurred in 1961-62.

**PRODUCTION AND DISPOSAL OF PIGMEAT (CARCASS WEIGHT): AUSTRALIA**  
1936-37 TO 1966-67

<i>Period</i>	<i>Change in stocks (a)</i>	<i>Production</i>	<i>Exports</i>	<i>Curing and canning</i>	<i>Apparent consumption (as pork or smallgoods) in Australia</i>	
					<i>Total</i>	<i>Per head per year</i>
	'000 tons	'000 tons	'000 tons	'000 tons	'000 tons	lb
Average for three years ended—						
1938-39 . .	n.a.	88.5	13.7	48.6	26.2	8.5
1948-49 . .	-1.2	92.8	6.3	63.4	24.3	7.1
1958-59 . .	..	97.4	0.8	53.0	43.6	10.1
Year—						
1962-63 . .	-1.6	114.4	0.2	58.0	57.8	11.9
1963-64 . .	-3.4	111.3	0.2	57.5	57.0	11.5
1964-65 . .	-0.2	120.2	0.4	60.7	59.3	11.8
1965-66 . .	..	133.1	0.5	64.3	68.4	13.3
1966-67 . .	-1.1	139.8	0.9	69.5	70.5	13.5

(a) Includes allowance for imports.

**PRODUCTION AND DISPOSAL OF BACON AND HAM (CURED CARCASS WEIGHT): AUSTRALIA, 1936-37 TO 1966-67**

Period	Change in stocks	Pro- duction	Exports	Canning	Apparent consumption in Australia	
					Total	Per head per year
	'000 tons	'000 tons	'000 tons	'000 tons	'000 tons	lb
Average for three years ended—						
1938-39 . . .	n.a.	32.5	1.0	..	31.5	10.2
1948-49 . . .	..	45.1	3.1	2.1	39.9	11.7
1958-59 . . .	+0.1	37.1	0.5	6.0	30.5	7.1
Year—						
1962-63 . . .	-0.1	41.7	0.1	5.8	35.8	7.4
1963-64 . . .	..	41.5	0.1	5.5	36.0	7.3
1964-65 . . .	..	43.4	0.1	5.2	38.0	7.5
1965-66 . . .	+0.2	46.2	0.2	7.0	38.8	7.6
1966-67p . . .	-0.1	50.1	0.2	8.1	41.9	8.0

**Exports of pigs and pig products**

**EXPORTS OF PIGS AND PIG PRODUCTS: AUSTRALIA, 1964-65 TO 1966-67**

		Quantity			Value (\$'000 f.o.b.)		
		1964-65	1965-66	1966-67	1964-65	1965-66	1966-67
Bacon and ham (including canned) . . . . .	'000 lb	379	487	564	259	334	406
Lard . . . . .	'000 lb	231	157	98	32	27	16
Frozen pork . . . . .	'000 lb	818	1,064	2,060	324	436	826
Pigs, live . . . . .	number	n.a.	n.a.	680	n.a.	n.a.	47

**The poultry industry**

Originally the poultry industry was conducted in conjunction with other branches of rural activity, mainly dairying, but it is now a specialised and distinct industry. It is from this source that the bulk of the commercial production is obtained. Practically all farm households keep poultry for the purpose of supplying their own domestic requirements, and some supplies from this source are also marketed. In addition, some private homes in both rural and suburban areas keep small numbers of fowls in back-yard runs to help satisfy domestic needs. Because of the incompleteness of data available on poultry throughout Australia, details of poultry numbers are not published.

**Stabilisation scheme for the egg industry**

A Commonwealth industry stabilisation scheme for the egg industry has been in operation since 1 July 1965. The principal features of the scheme are embodied in three Commonwealth Acts—*Poultry Industry Levy Act 1965-1966*, *Poultry Industry Levy Collection Act 1965-1966*, and *Poultry Industry Assistance Act 1965-1966*.

The scheme provides for the imposition of a levy on hens over six months of age kept for commercial purposes. The money obtained from the levy is used to meet trading losses on surplus eggs. Previously, returns to producers were equalised by State Egg Boards, who imposed an equalisation deduction to cover deficits which resulted from sales to overseas markets.

In determining the rate of the hen levy, the Minister for Primary Industry is required to take into consideration any recommendations by the Council of Egg Marketing Authorities of Australia (which consists of all members of the State Egg Marketing Boards) and is precluded from prescribing a rate

in excess of such recommendations. The initial rate of levy was set at about 2.71c per hen per fortnight (the equivalent of \$0.70 per bird per year). This rate was increased to 2.80c on 23 February 1966. Following upon recommendations by the Council of Egg Marketing Authorities of Australia, the Minister for Primary Industry approved an increase in the levy to 3.50c per fortnight operative from 13 July 1966. As from 19 April 1967 the levy was increased to 5.00c per fortnight for the remainder of the financial year 1966-67. This had the effect of raising the total levy for the year to the maximum permitted under the legislation of \$1.00 per hen per year. For 1967-68 the maximum levy was again imposed, to be apportioned at 4.00c per hen per fortnight for 24 periods and 2.00c per hen per fortnight for the remaining 2 periods.

Exemptions from payment are granted on the first 20 hens in each flock and also on a substantial proportion of broiler breeder hens. The eggs produced by broiler breeder hens which are not used for hatching determine the proportion of those hens on which the levy becomes payable in accordance with a formula incorporated in the legislation.

By arrangement between the Commonwealth and State Governments, the State Egg Boards collect the levy due in each State from individual producers and remit the total amount to the Commonwealth (the Department of Primary Industry collects the levy in the Australian Capital Territory). The Commonwealth Government pays into the Poultry Industry Trust Fund amounts equal to the receipts obtained from the hen levy. These amounts totalled \$8,900,000 in 1966-67 (\$6,427,000 in 1965-66). Payments from the Fund are made to the State Governments for financial assistance to the poultry industry, and are authorised by the Minister for Primary Industry, after consideration has been given to the recommendations by the Council of Egg Marketing Authorities of Australia. Payments from the Trust Fund totalled \$9,062,000 in 1966-67 (\$5,540,000 in 1965-66).

### Research

The *Poultry Industry Assistance Act* 1965-1966 permits expenditure from the Poultry Industry Trust Fund to be made for research. The Commonwealth Government has agreed to match expenditure from this Fund on a \$1 for \$1 basis with a limit to its contribution of \$100,000. There is no restriction on the amount which may be expended from the Fund for research purposes.

Research projects are recommended by the Council of Egg Marketing Authorities of Australia for approval by the Minister for Primary Industry. Expenditure may be approved for scientific, technical or economic research, the publication of reports thereon, the training of persons for research, and the dissemination of information and advice on scientific, technical or economic matters.

### Marketing of eggs

Details of the *Egg Export Control Act* 1947 were given in earlier issues of the Year Book (see No. 47, page 997).

Australian exports of shell eggs in 1966-67 amounted to 4,451,000 dozen compared with 3,935,000 dozen in 1965-66. The main outlets for Australian eggs in 1966-67 were Kuwait (1,755,000 dozen), Federation of South Arabia (673,000 dozen), Trucial States (406,000 dozen), and Bahrain (404,000 dozen).

### Recorded production of eggs and egg products

Available statistics of the production and disposal of eggs in Australia are restricted to those recorded by the Australian Egg Board and the Egg Marketing Board of New South Wales. Details of production as recorded by these authorities are shown in the following table.

SHELL EGGS: PRODUCTION<sup>(a)</sup> RECORDED BY EGG BOARDS  
STATES, 1962-63 TO 1966-67  
(<sup>000</sup> dozen)

State	1962-63	1963-64	1964-65	1965-66	1966-67
New South Wales <sup>(b)</sup>	54,609	56,713	62,918	65,240	68,043
Victoria	26,794	24,992	28,016	29,925	34,100
Queensland	11,290	12,459	14,182	17,062	20,474
South Australia	9,816	8,731	9,354	11,218	13,176
Western Australia	7,796	8,331	9,620	9,295	9,810
Tasmania	n.a.	n.a.	n.a.	n.a.	n.a.
Total <sup>(c)</sup>	110,305	111,226	124,089	132,740	145,603

(a) Receipts from consignors and sales by producer agents.

(b) Includes Australian Capital Territory.

(c) Excludes Tasmania.

Particulars of the production of whole egg pulp as recorded by the Egg Marketing Board for the State of New South Wales and by the Australian Egg Board for the other States are shown in the following table.

**LIQUID WHOLE EGG PULP: PRODUCTION RECORDED BY EGG BOARDS**  
STATES, 1962-63 TO 1966-67  
(<sup>'000</sup> lb)

<i>State</i>	<i>1962-63</i>	<i>1963-64</i>	<i>1964-65</i>	<i>1965-66</i>	<i>1966-67</i>
New South Wales . . . . .	11,500	9,272	18,463	12,540	15,581
Victoria . . . . .	7,684	3,216	5,456	3,286	5,825
Queensland . . . . .	3,864	3,922	5,731	5,450	6,718
South Australia . . . . .	2,836	3,001	2,639	4,148	4,953
Western Australia . . . . .	533	835	1,450	977	1,143
Tasmania . . . . .	n.a.	n.a.	n.a.	n.a.	n.a.
<b>Total(a)</b> . . . . .	<b>26,417</b>	<b>20,246</b>	<b>33,739</b>	<b>26,401</b>	<b>34,220</b>

(a) Excludes Tasmania.

In addition to liquid whole egg, production was also recorded of liquid egg whites and liquid egg yolks. Output in 1966-67 amounted to 2,101,000 lb and 1,526,000 lb respectively, compared with 3,875,000 lb and 2,664,000 lb respectively, in the previous year. These figures exclude small quantities produced in Tasmania for which details are not available.

**Consumption of eggs and egg products**

Because of the operation of producers outside the control of the Egg Boards and the extent of 'back-yard' poultry-keeping, for which no statistics are collected, figures relating to total egg production must be accepted with some reserve. The production shown in the following table, together with details of exports and consumption, is based upon the records of Egg Boards of production from areas under their control, plus estimates of production from uncontrolled areas and from 'back-yard' poultry-keepers.

**ESTIMATED PRODUCTION AND DISPOSAL OF EGGS IN SHELL**  
AUSTRALIA, 1936-37 TO 1966-67

<i>Period</i>	<i>Change in stocks</i>	<i>Estimated total production</i>	<i>Exports (a)</i>	<i>For drying and pulping (b)</i>	<i>Apparent consumption in Australia</i>	
					<i>Total</i>	<i>Per head per year</i>
<b>Average three years ended—</b>	<b>mill doz</b>	<b>mill doz</b>	<b>mill doz</b>	<b>mill doz</b>	<b>mill doz</b>	<b>dozen</b>
1938-39 . . . . .	-0.1	152.7	13.0	5.5	134.3	19.5
1948-49 . . . . .	+0.1	204.7	17.7	39.1	147.8	19.3
1958-59 . . . . .	+0.1	189.9	9.6	23.0	157.2	16.1
<b>Year—</b>						
1962-63 . . . . .	-0.3	207.7	4.6	23.9	179.4	16.6
1963-64 . . . . .	+1.1	210.6	4.3	21.0	184.2	16.7
1964-65 . . . . .	-0.2	225.5	4.2	31.9	189.6	16.8
1965-66 . . . . .	-0.3	228.1	4.7	27.2	196.5	17.1
1966-67p . . . . .	+0.2	238.4	5.3	31.9	201.0	17.2

(a) Includes ships' stores. (b) Includes wastage.

Details of the annual consumption of shell eggs, liquid whole egg and total shell egg equivalent per head of population are shown in the following table.

**SUPPLIES OF EGGS AND EGG PRODUCTS AVAILABLE  
FOR CONSUMPTION: AUSTRALIA, 1936-37 TO 1966-67**  
(Per head per year)

Period	Eggs in shell	Liquid whole egg and egg powder (a)	Total	
			Number	Weight (b)
	number	number		lb
Average for three years ended—				
1938-39 . . .	235	8	243	26.6
1948-49 . . .	232	23	255	27.9
1958-59 . . .	194	12	206	22.5
Year—				
1962-63 . . .	199	11	210	26.2
1963-64 . . .	200	13	213	26.6
1964-65 . . .	202	15	217	27.1
1965-66 . . .	205	15	220	27.5
1966-67p . . .	206	13	220	27.5

(a) In terms of number of eggs in shell. (b) The average weight of an egg in Australia was taken as 1.75 oz for years prior to 1960-61. Since then the average weight has been taken as 2 oz, and figures from 1960-61 are therefore not strictly comparable with those for earlier periods.

**Overseas trade in poultry products**

**EXPORTS OF POULTRY PRODUCTS: AUSTRALIA  
1964-65 TO 1966-67**

		Quantity			Value (\$'000 f.o.b.)		
		1964-65	1965-66	1966-67	1964-65	1965-66	1966-67
Eggs in shell . . .	'000 doz	3,327	3,935	4,451	921	1,124	1,161
Eggs not in shell—							
In liquid form(a) . . .	'000 lb	17,119	14,484	18,226	3,840	3,280	3,224
Dry . . .	'000 lb	158	257	100	123	189	77
Frozen poultry . . .	'000 lb	792	857	1,410	331	350	503
Poultry, live(b) . . .	number	735,911	323,601	276,259	184	79	69

(a) Includes frozen pulp. (b) Includes day-old chicks.

Imports of canned poultry in 1966-67 amounted to 539,000 lb, valued at \$146,000, compared with 526,000 lb, valued at \$138,000; in 1965-66.

## The bee-farming industry

**Production of honey and bees-wax**

Although practised as a separate industry, bee-farming is also carried on in conjunction with other branches of farming. A feature of the industry is that it consists mainly of itinerant apiarists operating on a large scale with mobile equipment. Some of these apiarists move as far afield as from Victoria to Queensland in an endeavour to provide a continuous supply of nectar from flora suitable for their bees. The returns of honey from productive hives during 1966-67 showed an average of 110.2 lb per hive, and the average quantity of wax was 1.5 lb per productive hive.

In the following table, statistics are confined to apiarists with five or more hives, except in New South Wales, where details relate to beekeepers with six or more hives. Prior to 1966-67, statistics for States other than Queensland related to beekeepers with five or more hives. In Queensland, details were confined to beekeepers on rural holdings with five or more hives and to beekeepers not on rural holdings with ten or more hives.

## BEEHIVES, HONEY AND BEES-WAX: STATES AND A.C.T., 1966-67

State or Territory	Beehives(a)		Honey produced			Bees-wax produced	
	Pro- ductive	Unpro- ductive	Total	Quantity	Gross value	Quantity	Gross value
	'000	'000	'000	'000 lb	\$'000	'000 lb	\$'000
New South Wales . . .	103	57	160	10,580	1,230	137	66
Victoria . . .	72	24	96	7,160	1,045	88	44
Queensland . . .	38	19	57	3,461	346	52	23
South Australia . . .	57	16	73	6,588	642	93	43
Western Australia . . .	41	10	51	6,882	440	99	44
Tasmania . . .	7	3	10	385	50	7	3
Australian Capital Terri- tory . . .	1	1	1	100	12	1	1
Australia . . .	319	129	448	35,158	3,765	477	224

(a) At 30 June 1967.

The production of honey and bees-wax fluctuates considerably and is determined mainly by the flow of nectar from flora, particularly the eucalypts, which varies greatly from year to year.

HONEY AND BEES-WAX PRODUCTION: STATES AND A.C.T., 1936-37 TO 1966-67  
(<sup>0</sup>000 lb)

Period	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	A.C.T.	Aust.
HONEY								
Average for three years ended—								
1938-39 . . .	3,005	3,107	700	2,874	1,299	200	3	11,188
1948-49 . . .	14,934	8,232	2,185	8,292	2,831	206	34	36,714
1958-59 . . .	12,853	7,239	2,071	5,924	6,548	398	44	35,077
Year—								
1962-63 . . .	14,087	4,818	2,941	4,147	6,099	547	40	32,679
1963-64 . . .	15,135	9,460	2,053	9,722	8,510	632	135	45,647
1964-65 . . .	13,701	9,180	3,794	6,527	8,066	715	97	42,080
1965-66 . . .	7,343	9,608	1,472	9,929	10,923	630	80	39,985
1966-67 . . .	10,580	7,160	3,461	6,588	6,882	385	100	35,158
BEES-WAX								
Average for three years ended—								
1938-39 . . .	49	39	11	38	23	2	..	162
1948-49 . . .	174	86	36	110	34	3	..	443
1958-59 . . .	163	81	31	94	81	5	..	455
Year—								
1962-63 . . .	177	64	44	56	79	6	..	426
1963-64 . . .	194	110	32	134	103	6	2	581
1964-65 . . .	185	105	52	90	106	10	1	549
1965-66 . . .	95	115	25	136	138	8	1	519
1966-67 . . .	137	88	52	93	99	7	1	477

## Honey levy

A levy is imposed on domestic sales of honey for the purpose of financing the operations of the Australian Honey Board. The current rate of levy, which became effective on 14 February 1966, is four-tenths of a cent per lb, but under the provisions of the *Honey Levy Act* 1962-66, it can be increased by regulation to a maximum of one cent per lb. The proceeds of this levy may be expended on the regulation of Australian exports of honey and on associated promotional and research activities. In 1964-65, 1965-66 and 1966-67 collections amounted to \$104,000, \$101,000 and \$92,000 respectively.

**Overseas trade in bee products**

The principal importer of Australian honey in 1966-67 was the United Kingdom, importing 10,358,000 lb, valued at \$1,060,000.

Bees-wax was exported mainly to the United Kingdom and the Federal Republic of Germany in 1966-67.

**EXPORTS OF HONEY AND BEES-WAX: AUSTRALIA, 1964-65 TO 1966-67**

	Quantity ('000 lb)			Value (\$'000 f.o.b.)		
	1964-65	1965-66	1966-67	1964-65	1965-66	1966-67
Honey . . . . .	13,710	16,234	13,050	1,431	1,646	1,518
Bees-wax . . . . .	258	238	598	111	104	299

**Value of dairy, poultry and bee production, and indexes of price and quantum of production****Value of dairy, poultry and bee production**

Values of dairy, poultry and bee-farming production for 1966-67 and earlier years are shown in the following tables. Further information on values, including definitions of the terms used, is given in the chapter Miscellaneous.

**GROSS VALUE OF DAIRY, POULTRY AND BEE PRODUCTION: AUSTRALIA  
1962-63 TO 1966-67  
(\$'000)**

	1962-63	1963-64	1964-65	1965-66	1966-67
<b>DAIRYING</b>					
Whole milk used for—					
Butter(a) . . . . .	147,076	152,750	157,989	154,862	165,635
Cheese(a) . . . . .	25,116	27,456	30,119	25,603	33,345
Preserved milk products . . . . .	19,088	21,132	23,806	24,197	25,355
Other purposes . . . . .	132,010	138,522	145,310	149,589	148,955
Subsidy paid on whole milk for—					
Butter . . . . .	24,500	24,500	24,500	24,500	24,500
Cheese . . . . .	2,500	2,500	2,500	2,500	2,500
Total, whole milk (including subsidy) . . . . .	350,290	366,860	384,224	381,250	400,289
Pigs slaughtered . . . . .	62,606	65,998	75,408	77,284	83,961
Dairy cattle slaughtered . . . . .	26,482	30,664	45,624	49,438	39,563
Total, dairying . . . . .	439,378	463,522	505,256	507,973	523,814
<b>POULTRY</b>					
Total, poultry . . . . .	123,630	138,182	137,425	154,603	174,451
<b>BEE-FARMING</b>					
Honey . . . . .	3,296	5,778	4,866	4,103	3,765
Bees-wax . . . . .	184	250	253	224	224
Total, bee-farming . . . . .	3,480	6,028	5,119	(b)4,323	(b)3,992

(a) Excludes Commonwealth subsidy which is shown separately.

(b) Discrepancy in addition due to rounding.

**GROSS, LOCAL AND NET VALUE OF DAIRY, POULTRY AND BEE PRODUCTION  
STATES AND TERRITORIES, 1966-67**  
(\\$'000)

<i>State or Territory</i>	<i>Gross production valued at principal markets</i>	<i>Marketing costs</i>	<i>Local value of production</i>	<i>Value of materials used in process of production</i>	<i>Net value of production (a)</i>
New South Wales . . . . .	226,249	21,554	204,695	(b)61,643	143,052
Victoria . . . . .	264,296	14,704	249,593	70,677	178,916
Queensland . . . . .	94,028	7,233	86,795	30,153	56,642
South Australia . . . . .	51,549	2,684	48,864	20,374	28,489
Western Australia . . . . .	33,022	1,648	31,374	16,072	15,303
Tasmania . . . . .	31,902	1,439	30,464	8,500	21,964
Northern Territory . . . . .	315	2	313	n.a.	313
Australian Capital Territory . . . . .	896	71	825	254	571
<b>Australia . . . . .</b>	<b>702,257</b>	<b>49,335</b>	<b>652,923</b>	<b>207,673</b>	<b>445,250</b>

(a) No deduction has been made for depreciation and maintenance. (b) No allowance has been made for costs of power, power kerosene, petrol and other oils.

**NET VALUE OF DAIRY, POULTRY AND BEE PRODUCTION(a)  
STATES AND TERRITORIES, 1962-63 TO 1966-67**

<i>Year</i>	<i>N.S.W.(b)</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>Aust.(c)</i>
<b>NET VALUE (\$'000)</b>							
1962-63 . . . . .	124,912	135,426	52,932	21,498	11,332	16,334	363,184
1963-64 . . . . .	131,838	152,640	57,018	23,604	12,714	18,116	396,870
1964-65 . . . . .	135,235	161,371	55,550	27,080	14,709	20,760	415,771
1965-66 . . . . .	132,732	164,782	53,413	27,556	16,926	19,741	416,003
1966-67 . . . . .	143,052	178,916	56,642	28,489	15,303	21,964	445,250

**NET VALUE PER HEAD OF POPULATION (\$)**

1962-63 . . . . .	31.07	44.96	33.86	21.53	14.58	45.60	33.48
1963-64 . . . . .	32.32	49.67	35.75	23.06	15.92	49.94	35.89
1964-65 . . . . .	32.65	51.45	34.14	25.74	18.00	56.66	36.86
1965-66 . . . . .	31.53	51.59	32.18	25.47	20.22	53.41	36.17
1966-67 . . . . .	33.48	55.05	33.55	25.81	17.75	58.74	38.03

(a) No deduction has been made for depreciation and maintenance. (b) No deduction has been made for costs of power, power kerosene, petrol and other oils. (c) Includes Northern Territory and Australian Capital Territory.



**Indexes of quantum and price of dairy, poultry and bee production**

For details of the methods of calculating these indexes and of the weights used *see* the chapter Miscellaneous.

**INDEXES OF QUANTUM(a) AND PRICE OF DAIRY, POULTRY AND BEE  
PRODUCTION: AUSTRALIA, 1962-63 TO 1966-67**

*(Base: Average 3 years ended June 1939 = 100)*

	1962-63	1963-64	1964-65	1965-66	1966-67
<hr/>					
Quantum(a) of production—					
Milk . . . . .	129	131	132	133	140
Other products . . . . .	130	133	143	147	156
<i>Total, dairy, poultry and bee</i> . . . . .	<i>129</i>	<i>131</i>	<i>136</i>	<i>138</i>	<i>145</i>
Per head of population . . . . .	82	81	83	82	85
Price—					
Milk . . . . .	380	382	403	395	388
Other products . . . . .	410	452	472	491	493
<i>Total, dairy, poultry and bee</i> . . . . .	<i>388</i>	<i>402</i>	<i>423</i>	<i>422</i>	<i>418</i>

(a) Indexes of value at constant prices, i.e. quantities revalued at average unit values of base years 1936-37 to 1938-39.

## CHAPTER 22

# WATER CONSERVATION AND IRRIGATION

## RESOURCES, UTILISATION AND NATIONAL AND INTERSTATE ASPECTS

Official Year Book No. 51, pages 228–31, contains a description of recent developments in the measurement of Australia's water resources. For information concerning general, descriptive and historical matter *see also* Year Book No. 37, pages 1096–1141.

For further details on geographical and climatic features determining the Australian water pattern, *see the chapter* Physical Geography and Climate; on water supply and sewerage in metropolitan areas, cities and towns, the chapter Local Government; and on the generation of hydro-electric power, the chapter Electric Power Generation and Distribution, of this issue.

A series of maps showing the location of major dams and reservoirs and the various irrigation schemes operating in each of the States may be found on pages 259–65 of Year Book No. 46, and a map showing the extent of known artesian basins throughout Australia is shown on page 273 of Year Book No. 48.

### Water resources and their utilisation

#### Surface supplies

An assessment of Australia's surface water resources has been made, based on measured and estimated stream flows within 197 river basins, as follows. The total average annual discharge of Australian rivers has been assessed at 280 million acre feet. This can be divided into 108 million acre feet measured discharge and 172 million acre feet estimated for areas where there are generally no gauging records. For the whole area of Australia (approximately 3 million square miles) only 1.9 million square miles are regarded as contributing to stream flow (i.e. there is practically no flow from Western Plateau drainage division and from arid parts of other divisions).

The flow of Australian rivers is small in comparison with the flow of rivers in other continents, some examples of which, expressed as mean annual discharges in millions of acre feet, are: Amazon, 2,950; Mississippi, 465; Mekong, 405; Niger, 308; Volga, 205; and the ten major rivers of the United States of America in the aggregate, 900.

#### Major dams and reservoirs

The table below lists existing major dams and reservoirs, together with those under construction and those projected, at June 1967. The list is confined to dams and reservoirs with a capacity of 100,000 acre feet or more. There are many others of smaller capacity in Australia.

MAJOR DAMS AND RESERVOIRS IN AUSTRALIA

Name	Location	Capacity (acre feet)	Height of wall (feet)	Remarks
EXISTING DAMS AND RESERVOIRS				
Eucumbene	Eucumbene River, New South Wales	3,890,000	381	Part of Snowy Mountains Hydro-electric Scheme
Eildon	Upper Goulburn River, Victoria	2,750,000	260	Storage for irrigation and for the generation of electricity
Hume	Murray River, near Albury, New South Wales	2,480,000	142	Part of Murray River Scheme—storage for domestic stock and irrigation purposes. Hydro-electric power also developed
Menindee Lakes Storage	Darling River, near Menindee, New South Wales	2,000,000	..	Part of Darling River Water Conservation Scheme
Miena	Great Lake, Tasmania	1,710,000	60	Storage for Poatina hydro-electric power station
Warragamba	Warragamba River, New South Wales	1,670,000	379	For Sydney water supply. Also provides for generation of hydro-electricity and flood mitigation

## MAJOR DAMS AND RESERVOIRS IN AUSTRALIA—continued

Name	Location	Capacity (acre feet)	Height of wall (feet)	Remarks
EXISTING DAMS AND RESERVOIRS—continued				
Burrundong . . .	Macquarie River, near Wellington, New South Wales	1,361,000	250	Storage for rural water supplies
Burrinjuck . . .	Murrumbidgee River, New South Wales	837,000	264	Storage for irrigation and production of hydro-electric power
Somerset . . .	Stanley River, Queensland	735,000	173	Brisbane-Ipswich water supply, flood mitigation and small hydro-electric power station
Jindabyne . . .	Snowy River, New South Wales	558,000	235	Part of Snowy Mountains Hydro-electric Scheme
Lake Victoria . . .	Murray River, near South Australian border, in New South Wales	551,700	..	Natural off-river storage for irrigation in South Australia. Storage improved by construction of embankments and control regulators
Lake Echo . . .	Lake Echo, Tasmania . .	442,000	60	Storage for Lake Echo, Tungatinah, Liapootah, Wayatinah and Catagunya hydro-electric power stations
Clark . . .	Derwent River, Tasmania .	434,000	220	Storage for Tarraleah, Liapootah, Wayatinah, and Catagunya hydro-electric power stations
Arthur Lakes . . .	Source of Lake River, near Great Lake, Tasmania	410,000	50	Part of Great Lake hydro-electric power development
Keepit . . .	Namoi River, near Gunnedah, New South Wales	345,000	177	For rural water supplies and hydro-electricity generation
Waranga . . .	Goulburn River, Victoria .	333,400	45	Irrigation storage
Tinaroo Falls . . .	Barron River, North Queensland	330,000	136	For irrigation purposes in the Mareeba-Dimbulah area
Glenbawn . . .	Hunter River, near Scone, New South Wales	293,000	251	Part of Hunter Valley conservation work, for irrigation and flood mitigation
Rocklands . . .	Glenelg River, Victoria .	272,000	93	Part of Wimmera-Mallee domestic and stock water supply system
Eppalock . . .	Campaspe River, near Heathcote, Victoria	252,860	150	To supplement supply to Bendigo and for irrigation
Wyangala . . .	Lachlan River, New South Wales	(a)245,000	200	Storage for domestic, stock and irrigation purposes and for generation of hydro-electric power. (See also under Dams and Reservoirs under Construction)
Tantangara . . .	Murrumbidgee River, New South Wales	206,000	148	Part of Snowy Mountains Hydro-electric Scheme
Avon . . .	Avon River, New South Wales	(a)163,390	232	Part of Sydney water supply
Upper Yarra . . .	Yarra River, Victoria . .	162,000	270	For Melbourne water supply
Glenmaggie . . .	Gippsland, Victoria . .	154,300	121	Storage for irrigation
Lake St Clair . . .	Central Highlands, Tasmania	154,200	..	Improved natural storage for Tarraleah hydro-electric power station
Wellington . . .	Collie River, Western Australia	150,100	112	For supply of water to irrigation districts and to agricultural areas and country towns
Grahamstown . . .	Grahamstown River, near Newcastle, New South Wales	147,000	35	To supplement supply to Newcastle and district
Koombooloomba . . .	Tully River, North Queensland	146,000	123	For hydro-electric and irrigation purposes
Serpentine . . .	Serpentine River, Western Australia	144,000	171	For Perth water supply
Lake Brewster . . .	Lachlan River, near Hillston, New South Wales	123,900	..	Storage of rural water supplies for the lower Lachlan
Cairn Curran . . .	Loddon River, Victoria .	120,600	144	Storage for irrigation
Rowallan . . .	Mersey River, North Tasmania	110,000	140	Storage for Mersey Forth power development
DAMS AND RESERVOIRS UNDER CONSTRUCTION				
Blowering . . .	Tumut River, New South Wales	1,320,000	368	For regulation of discharges from stations of Snowy Mountains Hydro-electric Scheme, primarily for irrigation but also for hydro-electric power generation
Wyangala . . .	Lachlan River, New South Wales	1,000,000	270	Strengthening and enlarging of existing dam for increased water supply and hydro-electric power generation. (See also under Existing Dams and Reservoirs)
Wuruma . . .	Nogoa River, Central Queensland	157,000	120	For irrigation storage
Eungella . . .	Broken River, North Queensland	104,000	150	Provision of cooling water for Collinsville power station and for irrigation purposes

(a) Temporary reduced level.

MAJOR DAMS AND RESERVOIRS IN AUSTRALIA—*continued*

<i>Name</i>	<i>Location</i>	<i>Capacity (acre feet)</i>	<i>Height of wall (feet)</i>	<i>Remarks</i>
<b>DAMS AND RESERVOIRS PROJECTED</b>				
Gordon . . .	Gordon River, South-west Tasmania	9,600,000	450	Storage for Gordon River power development
Chowilla . . .	Murray River, in South Australia, near Victorian border	(a) 5,000,000	41	Regulation of the lower Murray River
Ord River (main)	Near Wyndham, Western Australia	4,600,000	220	For irrigation, generation of hydro-electric power and flood mitigation. (additional 6,000,000 acre feet flood control proposed)
Maraboon . . .	Nogoa River, Central Queensland	1,170,000	148	For irrigation and probable thermal power station
Copeton . . .	Gwydir River, New South Wales	1,100,000	373	For irrigation storage
Buffalo (second stage)	Buffalo River, near Myrtleford, Victoria	800,000	260	For irrigation
Talbingo . . .	Tumut River, New South Wales	747,000	530	Part of Snowy Mountains Hydro-electric Scheme
Warkworth . . .	Wollombi Brook, Hunter Valley, New South Wales	406,000	130	Flood mitigation and irrigation dam for Hunter Valley
Serpentine . . .	Serpentine River, south-west Tasmania	307,200	135	Storage for Gordon River power development
Scotts Peak . . .	Huon River, south-west Tasmania		160	
Mokoan . . .	Winton Swamp, near Benalla, Victoria	300,000	35	To store flood flows in Broken River for irrigation
Cardinia Creek . . .	Near Emerald, Victoria	220,000	260	For off river storage for Melbourne water supply
North Pine . . .	North Pine River, near Petrie, Queensland	164,000	125	To supplement supply to northern Brisbane area

(a) Subject to final survey.

**Irrigation**

For some brief remarks on the history of irrigation in Australia see issues of the Year Book prior to No. 39. Trends in irrigation practice in more recent years were described in Year Book No. 37, page 1099.

**AREA OF LAND IRRIGATED, STATES AND TERRITORIES, 1962-63 TO 1966-67**  
(Acres)

<i>Season and crop</i>	<i>N.S.W. (a)</i>	<i>Vic. (b)</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
1966-67—									
Cotton . . .	22,218	..	7,997	..	11,892	..	..	..	42,107
Hops . . .	..	(c)	..	..	(d)	1,495	..	..	(e) 1,495
Orchards . . .	35,562	46,594	(f) 9,040	32,122	11,704	8,287	87	7	143,403
Rice . . .	73,639	..	..	..	(d)	..	(g)	..	(e) 73,639
Sugar-cane . . .	(c)	..	142,620	..	..	..	..	..	(e) 142,620
Tobacco . . .	n.a.	n.a.	11,781	..	..	..	..	..	(e) 11,781
Vegetables . . .	16,639	26,617	39,198	12,341	9,770	12,979	178	117	117,839
Vineyards . . .	17,935	47,418	(h)	28,268	795	..	..	..	(e) 94,416
Other crops (including fodder and fallow land)	455,872	128,543	88,508	23,720	4,676	6,353	437	571	708,680
Total, crops . . .	621,865	249,172	299,144	96,451	38,837	29,114	702	695	1,335,980
Pastures . . .	818,916	1,064,716	44,908	42,306	31,790	18,111	188	459	2,021,394
Total, 1966-67 . . .	1,440,781	1,313,888	344,052	138,757	70,627	47,225	890	1,154	3,357,374
1965-66 . . .	1,308,439	1,262,661	332,534	128,835	67,407	45,196	771	1,125	3,146,968
1964-65 . . .	1,198,404	1,189,055	281,173	123,139	63,035	34,322	587	1,120	2,890,835
1963-64 . . .	1,060,479	1,137,241	252,082	117,870	55,194	33,570	973	1,081	2,658,490
1962-63 . . .	1,036,846	1,151,555	221,161	112,813	51,501	24,285	434	1,247	2,599,842

(a) Source: Water Conservation and Irrigation Commission. (b) Source: State Rivers and Water Supply Commission. (c) Not available separately; included in Other crops. (d) Not available for publication; included in Other crops. (e) Incomplete, see individual States. (f) Includes vineyards. (g) Not available for publication; excluded from totals. (h) Included with Orchards.

### **Irrigation research**

Comprehensive programmes of research and investigation are being pursued by State water and agricultural authorities and the Commonwealth Scientific and Industrial Research Organization, often in collaboration. Special attention is being given to the following: high water tables due to the application of water; surface accumulation of salt and other soil changes associated with irrigation; methods of applying water efficiently; soil treatments to improve the physical condition of irrigated heavy clay soils; the utilisation of irrigated pastures by stock; growth problems affecting plants and trees; the prevention of evaporation from water storages; the potability of saline waters for stock; the de-salting of brackish waters; and cloud-seeding over catchments.

Irrigation is studied by the Commonwealth Scientific and Industrial Research Organization at a number of its research stations and laboratories, the principal one being the Division of Irrigation Research at Griffith (New South Wales), where investigations are concerned with limiting the degradation of land by irrigation, improving the quality and range of irrigated crops, and assessing the amount of water required by irrigated crops and the most economical means of applying it. The crops being studied include citrus, cotton, wine grapes and lucerne. The Organization's Division of Plant Industry studies irrigated pastures at Deniliquin (New South Wales) and Canberra (Australian Capital Territory), and tobacco at Mareeba (Queensland). At Adelaide (South Australia) and Merbein (Victoria) the Division of Horticultural Research is working on problems of the dried-fruit industry. The Division of Land Research conducts research on rice at the Coastal Plains Research Station, Darwin (Northern Territory), and on a number of irrigated crops, including rice, safflower, linseed, and cotton, at the Kimberley Research Station (Western Australia). The Division has also carried out a number of hydrological investigations in connection with the utilisation of underground water for irrigation. The Division of Soils and the Division of Soil Mechanics are studying methods of reducing seepage from earthen dams, and take part in the examination of the physical properties of sediments beneath proposed dam sites. The Division of Soils is also looking at underground water movement and the water balance in the south-east of South Australia, and at the drainage and soil moisture regime of the irrigated swamps of the lower Murray River. The Division of Applied Chemistry is investigating methods of minimising evaporation losses from water storages by the use of monomolecular layers.

The Irrigation Research and Extension Committee plays an important part in the agricultural activity of the Murrumbidgee and Coleambally Irrigation Areas. It is representative of the New South Wales Department of Agriculture, the Commonwealth Scientific and Industrial Research Organization, the Rural Bank of New South Wales, the Soil Conservation Service of New South Wales, the Water Conservation and Irrigation Commission, the Rice Marketing Board of New South Wales, and secondary industries' and farmers' organisations. Finance is provided by these authorities on an agreed basis. The objectives are: to enable the agricultural extension services to the farmers in the defined sub-region to be continued and developed; to provide a system for advising on local agricultural policy and organisation; to provide means for farmer opinion to have due weight in the consideration of regional agricultural administration and policy; to achieve a unified approach to sub-regional extension in all branches of agriculture; to advise on the research needs of the sub-region and to co-ordinate the agricultural research of the various rural institutions working therein; to achieve close liaison between research and extension; and to conduct research in extension methods.

Two other organisations with similar objectives are the Victorian Irrigation Research and Promotion Organisation which operates from Shepparton, and the Murray Research and Extension Committee centred at Deniliquin.

### **Preservation of catchments**

Since water conservation commences on the catchments it is becoming increasingly recognised that anything which interferes with catchment efficiency affects the quantity of water available for all purposes. Active steps are being taken to counteract soil erosion, to conserve soil generally, and to minimise the effects of floods, overstocking, bush fires, and the destruction of vegetative cover. All States and the Commonwealth have initiated forestry policies which provide for reforestation and the preservation of catchments. In recent years efforts to counteract soil erosion have been intensified, and there is some evidence of a more unified approach to catchment, water, forestry, and land use factors regarded as parts of a single problem.

### **Sub-surface supplies**

Much of Australia's underground water is obtained from artesian and sub-artesian basins and is used for stock purposes and domestic use. These supplies are indispensable in the dry areas which comprise most of the inland and extensive coastal areas as well. The quality of water ranges from

usable to very saline. The wide availability of saline waters or the proximity of the sea means that with modern desalination plants, several of which have already been installed, development opportunities are not necessarily impeded by lack of fresh water.

Considerable use is also made of sub-surface water, other than pressure water, from local storages, particularly in the well-settled areas. The water is used mainly for domestic and stock purposes. Compared with other countries with similar rainfall and climate, underground water is not used extensively for town and individual industrial supplies, but its use for these purposes is increasing.

*Artesian and sub-artesian supplies.* Pressure water (either artesian or sub-artesian), variable in quantity and quality, is obtainable in many parts of Australia, the various artesian basins extending over about half the continent. A map of Australia showing the extent of the known artesian basins appears on page 273 of Year Book No. 48.

The Great Artesian Basin, the most extensive in the world, underlies an area of approximately 676,250 square miles, comprising about 421,000 in Queensland, 135,000 in South Australia, 81,250 in New South Wales and 39,000 in the Northern Territory. A table setting out the principal defined water-bearing basins in Australia appears on page 1001 of Year Book No. 53.

More than 18,000 artesian bores have been drilled within the Great Artesian Basin, while the daily free discharge from all bores continuing to flow in Australia has been stated as exceeding 350 million gallons, of which the loss by evaporation and seepage has been estimated at more than 90 per cent. Sub-artesian bores and wells throughout Australia number more than 200,000.

Artesian water generally is good stock water, but most is unsuitable for plant life; in certain areas sub-artesian waters are suitable for all uses including irrigation. In the Eucla Basin and parts of the Murray and Pirie-Torrens Basins the water is of poor quality, being barely suitable for stock.

In common with other countries possessing artesian supplies, Australia has been faced with the problem of flow diminution. It was recognised early that flows were diminishing as more bores were drilled, but it is now considered that while many of these bores will ultimately cease to flow, others will assume a perpetually steady rate of flow, corresponding with the average intake of water from rainfall absorbed by permeable outcrops, mainly sandstone and limestone. Diminution in flows from artesian bores has emphasised the need to eliminate wastage as much as possible. Licences now issued for the construction of new artesian bores prohibit the distribution of water through drains, channels, etc., and the supplies must be confined to the borehead or piped to appropriate watering points.

*Shallow groundwater.* Shallow groundwater supplies are used in various parts of Australia for industry, irrigation, stock, and domestic purposes. Two examples of the use of these shallow supplies for industrial and domestic purposes occur in New South Wales. The Hunter District Water Board pumps 15 million gallons a day for general use from the Tomago coastal sands near Newcastle, and at Botany, Sydney, private industry pumps 8-10 million gallons a day for its own use from similar sands. Exploration of the coastal sands north of the Tomago Sands has revealed a further potential production of 25 million gallons a day. Examples of the use of shallow groundwater supplies for irrigation include the Burdekin Delta and the Bundaberg area in Queensland. In the Burdekin Delta, which covers an area of some 200 square miles, the present extraction for irrigation from underground sources is in the region of 200,000 acre feet per annum (about 150 million gallons a day) and in the Bundaberg area it is approximately 50,000 acre feet per annum (about 37 million gallons a day).

Schemes for artificial recharge of underground supplies have been implemented on both sides of the Burdekin River delta. Diversions from unregulated river flows of 61,000 acre feet per annum to the north side and of 40,200 acre feet per annum (when available) to the south side have been authorised.

In recent years there has been a marked increase, particularly in Queensland, New South Wales and Victoria, in investigation into the groundwater resources of river and coastal alluvium for irrigation and town water supplies.

### National and interstate aspects

As the Commonwealth Constitution makes special reference to water rights, both the Commonwealth and the State Governments have an interest in the control and conservation of water. The main responsibility for control of water resources rests with the individual State Governments, but as political boundaries sometimes intersect river valleys and catchments, co-operation between Governments has been necessary to develop resources in certain cases. Specific examples of Commonwealth-State and interstate co-operation and approach are given in the following paragraphs.

### Australian Water Resources Council

The Australian Water Resources Council was established by joint action of the Commonwealth and State Governments in 1962. The council comprises Commonwealth and State Ministers primarily responsible for water resources, with the Commonwealth Minister for National Development as Chairman, and is serviced by a Standing Committee consisting mainly of the heads of Departments responsible to these Ministers, and by a number of technical committees.

The primary objective of the Council is the provision of a comprehensive assessment on a continuing basis of Australia's water resources, and the extension of measurement and research so as to provide a sound basis for the planning of future development.

In terms of its main objective, the Council in 1964 recommended, and the Commonwealth and State Governments agreed, that there should be an accelerated programme of establishment of stream gauging stations and investigation of underground water. The Commonwealth Government agreed to contribute a total of up to \$2,750,000 for the first three years of what was envisaged as a ten-year programme. The Commonwealth contribution for the current three-year period, which began in 1967-68, will be up to \$4,500,000. In the first three years the States spent about \$8,000,000 from their own financial resources, and expenditure in excess of this amount is expected in the current three years.

The Council has also given attention to the collation of available data on Australia's water resources, and in 1965 a *Review of Australia's Water Resources (Stream Flow and Underground Resources)* 1963 was published. This document was the first official assessment of surface and underground water resources. In 1967 a catalogue *Stream Gauging Information, Australia, June 1965* was published on behalf of the Council by the Department of National Development. Water authorities have also agreed to publish stream flow records at five-yearly intervals. The Council continues to support Australian participation in the programme of the International Hydrological Decade (1965-1974). An important contribution will follow from the decision of the Council to select one hundred representative basins throughout Australia for detailed hydrological studies.

Studies of the requirements and facilities for education in the water resources field have been undertaken by the Council. Research studies in progress on a number of topics requiring urgent attention are being published in a new Australian Water Resources Council Hydrological Series, the first volume of which is *A Survey of Water Desalination Methods and their Relevance to Australia*, published in 1966.

The Council is not concerned with particular works projects, normally the responsibility of the States or the Commonwealth, for which there are established channels, such as the Premiers' Conference and Loan Council, for the exchange of views and allocation of funds.

### National Water Resources Development Programme

In developing water resources, the Commonwealth Government's role in the past, while important, had been confined to assisting special projects or areas, e.g. the Snowy Mountains Scheme, participation in the River Murray Commission, and financial support for individual State projects such as the Ord River project. However, the National Water Resources Development Programme, announced in November 1966, represents a very important move towards closer collaboration between State and Commonwealth Governments, and a more continuing and detailed involvement by the Commonwealth in the development of Australia's water resources.

Under the National Water Resources Development Programme the Commonwealth has undertaken to provide grants to the States amounting to a total of about \$50,000,000 over the next five years for water conservation works aimed at reducing the hazards of droughts and expanding primary production. The first two grants under this Programme were announced late in 1967. For the Emerald irrigation project in central Queensland, the Queensland Government is to receive a non-repayable grant of up to \$20,000,000 for the construction of the dam, with the State financing the irrigation, drainage, and associated works. Two Victorian schemes to reduce salinity levels in the Murray River, for which grants totalling \$3,600,000 will be provided, were approved as a matter of urgency so that the works can be constructed in time for the 1968-69 irrigation season.

Proposals submitted by the States are examined by the Commonwealth to determine which are suitable, from a national point of view, for inclusion in the Programme, and accordingly grants will be announced from time to time.

### Murray River scheme

The Murray River and its tributaries form the largest river system in Australia. The catchment is approximately 408,000 square miles, or one-seventh of the area of the Australian continent, comprising five-sixths of New South Wales, over one-half of Victoria, one-sixth of Queensland and a small part of South Australia. The Murray proper is 1,600 miles long. Its main tributaries are the

Darling (1,700 miles), the Murrumbidgee (980 miles), and the Goulburn (350 miles). The average annual flow of each of the chief contributory streams is as follows: Upper Murray, including the Mitta Mitta and Kiewa Rivers, 3,820,000 acre feet; Darling River, 2,820,000 acre feet; Goulburn River (including Broken River), 2,580,000 acre feet; Murrumbidgee River, 2,050,000 acre feet; and Ovens River, 1,266,000 acre feet. Irrigated production in the Murray River Basin is mainly grapes for wine, dried fruits, fresh fruits, rice, vegetables, dairy produce, wool, and fat lambs.

*River Murray Waters Agreement.* For a brief summary of historical events leading up to the River Murray Agreement (1915) by the Governments of the Commonwealth, New South Wales, Victoria, and South Australia see issues of the Year Book prior to No. 39. Under the Agreement construction works are carried out by the States (which are also responsible for maintenance) subject to the approval and direction of the River Murray Commission. The Agreement provides that the minimum quantity of water to be allowed to pass for supply to South Australia in each year shall be sufficient to maintain certain specified flows in the lower river varying from 47,000 acre feet a month in the winter months to 134,000 acre feet a month in the four summer months of maximum demand—the total amounting to 1,254,000 acre feet over twelve months. The flow at Albury is shared equally by New South Wales and Victoria, and each of these States has full control of its tributaries below Albury, subject in each case to the fulfilment of the South Australian allocation. For a brief outline of the operation of the Agreement prior to 1949 see Year Book No. 40, page 1065, and earlier issues.

At a conference of Ministers held in 1949 to consider the diversion of the Snowy River it was decided that, by diversion of streams in the Snowy Mountains area, an average of approximately 440,000 acre feet per annum would be added to the Murray River (see Snowy Mountains Hydro-electric Scheme, page 967) and that increased storage should be provided in order to give additional regulation of the Murray River itself as well as to provide for regulation of the diverted waters. Hydro-electric potentialities would also affect the size of the storage.

The River Murray Commission investigated the position and subsequently recommended to the contracting Governments that the River Murray Waters Agreement be amended to provide for enlargement of the Hume Reservoir by 500,000 acre feet to approximately 2,500,000 acre feet. A conference of Ministers in 1954 agreed to the enlargement, and it was also agreed that the Commission should be given power to construct regulators and to carry out such other work on the Murray River between Tocumwal and Echuca as it considered necessary to reduce the losses from the regulated flow in that stretch of the river. The amended Agreement was ratified in the Parliaments of the Commonwealth and the three States and was proclaimed on 7 April 1955. In view of the proposed diversions by the Snowy Mountains Authority to and from the Murray River, and for other reasons, amendments to those sections of the River Murray Waters Agreement dealing with the distribution of the waters of the Murray were considered desirable. Following ministerial conferences, amendments were ratified by the four Parliaments concerned, and came into force on 6 November 1958.

Further amendment of the Agreement to provide for the construction of a storage of approximately 5,000,000 acre feet capacity at Chowilla in South Australia was ratified by legislation in the Commonwealth and State Parliaments and came into force on 30 April 1964.

As a temporary measure, to assist in drought mitigation pending development of this project, it has been agreed that portion of the waters in the Menindee Lakes storage will be made available to the Commission for allocation between the States of New South Wales, Victoria and South Australia. The arrangement, to operate for a period of seven years from 1 January 1963, was approved by the *Menindee Lakes Storage Agreement Act 1963*.

The quantity (in acre feet) of water diverted during 1966–67 from the Murray and its tributaries for irrigation and other purposes was as follows: New South Wales, 3,782,000; Victoria, 3,154,000; South Australia, 384,000; a total of 7,320,000 acre feet.

*River Murray Works.* One of the major works of the Murray River scheme is the Hume Reservoir, situated just below the junction of the Murray and Mitta Mitta Rivers, ten miles above Albury, forming a lake of 50,000 acres. The design comprises a mass concrete spillway and outlet works extending for 1,000 feet, and an earthen embankment 142 feet high extending for 4,000 feet across the river flats, the length of the total structure being approximately one mile. Work on the enlargement of the reservoir to its approved capacity of 2,480,000 acre feet was completed in 1961.

The Yarrawonga Diversion Weir, which was completed in 1939, raised the river level so that water could be diverted by gravitation into main channels constructed on either side of the river. Between the Yarrawonga Weir and the Murray mouth, thirteen weirs and locks have been built. Two flood diversion weirs have been constructed on the Murrumbidgee—one between Hay and the Lachlan junction and the other below the Lachlan junction.

The Mulwala Canal, supplied from the Yarrawonga Weir, has an off-take capacity of 2,500 cubic feet a second, servicing 1,800,000 acres of land in New South Wales. The Yarrawonga Channel, on



the Victorian side, has an off-take capacity of 1,250 cubic feet a second, serving 300,000 acres. Not all of this area is irrigated.

Adjoining the river in New South Wales, and 35 miles from the Murray-Darling junction, Lake Victoria storage, with a surface area of 27,670 acres, was completed in 1928. The water released from Lake Victoria is used by the South Australian settlements. The inlet channel to Lake Victoria was enlarged in 1957 to permit greater diversion of periodical flood flows of short duration.

Five barrages across channels near the Murray River mouth connecting Lake Alexandrina with the sea were completed in 1940 to prevent ingress of salt water to Lakes Alexandrina and Albert and to the lower river, thereby increasing the productivity of adjacent lands. The structures maintain a sufficiently high level for 50 miles up river to permit watering by gravitation of a considerable area of reclaimed river flats. The total distance across the barrages and intervening islands is 15 miles.

In addition to the works carried out under the auspices of the Commission, the separate States have constructed thousands of miles of distribution channels and have provided a number of storages on the tributaries, thereby contributing materially to the large amount of irrigation development in the Murray Basin. The main storages are: New South Wales—Menindee Lakes Storage (Darling), Burrinjuck (Murrumbidgee), Keepit (Namoi), Burrendong (Macquarie), and Wyangala (Lachlan); Victoria—Eildon (Goulburn), Waranga (Goulburn), Eppalock (Campaspe) and Cairn Curran (Loddon). Details of these and other State works on Murray tributaries will be found in the sections dealing with State systems. No storages exist on the Murray in South Australia at present, but the construction of a large storage at Chowilla is proposed (*see page 965*).

#### **New South Wales-Queensland Border Rivers Agreement**

The catchments for the border streams of New South Wales and Queensland (2,000 square miles) extend to the granite areas in the vicinity of Tenterfield (New South Wales) and Stanthorpe (Queensland), and elevation rises to 3,000 feet. Average rainfall is 30 inches. The catchments and the areas suitable for irrigation are approximately equal in each State. Climatic conditions are such that from April to October it is necessary to supplement rainfall by irrigation to stabilise and increase production. The capacity of the area to grow lucerne and tobacco under irrigation has already been demonstrated. Other possible development of the area includes irrigation of cotton, root crops, cereals, and citrus fruit, and expansion of the fat stock industry.

The New South Wales-Queensland Border Rivers Agreement came into effect on 1 July 1947. The Agreement provides for the construction of certain works on those sections of the Severn, Dumaresq, MacIntyre, and Barwon Rivers which constitute part of the boundary between New South Wales and Queensland for the furtherance of water conservation, water supply and irrigation in those States.

The works to be constructed comprise a dam on the Dumaresq River at a site to be selected by the Water Conservation and Irrigation Commission of New South Wales (the constructing authority) to give a storage basin with a capacity as large as is reasonably practicable and not less than six nor more than twelve weirs as may be found necessary to meet the requirements of irrigation along the rivers. Provision is also made for the construction of not more than four regulators in the effluents from the barrier rivers and for the taking over of the existing weir on the MacIntyre River at Goondiwindi and the existing weir on the Barwon River at Mungindi (the Irrigation and Water Supply Commission of Queensland is the constructing authority for new weirs and regulators). The cost of these works and of administration are to be borne by the States in equal shares. The Agreement further provides that the water discharge from the Dumaresq storage, whether by regulated or unregulated flow, shall be available to the two States in equal shares.

After unfavourable foundation conditions were disclosed at several dam sites on the Dumaresq River, investigations were extended to tributary streams, and superficially suitable sites located on Pike Creek and the Mole River. A geophysical survey was made at each of these sites and preliminary comparative estimates were prepared to determine the relative economy of providing one large storage at Mingoola or two smaller storages on the tributaries. Following exploratory drilling of the tributary sites, a report dealing with alternative storage proposals and possible amendments to the existing Agreement was submitted to the participating States. It was subsequently agreed by the State Governments that, at the appropriate time, the existing Agreement would be amended to include, *inter alia*, provision for the construction of storages on Pike Creek (Queensland) and the Mole River (New South Wales).

Completed works include Bonshaw and Cunningham Weirs on the Dumaresq River, a weir and regulator on the Barwon River at the offtake of the Boomi River, and a low level weir to establish a pumping pool at Glenarbon on the Dumaresq River. The existing Goondiwindi and Mungindi Weirs are being maintained, operated and controlled by the Queensland Irrigation and Water Supply Commission. Until a dam has been constructed it is unlikely that any other weirs will be required.

### Snowy Mountains Hydro-electric Scheme\*

Following a comprehensive investigation into both the water and power potential of the Snowy River waters by a Technical Committee representative of the Commonwealth and the States of New South Wales and Victoria in 1947 and 1948, and the submission by the Committee of reports in 1948 and 1949, the Commonwealth Parliament passed the *Snowy Mountains Hydro-electric Power Act* 1949 setting up an Authority to implement the proposals agreed upon.

The basis of the proposals was to impound the Snowy River waters at high elevations and, by diverting them into tunnels passing under the Alps, to use their potential power for the generation of electricity and then to discharge them into the Murray and Murrumbidgee River systems for use in the irrigation areas.

The scheme involves two main diversions, that of the Eucumbene, a tributary of the Snowy, to the Upper Tumut River, and that of the main stream of the Snowy River at Island Bend and Jindabyne to the Swampy Plain River. In addition, works required to make use of the waters of the Upper Murrumbidgee, the Upper Tumut, the Upper Tooma and the Geehi Rivers for power generation also provide additional regulation of these streams, and this makes more water available for irrigation. Details of the two trans-mountain diversions and the associated power works together with details of progress and construction are given in the chapter Electric Power Generation and Distribution.

An additional 500,000 acre feet of water per annum is now available for irrigation in the Murrumbidgee Valley. When all works are completed, it is estimated that the total gain to the Murrumbidgee by diversion and regulation will amount to 1,120,000 acre feet per annum and the total gain to the Murray will be 800,000 acre feet per annum. This additional water should be sufficient to provide irrigation for approximately 1,000 square miles of land, which is expected to result in a substantial increase in annual primary production.

### International aspects

Australia maintains contact with international developments in water conservation and irrigation through its membership, since 1952, of the International Commission on Irrigation and Drainage. This Commission was set up in India in 1950 in order that the technical experience of all countries might be pooled for the benefit of all, and to promote the development and application of the science and technique of irrigation and drainage in the engineering, economic and social aspects. The Commission is constituted of National Committees of participating countries, and fifty-nine countries, including Australia, have so far been admitted to membership.

The Central Office of the International Commission is situated in New Delhi, India. Congresses, which are held every three years, have taken place in India, Algeria, the United States of America, Spain and Japan, in that order. The sixth Congress was held in India in January 1966.

An Australian National Committee was established following a meeting of representatives of Australian authorities held in Melbourne in 1953. At that meeting it was decided, *inter alia*, 'that a National Committee should be formed and that the National Committee would consist of representatives of Government Departments, Statutory Authorities, firms, and individuals actively interested in irrigation and drainage'. The Committee meets annually.

### STATES AND TERRITORIES

The foregoing text deals with water conservation and irrigation in Australia generally and with international, national and interstate aspects. The following survey covers the local pattern of water resources and the steps taken by the State Governments to bring about their development. In the various States water policies tend to assume a distinctive and characteristic pattern closely allied with climatic conditions and specific local needs.

In Victoria almost every form of water scheme is in operation. In New South Wales major emphasis at present is on irrigation and stock development in the dry areas along the Murray and Murrumbidgee Rivers, though a substantial scheme of intensive irrigation is being conducted in the Murrumbidgee Irrigation Areas. In Queensland, up to the present, the predominant emphasis has fallen on water (mainly underground sources) for stock, and the development of small irrigation schemes in sub-humid and humid areas, especially to stabilise sugar production. Apart from regular irrigation practices along the Murray River, South Australian authorities are vitally concerned with reticulated supplies for rural areas and towns. Western Australia has developed unique rock catchments and piped supplies for agricultural areas and towns in dry districts. Tasmanian interest relates almost exclusively to hydro-electric generation. The Northern Territory is concerned primarily with stock supplies and the safeguarding of long stock routes.

\* See also the chapter Electric Power Generation and Distribution. For more detailed information see special article by the then Commissioner, Snowy Mountains Hydro-electric Authority (Sir William Hudson) which appeared in Chapter XXIX. Miscellaneous of Year Book No. 42.

### New South Wales

On page 1110 of Year Book No. 37 information is given on the pattern of rainfall and the history of irrigation in New South Wales. (*See also* the chapter Physical Geography and Climate of this issue.)

#### Administration

The Water Conservation and Irrigation Commission of New South Wales consists of three members appointed by the Governor. The operations of the Commission cover water conservation, control of irrigation areas, the establishment, operation and maintenance of works for domestic and stock water supply, irrigation districts, flood control districts, sub-soil drainage districts, constitution of water trusts, the issue of licences for private irrigation, artesian and shallow boring, assistance under the provisions of the farm water supplies scheme, and river improvement works.

Under the Water Act, 1912–1955 the right to the use and flow and the control of water in all rivers and lakes which flow through, or past, or are situated within, the land of two or more occupiers, is vested in the Commission for the benefit of the Crown. A system of licences operates for the protection of private works of water conservation, irrigation, water supply, drainage and prevention of inundation.

For particulars of the New South Wales–Queensland Border Rivers Agreement ratified by Acts of both States in 1947, *see* page 966 of this chapter.

#### Schemes summarised

The bulk of irrigated land is along the Murray and its tributary the Murrumbidgee. Smaller areas are served by the Wyangala Dam, Lake Cargelligo and Lake Brewster on the Lachlan (a tributary of the Murrumbidgee), by Glenbawn Dam on the Hunter River, by Keepit Dam on the Namoi River, by Burrendong Dam on the Macquarie River, and by the Menindee Lakes Storage on the Darling River. None of the other rivers is regulated by large head storages, though weirs and dams have been provided for town supplies, etc. in many places. A head storage on the Tumut River near Tumut is nearing completion. In addition, substantial use is made of artesian and sub-artesian water in pastoral areas.

New South Wales legislation provides for the constitution and control of various schemes having different characteristics and including irrigation areas, irrigation districts, water trust districts, flood control and irrigation districts, and river improvement districts. There are nine irrigation areas, although two of these, Yanco and Mirrool, are generally described under the one heading, namely, the Murrumbidgee Irrigation Areas. The Areas are: The Murrumbidgee Irrigation Areas, consisting of 451,263 acres served with water through a channel system stemming from the river at Berembid Weir; the Coomealla Irrigation Area of 34,626 acres, served by pumping from the Murray; the Curlwaa Irrigation Area of 10,393 acres, supplied from the Murray by pumping; the Hay Irrigation Area of 6,850 acres, supplied with water pumped from the Murrumbidgee; the Tullakool Irrigation Area of 18,006 acres, supplied from the Edward River by diversion at Stevens Weir; the Buronga (8,739 acres) and Mallee Cliffs (1,900 acres) Irrigation Areas, served by pumping from the Murray; and the Coleambally Irrigation Area (148,055 acres), served by diversion from the Murrumbidgee River. All these Areas are administered by the Commission, and details of the various schemes are given in the table on page 969.

The capacities of the main storages for irrigation in New South Wales (in acre feet) are:

*Darling*—Menindee Lakes Storages (2,000,000);

*Murray*—Half share of Hume Reservoir, weirs and locks to Wentworth (1,351,570); Stevens Weir, Edward River (7,165);

*Macquarie*—Burrendong Dam (964,000 irrigation storage; 397,000 flood mitigation storage);

*Murrumbidgee*—Burrinjuck Dam (837,000); Berembid Weir (10,000); Redbank Weir (7,360); Maude Weir (6,740);

*Namoi*—Keepit Dam (345,000);

*Lachlan*—Wyangala Dam (temporary reduced level 245,000); Lake Brewster (123,900); Lake Cargelligo (29,435); Jemalong Weir (2,200);

*Hunter*—Glenbawn Dam (185,000 acre feet irrigation storage; 108,000 acre feet flood mitigation storage); and

*Snowy Mountains Hydro-electric Scheme*—Lake Eucumbene (3,890,000); Blowering Dam (1,320,000); Jindabyne Reservoir (558,000); Tantangara Dam (206,000).

The total length of supply channels, drains, escape channels and pipe lines constructed by the Water Conservation and Irrigation Commission in New South Wales is 4,922 miles. This comprises 3,420 miles of supply channels (including main canals), 1,433 miles of drains and escape channels, and 69 miles of pipe lines.

## Extent of systems and nature of irrigated culture

The following table shows the areas of the various irrigation systems and the areas irrigated in 1966-67 and corresponding particulars for the State as a whole during the seasons 1962-63 to 1966-67.

AREAS OF SYSTEMS AND OF LAND IRRIGATED: NEW SOUTH WALES  
1962-63 TO 1966-67

(Source: Water Conservation and Irrigation Commission)

(Acres)

Season and system	Area irrigated(a)										Total
	Total area	Rice	Other cereals grown for grain	Fodder crops		Pastures	Vineyards	Orchards (b)	Vegetables	Fallow land and miscellaneous	
				Lucerne	Other						
1966-67—											
Irrigation Areas—											
Murrumbidgee (within the Areas)	451,263	34,251	55,189	6,285	2,966	151,164	6,994	20,628	3,701	45,212	326,390
Lands adjacent supplied under agreement	n.a.	..	..	97	368	1,280	..	104	1	292	2,142
Coomealla	34,626	..	..	3	..	..	5,047	1,847	..	..	6,897
Curlwaa	10,393	..	..	32	..	128	379	1,317	..	..	1,856
Hay	6,850	..	538	..	..	2,420	..	..	..	..	(c)2,958
Tullakool	18,006	1,168	470	140	300	8,478	..	..	..	280	10,836
Buronga	8,739	..	..	..	..	..	252	544	..	..	796
Mallee Cliffs	1,900	..	..	57	..	..	149	155	..	..	361
Coleambally	148,055	13,650	31,371	1,252	1,055	29,607	51	72	204	16,870	94,132
Total, Areas	(d)679,832	49,069	87,568	7,866	4,689	193,077	12,872	24,667	3,906	62,654	446,368
Irrigation Districts—											
Benerambah	112,818	6,319	13,595	1,457	1,697	36,867	..	..	213	12,328	72,476
Tabbitta	32,330	418	1,898	860	63	3,815	..	..	12	1,720	8,786
Wah Wah	579,132	..	6,489	2,183	849	10,950	..	..	..	6,458	26,929
Berrigoin	804,057	..	29,619	20,554	2,489	252,007	..	..	437	13,364	318,470
Wakool	503,322	8,812	7,675	1,834	3,225	83,246	..	..	12	2,856	107,660
Denimein	147,005	3,380	3,329	1,275	473	24,040	..	5	24	778	33,304
Jemalong and Wyldie's Plains	224,556	..	3,405	8,820	445	11,595	..	..	80	1,050	25,395
Gumly	353	..	35	39	..	28	..	20	37	..	159
Deniboota	338,054	5,641	5,912	3,192	1,632	48,046	..	..	12	4,828	69,263
Total, Districts	2,741,627	24,570	71,957	40,214	10,873	470,594	..	25	827	43,382	662,442
Flood control Districts—											
Lowbidgee	399,707	..	..	..	..	..	..	..	..	..	n.a.
Medgum	272,800	..	..	..	..	..	..	..	..	..	n.a.
Total, Flood Districts	672,507	..	..	..	..	..	..	..	..	..	n.a.
Irrigation Trusts—											
Pomona	1,580	..	..	..	..	..	760	130	..	..	890
Goodnight	1,104	..	..	..	..	..	619	43	..	..	662
Bungunyah—											
Koraleigh	1,810	..	..	..	..	..	920	113	160	..	1,193
Glenview	661	..	..	..	..	341	..	..	..	..	341
Brangan	4,933	..	..	..	..	..	..	..	..	..	n.a.
Bama	3,446	..	..	..	..	..	..	..	..	..	n.a.
West Cadell	5,827	..	..	..	..	..	..	..	..	..	n.a.
Total, Trusts	19,361	..	..	..	..	(d)341	(d)2,299	(d)286	(d)160	..	(d)3,086
Water Trusts—											
Domestic and stock supplies	2,829,791	..	..	..	..	..	..	..	..	..	..
Licensed diversions	n.a.	..	32,687	58,797	33,258	154,904	2,764	10,584	11,746	24,145	328,885
Total, 1966-67	6,943,118	73,639	192,212	106,877	48,820	818,916	17,935	35,562	16,639	130,181	1,440,781
1965-66	6,928,808	64,341	164,059	101,901	50,417	742,249	16,361	36,065	16,593	116,453	1,308,439
1964-65	6,912,735	61,617	132,624	42,901	9,491	552,888	14,035	27,605	4,375	81,494	(e)1,198,404
1963-64	6,912,942	59,331	82,376	45,823	11,846	505,176	12,810	24,451	2,859	82,046	(e)1,060,479
1962-63	6,972,239	53,578	85,459	42,814	18,296	520,167	13,086	21,559	4,033	72,179	(e)1,036,846

(a) Excludes Flood Control Districts and some Irrigation Trusts, particulars for which are not available. (b) Citrus and deciduous; in 1966-67 deciduous amounted to 13,285 acres, of which 10,636 acres were in the Murrumbidgee Irrigation Areas. (c) Includes lands outside irrigation areas supplied under special agreement. (d) Incomplete. (e) Includes total area irrigated by Licensed Diversions, but details for individual crops, etc., are not available.

### **Irrigation Areas**

*Murrumbidgee.* These areas, together with adjacent lands supplied under agreement, received 496,290 acre feet, or nearly a fifth of the total water (2,688,105 acre feet) allocated within the State for stock, domestic supply and irrigation. They are served by the Burrinjuck Dam on the Murrumbidgee, forty miles north-west of Canberra. The catchment above the dam is about 5,000 square miles. The river rises on the high plateau north of Mount Kosciusko where the average annual rainfall exceeds 60 inches. Flow for the irrigation areas and districts is supplemented by unregulated flow from the Tumut River below the dam. The dam also provides town supplies for Gundagai, Wagga, Narrandera, Hay, Balranald, and for towns served by the South-West Tablelands scheme.

Domestic and stock water and water for irrigation are supplied to the Irrigation Districts of Tabbita, Benerembah and Wah Wah, and the Flood Control and Irrigation District of Lowbidgee. Flood flows are relied on to serve the Lowbidgee district, and water is not released from the dam for that purpose. For the other undertakings, however, water is stored during the winter, fed by melting snows and spring freshets, and is released during the September–May irrigation season. It passes along the river channel to Berembd Weir, 240 miles westward, where it is diverted to the main canal with an off-take capacity of 1,600 cubic feet a second. The main canal has been completed to beyond Griffith, 106 miles from the off-take. Reticulation channels aggregate approximately 900 miles and drainage channels 880 miles. In addition, approximately 440 miles of supply channels run through irrigation districts adjacent to the Murrumbidgee Areas in which the water supply is operated and maintained by the Water Conservation and Irrigation Commission.

The Water Conservation and Irrigation Commission controls land transactions and water supplies for the Murrumbidgee Irrigation Areas only, and has no jurisdiction over land transactions in the adjacent irrigation districts, although it is responsible for the operation and maintenance of the water supply in these areas. Other local government services, including electricity and town water supply, are provided by Councils. Land is disposed of by the Commission by purchase or under perpetual lease tenure or leased for short terms for grazing or cultivation. The area under occupation at 30 June 1967 was 414,576 acres, including 37,925 acres held for short lease grazing, agriculture, etc.

The land on which the Murrumbidgee Irrigation Areas and associated districts are situated originally comprised large sheep stations and was sparsely populated, but at 30 June 1967 its population was approximately 30,000, that of Leeton Shire being 11,040 and that of Wade Shire, 18,090. The principal products of the Murrumbidgee Irrigation Areas are wool, livestock for slaughtering, rice, citrus fruits, peaches and nectarines, grapes, tomatoes, peas, beans, and root vegetables. Rice growing was initiated on the Areas in 1924 and has since become the most important crop. In a normal season the water supplied for rice represents about half the total delivered to the Areas.

*Other Irrigation Areas.* The Coomealla, Tullakool, Buronga, Mallee Cliffs, Hay, Curlwaa, and Coleambally Irrigation Areas follow the same administrative pattern as the Murrumbidgee Areas—that is, land transactions are administered by the Water Conservation and Irrigation Commission which is responsible also for the operation and maintenance of works to supply water.

### **Irrigation Districts**

These districts are set up under the Water Act, 1912–1955 for (a) domestic and stock water supply and (b) irrigation. They differ from water trusts in that the cost of the works is not required to be repaid over a period, but annual charges are made by the State for water supplied to landholders.

Since the completion of the Hume Reservoir, several such districts have been established along the Murray to utilise the New South Wales share of the storage. Water is not available for the whole of the 5,000,000 acres adjacent to the Murray in New South Wales, and therefore the schemes are based on 'extensive' irrigation, that is, water rights are allotted to holdings on the basis that only a portion of each holding (one acre in three, five or ten, according to the district, etc.) will be irrigated, but additional water, when available, may be obtained by landholders. 'Water right' means right to such a quantity annually of water, 12 inches deep, as will cover an area of one acre.

Water to serve Berriquin, Deniboota and Denimein Districts is diverted through a main canal which is approximately 100 miles long. Water for the Wakool Irrigation District and the Tullakool Irrigation Area is diverted from the Edward River at Stevens Weir, and a supplementary supply is also obtainable from Mulwala canal. At 30 June 1967 the total length of completed canals and channels in Berriquin District was 1,000 miles, comprising Mulwala canal 75 miles, Berrigan channel 22 miles, subsidiary channels 788 miles, escape channels 105 miles, and cross drainage channels 10 miles. Off-take capacity of the Mulwala canal is 5,000 acre feet a day. Wakool, with 422 miles of channel, contains 318 holdings, and the area developed by irrigation includes about one acre in six of the total area. Sheep raising and rice growing are the main industries. Considerable subdivision has occurred within the Berriquin District, and the proportion of the total area developed for irrigation is higher than in the case of Wakool. Sheep (including fat lambs), dairying, wheat, and rice growing are the main industries.

### Water Trust Districts, Irrigation Trusts and Flood Control and Irrigation Districts

The Water Act, 1912-1966 provides for the constitution of Trust Districts for domestic and stock water and irrigation, and empowers the Commission to construct, acquire or utilise necessary works. When the works are completed, they are handed over to trustees to administer. The trustees are elected by the occupiers of the land and act with a representative of the Commission. They are empowered to levy and collect rates covering the cost of the works repayable to the Crown by instalments and also the cost of operation and maintenance of the works. The rates are struck according to the area of land which benefits. The following are the water trusts, other than irrigation, as at present constituted (the area in acres of each district being shown in parenthesis): *Murray River*—Little Merran Creek (157,440), Bullatale Creek (68,320), Poon Boon (34,300), Minnie Bend Flood Prevention (2,190); *Murrumbidgee River*—Yanco, Colombo and Billabong Creeks (1,007,780); *Lachlan River*—Marrowie Creek (292,640), Toriganny, Muggabah and Merrimajeel Creeks (170,240), Ulonga (64,960), Micabil Weir (11,500), Condobolin West Weir (4,480); *Miscellaneous*—Great Anabranched of Darling River (959,184), Nidgery Weir (46,880), Algdugerie Creek (9,760), Collarenebri town water supply (117)—making in all a total area of 2,829,791 acres. Twelve of these trusts have been formed for the provision of water for domestic and stock purposes, one for a town supply and one for flood prevention.

Irrigation Trusts are established under the same Act and are administered by trustees in a similar way. There are seven of these trusts.

The Lowbidgee Provisional Flood Control and Irrigation District, the first of its kind, was constituted in 1945. Its purpose is to provide flood irrigation for pasture lands on the lower Murrumbidgee by water diverted from the Maude and Redbank Weirs. Another district, Medgun, near Moree in the north-west, is also in operation.

### River, lake and farm water supplies

During recent years the numbers of licences and permits issued to individuals to draw water from rivers and lakes for irrigation have increased substantially, especially along the coastal streams in sub-humid districts where the value of supplementary irrigation is becoming more recognised as a means of stabilising production in dry months. There has also been a considerable increase along the Murrumbidgee, Lachlan, Namoi, and Macquarie Rivers.

Under the Farm Water Supplies Act, 1946, technical advice and assistance, and also financial assistance, are made available to help individual farmers and groups of farmers to provide and improve water supplies for domestic, stock and irrigation purposes by means of wells, bores, excavated tanks, weirs or dams, and flood and spray irrigation systems.

### Underground water

Extensive use is made of artesian, sub-artesian, and shallow underground water. The Great Artesian Basin underlies an area of some 81,250 square miles in north-western New South Wales. Eighty-seven Bore Water Trusts and twelve Artesian Wells Districts have been constituted. Bore Trusts are administered in the same way as Water Trusts, but in Artesian Wells Districts the settlers maintain the drains. Bore Trusts and Artesian Districts cover 5,500,000 acres and distribute water through 3,592 miles of open earth drains. At 30 June 1967, 1,167 artesian bores had been constructed in the New South Wales section of the Basin. At that date 692 bores were flowing and were capable of producing about 63,898,000 gallons a day. Conservation measures control this to about 51,600,000 gallons a day. The total length of bore drains, including those for Trusts and Districts, is approximately 8,000 miles.

Of other structural basins of sedimentary rocks, e.g. Murray, Sydney, Oxley, and Clarence Basins, the Murray is the largest and also the most important in that it affords stock water supplies over an extensive area of the south-western section of the State. Only a few of these bores flow, the remainder being sub-artesian. Good supplies for stock and, in some instances, small scale irrigation, are obtained from porous sandstone in the Moss Vale-Picton area, but the remainder has limited potential. Stock supplies are obtained from bores in the fringe zones of the Oxley Basin, but the centre of this basin lies under the Liverpool range. The Clarence Basin is relatively unimportant from a groundwater viewpoint, but stock supplies are obtained from some sections.

In other parts of the State the largest and best quality groundwater supplies are obtained from sands and gravels in the alluvium of the major rivers and their tributaries, particularly the western-flowing rivers, e.g. Lachlan, Macquarie and Namoi. Supplies ranging from 10,000 to 210,000 gallons an hour are obtained from wells and bores in these areas and are used for irrigation and town water supply. The Government is carrying out investigations to determine the ground-water potential of the alluvium of such valleys, particularly with regard to irrigation use, and a test-boring programme is in progress in the Lachlan and Namoi Valleys. Investigation programmes have also been initiated in the

coastal river systems, commencing with the Hastings and Bega river valleys, but the groundwater potential of the coastal valleys is quite limited compared with the inland drainage systems. Old sand dune areas along the coast provide large supplies of good quality water. However, since the soils of these areas are not suited to agricultural pursuits, exploitation has been largely confined to the Sydney and Newcastle areas. Initially a source of Sydney's water supply, the Botany sands are now utilised mainly by industry. The Tomago sands provide a considerable proportion of the Newcastle water supply.

The older rocks, which are mostly folded and jointed, are very variable in their groundwater potential and only rarely do they yield supplies sufficient and suitable for limited irrigation. Where suitable conditions obtain, they yield useful stock supplies, mostly at depths between 50 and 250 feet.

A licence under the Water Act, 1912-1966 is required for all bores sunk in any part of New South Wales, and details of over 30,000 bores and wells in the State are recorded. When assessed in relation to the geologic and topographic conditions of any particular area, such records provide valuable evidence of the groundwater potential and are thus of considerable benefit to landholders.

#### **Future programme**

The programme of development in hand includes the provision of additional dams and storages, weirs, and flood mitigation and river protection works in various parts of the State. Work has commenced on a dam at Pindari on the Severn River, and legislation has been passed authorising the construction of a flood control and irrigation dam at Warkworth in the Hunter Valley. The Hunter River development, of which Glenbawn Dam is an integral part, concerns an exceptionally fertile coastal valley, forming the hinterland to Newcastle, where the annual rainfall is not heavy and variations from month to month are considerable. This is the first coastal scheme initiated in New South Wales. At Wyangala Dam, on the Lachlan River, the strengthening and enlargement of the original dam is nearing completion. The new storage capacity of 560,000 acre feet will be increased to 1,000,000 acre feet by 1970 following the installation of radial gates in the new spillway. Construction of the Blowering Dam on the Tumut River was completed in 1968. Within the new Coleambally Irrigation Area further development of farms has been carried out and water is being supplied by the new diversion weir at Gogeldrie. At 30 June 1967, 194 large area farms and 15 horticultural farms had been allotted.

### **Victoria**

Particulars of the rainfall pattern of Victoria were given on page 1117 of Year Book No. 37. (See also the chapter Physical Geography and Climate of this issue.)

#### **Administration**

Victorian Governments have been active in the development of country water supplies since the 1860's when major works to supply the Bendigo goldfields were undertaken. Local trusts to construct and operate waterworks under Government supervision were provided for in the *Water Conservation Act* 1881. Development under the trust system was greatly stimulated by the *Irrigation Act* 1886, which provided for the construction of national headworks by the State, and vested in the Crown the right to the use and control of all surface waters. By 1900 there were 33 irrigation trusts and 18 other rural water supply trusts, but the system of local control was then breaking down under financial difficulties.

The *Water Act* 1905 established the State Rivers and Water Supply Commission to take over the Irrigation Trust districts (except the still-existing First Mildura Irrigation Trust) and to exercise the State's functions in the further control and development of surface waters outside the metropolis. The Commission now supervises all private diversions from streams and directly administers irrigation districts covering 2,253,000 acres, rural waterworks districts covering 8,001,000 acres, drainage and flood protection districts covering 149,000 acres, and urban water supplies serving 215,000 people. It also supervises the activities of local urban water supply authorities supplying 616,000 people in 238 towns, as well as 86 local sewerage authorities and 29 river improvement and drainage authorities.

#### **Works summarised**

Since the State Rivers and Water Supply Commission began its operations in 1906 the capacity of storages under its control has been increased from 172,000 acre feet to 4,658,920 acre feet. In addition, Victoria has in effect a half share in River Murray Commission storages totalling 2,703,150 acre feet, bringing total capacity available to Victoria at 30 June 1967, to 6,010,490 acre feet. Most of the water used from these storages is for irrigation. The area irrigated has increased from 105,000 acres in 1906 to 1,313,888 acres in 1966-67. Irrigation deliveries in 1966-67 totalled 2,130,053 acre

feet. The value of irrigation production in 1965-66 was estimated at \$159,550,000. Of the total irrigation production about one-quarter was from lands irrigated by 'private diverters', i.e. irrigators who are authorised to take water from streams, lakes, etc., but who do not come within the boundaries of an irrigation district.

### Storages

Capacities of principal storages (in acre feet) and system totals at 30 June 1967 were as follows:

*Goulburn System*—Eildon, 2,750,000; Waranga, 333,400; total, 3,130,650;

*Murray System*—half share of Murray storages, 1,351,570; total, 1,392,430;

*Ovens System*—Lake Buffalo, 19,500; total, 19,500;

*Loddon System*—Cairn Curran, 120,600; Tullaroop, 60,000; Kerang Lakes, 57,700; total, 276,250;

*Campaspe-Coliban System*—Eppalock, 252,860; Coliban storages, 63,830; total, 316,690;

*Wimmera-Mallee Systems*—Rocklands, 272,000; Toolondo, 86,000; Bellfield, 63,680; total, 627,890;

*Maffra-Sale System*—Glenmaggie, 154,300; total, 154,340;

*Werribee-Bacchus Marsh*—total, 34,900;

*Mornington Peninsula*—total, 17,640.

### Nature of irrigated culture

The following table shows the areas irrigated in the various irrigation systems in 1966-67, and corresponding particulars for the State as a whole during the seasons 1962-63 to 1966-67.

#### AREA OF LAND IRRIGATED: VICTORIA, 1962-63 TO 1966-67

(Source: State Rivers and Water Supply Commission)

(Acres)

Season and system	Fodder crops			Pastures			Vine-yards	Orchards	Market gardens	Fallow and miscel-laneous	Total
	Cereals	Lucerne	Other	Native	Sown						
					Annual	Perennial					
1966-67—											
Goulburn-Campaspe-Loddon	17,145	24,692	6,238	22,897	257,978	201,026	355	24,970	5,711	20,801	581,633
Murray—											
Torrumbarry	6,175	5,690	6,409	20,672	140,548	88,427	4,250	1,568	717	3,858	278,314
Murray Valley Irrigation Area	59	6,840	2,251	657	62,506	45,154	116	6,591	454	333	124,961
Pumping(a)	123	850	191	311	103	201	38,982	3,279	157	1,402	45,599
Total, Murray	6,357	13,380	8,851	21,640	203,157	133,782	43,348	11,438	1,328	5,593	448,874
Other northern systems	47	1,144		807	1,751	11,026	..	3,196	496	38	18,505
Southern systems	55	1,340	138	2,835	1,358	62,990	..	638	5,994	312	75,660
Private diversions(b)	1,001	9,312	3,247	6,534	16,390	120,725	3,715	6,352	13,088	8,852	189,216
Total, 1966-67	24,605	49,868	18,474	54,713	480,454	529,549	47,418	46,594	26,617	35,596	1,313,888
1965-66	29,347	48,016	19,123	54,967	472,426	494,040	45,697	44,851	27,653	26,541	1,262,661
1964-65	8,048	42,320	14,116	51,210	443,227	484,634	47,778	44,743	26,884	26,095	1,189,055
1963-64	14,878	42,878	21,031	41,360	427,160	453,986	45,257	43,891	24,422	22,378	1,137,241
1962-63	26,113	43,180	22,820	61,317	418,025	440,360	45,757	43,059	22,634	28,290	1,151,535

(a) Includes First Mildura Irrigation Trust.

(b) Excludes private diverters in the Torrumbarry System, but includes all other private diverters along the Murray River.

### Irrigation systems

*Goulburn-Campaspe-Loddon.* The principal storage for Goulburn waters is Lake Eildon, which was completed in 1956, submerging the original 306,000 acre feet Eildon storage completed in 1927. For the distribution of additional supplies available from Eildon and from other new storages on the Loddon and Campaspe rivers it has been necessary to undertake major enlargements in the distribution system by a long-term programme of channel works which is still in progress. Deliveries have increased from 395,000 acre feet in 1954-55 to 909,000 in 1966-67. Goulburn River water is diverted to the irrigation areas by gravitation from the pool formed by the Goulburn Weir, near Nagambie, completed in 1890 as a State work. The East Goulburn main channel of 1,000 cusecs capacity supplies the areas around Shepparton. Two 1,500 cusec channels to the west convey water to the off-river Waranga Reservoir and supply part of the Rodney area through off-takes on the way. From Waranga Reservoir there are two main outlets, one supplying the western part of the Rodney area and the other, of 1,200 cusecs capacity, supplying the Waranga Western Main Channel, which runs more than 100 miles west across the Campaspe and Loddon Valleys to Boort.



Flows in the Waranga Western Main Channel are augmented by the injection of Campaspe water through a pumping station of 200 cusecs capacity near Rochester. Supply to the Tragowel and Boort areas is augmented by gravitational diversion of Loddon water.

The gross area of holdings in the Goulburn-Campaspe-Loddon systems is 1,351,862 acres. The main products are dairy produce, fruit, wool, and fat lambs. Annual production of deciduous canning fruits in the eastern part of the system is about two-thirds of Australia's total.

*Murray River system.* Water is diverted from the Murray by gravity at the Yarrawonga Weir for the Murray Valley Irrigation Area and at the Torrumbarry Weir for the Torrumbarry irrigation system which extends to Swan Hill. Holdings in the Murray Valley area total 301,749 acres, devoted mainly to dairying, fat lambs and canning fruit. Holdings in the Torrumbarry system total 372,342 acres, devoted mainly to dairying and the production of fat lambs, with a concentration of vineyards, orchards and market gardens around Swan Hill.

Downstream from Swan Hill there are 5 districts supplied by pumping: the district of the First Mildura Irrigation Trust and the 4 Commission districts of Nyah, Robinvale, Red Cliffs, and Merbein. These districts together serve 80,615 acres, producing mainly dried vine fruits, with some citrus fruits and table and wine grapes.

*Southern systems.* The Macalister district, covering 129,939 acres around Maffra and Sale, is supplied from the Macalister River, regulated by Lake Glenmaggie, and from the unregulated flow of the Thomson River. Dairy farming is the principal activity. The Bacchus Marsh and Werribee Districts, supplied from storages in the Werribee River only 20 miles west of Melbourne, cover 16,341 acres intensively developed for dairying and vegetables.

#### **Wimmera-Mallee domestic and stock supply system**

Storages in the Grampians in south-west Victoria ensure farm water supplies over an area of 11,000 square miles extending northward through riverless pastoral and cereal lands to the Murray. Farm dams throughout this region, which covers one-eighth of the total area of the State, are filled once each year, in the winter-spring season, through the medium of 6,600 miles of Commission channels and about 4,000 miles of private channels. Without this supply, occupation of the region would be extremely hazardous. Headworks storage capacity has now been increased from 564,210 acre feet to 627,890 acre feet by construction of Lake Bellfield. Fifty towns, with a population of 46,000, receive their supply from the same system. Near Horsham and Murtoa, close to headworks in the south, a supply is maintained for the irrigation of an area of 7,500 acres, mainly for dairying.

#### **Drainage, flood protection and river improvement**

The largest work in this category undertaken by the State Rivers and Water Supply Commission is the Koo-wee-rup-Cardinia flood protection district embracing 89,245 acres of a continuous depression along the seaboard of Westernport. Once useless, indeed a hindrance to communication, this area now yields primary products worth several million dollars each year.

By the *River Improvement Act* 1948, the formation of local river improvement and drainage trusts under the supervision of the Commission has been greatly facilitated and, since 1950, 28 such trusts have been formed. The importance of river improvement work is expected to continue to grow.

In 1963 the Dandenong Valley Authority was created, by special legislation, with jurisdiction over the whole catchment of the Dandenong Creek (300 square miles) for purposes of arterial drainage, river improvement and flood protection. In June 1966 the Authority took over the Commission's Carrum Drainage District.

#### **Finance**

The net capital liability of the Commission at 30 June 1967 for works under its direct control was \$277 million. Of this amount, \$182 million was expended for irrigation and \$24 million for rural, domestic and stock supplies, the cost being borne entirely by the State. The total liability for urban supplies was \$51 million, of which \$27 million was borne by the districts concerned. The remaining \$20 million was for expenditure on flood protection and drainage (\$3 million), and items such as loan flotation expenses, miscellaneous surveys and investigations, and buildings, plant and stores.

#### **Underground resources**

*Underground water.* The investigation, exploration and survey of underground water resources in Victoria is carried out jointly by the State Rivers and Water Supply Commission and the Department of Mines. The Commission is concerned mainly with investigation of shallow waters in irrigation districts, while the Department covers all other work, including exploratory drilling to 5,500 feet.

Underground water is the only available source of supply other than rain in some areas of the State. It is of particular importance in the western portions of the Wimmera-Mallee districts where annual rainfall ranges between 10 and 20 inches and there are no surface streams. Elsewhere underground water is used to supplement surface supplies and in places it may be the only developed source for town, industry, rural, domestic, stock, or irrigation use.

The Wimmera and Mallee districts are situated over part of the Murray Basin where, to the west of the Wimmera River, Miocene marine limestones form an aquifer with water suitable for town supply and irrigation. It is used for this purpose at Kaniva, Murrayville and Nhill, where yields between 10,000 and 60,000 gallons per hour may be obtained. North of Murrayville and Underbool the water in the limestones is more saline and in the extreme north it is too saline even for stock use. East of the Wimmera River to Lake Tyrrell and north of Swan Hill the marine rocks consist of marls and silts with calcareous beds capable of yielding saline water at less than 1,000 gallons per hour. These aquifers are not developed. Lower Tertiary swamp, deltaic and estuarine carbonaceous and ligneous sediments underlie and extend eastward of the marine rocks. Sands in these sediments contain water of greater or lesser salinity than that of the marine deposits. Yields of up to 10,000 gallons per hour have been obtained from the deltaic aquifers between Swan Hill and Robinvale. In the Natya-Kenley area the water is suitable for most stock purposes and for limited irrigation under favourable conditions. Overlying the marine and estuarine sediments there are aquifers consisting of Pliocene to Pleistocene terrestrial, fluvial and lacustrine sands and sandstones. Yields from these rocks are limited to windmill supplies. The quality is variable and in the north-west highly saline. East of the Avoca River the deposits of the Murray Basin are entirely non-marine and consist of terrestrial, fluvial and lacustrine gravels, sands, silts, and clays to a maximum depth of about 600 feet. Water from the sands and gravels is of variable quality. In places it is too saline for stock use, but the quality improves towards the east and it is used for town supply at Katunga and Wangaratta, and at Barnawartha, Bright and Chiltern where the deposits partly fill valleys in the bedrock of the highlands.

In the Otway Basin in the south-west of Victoria the Upper Cretaceous-Lower Tertiary sands have been developed for underground water supplies to Portland, Heywood, Port Fairy, Peterborough, Port Campbell, and Timboon. In the central (Warrnambool and Koroit) and northern parts of the basin the waters are suitable only for stock. In the areas of better quality water the depth of the aquifers (2,000-4,500 feet) renders their development uneconomic except for town supply and industry. Oligocene to Miocene marine limestones occur in the south-central and western portions of the basin. The salinity of the water in the limestones is often less than that of the water in the sands beneath, but the limestone waters are generally hard. They are used in part to supply Portland and also for irrigation. Small underground water supplies are obtained from the Pliocene-Pleistocene deposits of ferruginous sands, marine sandy limestones and dune limestones in the west and from the dune limestones along the coast between Warrnambool and Portland.

In and around the structural depressions of the Port Phillip and Westernport Bay districts there are several small areas where underground water of good quality occurs. Among these are the Lower Tertiary sand aquifers at Anglesea which are being developed to yield approximately 200,000 gallons per hour for industrial purposes; the Middle Miocene sands, shelly silts and limestones which have been developed for market garden watering south-east of Melbourne; and the Pleistocene sands and shelly silts on the Nepean Peninsula where the water is used for market gardens and pasture irrigation.

*Irrigation.* Brackish waters in the Eocene to Oligocene sands under the Werribee Plains have some potential for industrial use. The Westernport area has yielded large supplies of water from Tertiary marine and non-marine sands, and from fractured fresh basalt in some areas. Extensive use is made of water from the sands for irrigation of pastures and cash crops in the Koo-wee-rup Swamp area. Yields of up to 30,000 gallons per hour are common. In the Lang Lang area the water is used for town and industrial supply, but not as yet for irrigation. Stock supplies with one or two minor exceptions are available at shallow depth over the whole of the area.

The Gippsland Basin contains two main groups of water-bearing rocks, the Lower Tertiary coal measures and marine sands, and the Upper Tertiary sands and gravels. Water from the Lower Tertiary rocks is frequently high in bicarbonate and therefore soft. It is used for irrigation at Bairnsdale and Yarram, and some abnormally hot water is used for industrial purposes at Maryvale. The Upper Tertiary rocks yield large quantities of very good quality water, mainly in the east-central part of the basin, where it is used extensively for irrigation. Stock supplies are generally available at shallow depth in rocks of various types and ages.

The pre-Upper Cretaceous sedimentary and igneous rocks of the highland areas generally yield small supplies of water suitable for stock. Exceptions to this are the Devonian sandstones of the Grampians where large supplies of good quality water may be obtained, and the better quality waters suitable for domestic use from the higher rainfall area of the eastern highlands of the State.

The Lower Tertiary volcanic rocks, mainly basalts, yield large supplies, up to 15,000 gallons per hour where the basalt is well jointed and little weathered, but only small quantities where the rocks are weathered. Where yields are large as in the west and south-west of Gippsland and on French Island the water quality generally is suitable for irrigation, but on the Bellarine and Mornington Peninsulas, Phillip Island and at Cranbourne the small yields of water are suitable for limited stock use only. Pliocene to Pleistocene volcanic rocks, basalts with tuffs and agglomerate occur extensively over the Werribee Plains and Western District and in valleys in the western half of the Central Highlands. Yields from these rocks are variable, the maximum recorded being 16,000 gallons per hour. From the weathered basalt yields are usually less than 1,000 gallons per hour. The quality is generally suitable only for stock but may be suitable for irrigation. Underground water derived from the later basalts of the stony rises west of Colac usually has high nitrate content.

#### **Future programme**

In July 1963 the Government announced plans for a long-term storage programme for irrigation purposes to cost a total of \$75 million between 1963-64 and 1973-74. Three of these storages, namely Chowilla Reservoir (a River Murray Commission Storage), Lake Buffalo (second stage) and Lake Mokoan, appear in the list of dams and reservoirs projected in the table on page 961.

Since the long-term storage programme came into operation, new storages have been completed for the Wimmera-Mallee System (Lake Bellfield, near Horsham); the Mornington Peninsula System (Devilbend Reservoir and Tarago Reservoir); the Goulburn-Murray System (Corop Lakes) and private diverters near Benalla (Lake Nillahcootie); and along the Buffalo River (Lake Buffalo, first stage).

At present work is proceeding on new storages to supplement supply to the Bacchus Marsh-Werribee System (Lake Merriane) and the Goulburn-Murray System (Lake Mokoan, near Benalla).

Works expenditure of about \$4,000,000 per year is carried out from about thirty-five operating centres throughout the State. In addition, four major construction centres have been spending about \$2,500,000 annually for many years on a programme of channel and drainage works in the Goulburn-Murray System, and the end of this programme is not yet in sight.

A major new development has been a grant of \$3,600,000 from the Commonwealth Government to finance a scheme to reduce the flow of saline drainage water into the River Murray.

### **Queensland**

Particulars of the rainfall pattern of Queensland are given in Year Book No. 37, page 1122. (*See also* the chapter Physical Geography and Climate of this issue.)

#### **Administration**

In Queensland the right to the use and flow of non-tidal surface water contained in, or flowing through or past, the land of two or more occupiers, and all artesian and sub-artesian water vests in the Crown. Subject to certain reservations for local authority and other purposes, such water is controlled by a Commissioner of Irrigation and Water Supply. Private diversions from watercourses, artesian wells and, in certain declared areas, sub-artesian wells, are subject to licence by the Commissioner. Dams and weirs are constructed by the Commissioner to safeguard supplies in streams from which private pumping for irrigation takes place, and also to provide water for irrigation areas established by the Commissioner. For a description of the development of the present administration *see* Year Book No. 42 and earlier issues.

#### **Irrigation—extent, systems and methods**

Queensland sugar cane represents in value about 40 per cent of the agricultural production of the State. In 1966-67 almost 23 per cent of the sugar cane acreage was irrigated, representing 41 per cent of the total area irrigated in the State. Tobacco is another major crop, and the area irrigated during 1966-67 represented 97 per cent of the total plantings.

Most irrigation in Queensland is undertaken by farmers operating under licence to obtain water by pumping from streams or from natural underground storages. Over half the total area irrigated in Queensland is supplied from underground water. The main areas where these supplies have been developed extensively are the Burdekin Delta (Ayr-Home Hill area), the Pioneer Valley, Callide Valley, Lower Burnett (Bundaberg area), Lockyer Valley, and Redland Bay.

Furrow irrigation is used for cotton, sugar cane, some tobacco, and miscellaneous row crops. Spray irrigation is used widely on fruit, vegetables, fodder crops, sugar cane, and the major part of the tobacco crop. Irrigation is required around-the-year for most of Queensland, as the timing and duration of the summer 'wet' season are too variable to enable a definite non-irrigation season to be fixed, as can be done in southern States.

## AREA OF LAND IRRIGATED: QUEENSLAND, 1962-63 TO 1966-67

Season and division	No. of irrigators	Area irrigated (acres)							Total
		Vegetables	Fruit and vineyards	Sugar cane	Tobacco	Cotton	Other crops	Pastures	
1966-67—									
Southern Queensland .	6,598	32,849	7,560	45,542	2,118	5,026	67,484	28,618	189,197
Central Queensland .	679	1,013	505	252	56	2,889	16,396	2,961	24,072
Northern Queensland .	2,327	5,336	975	96,827	9,606	82	4,629	13,329	130,784
Total, 1966-67 .	9,604	39,198	9,040	142,620	11,781	7,997	88,508	44,908	344,052
1965-66 . . . . .	9,897	38,726	9,049	140,994	12,116	6,333	90,070	35,246	332,534
1964-65 . . . . .	9,310	35,020	8,092	120,556	13,499	4,148	71,634	28,224	281,173
1963-64 . . . . .	8,930	36,329	7,315	98,204	15,079	2,717	65,078	27,360	252,082
1962-63 . . . . .	8,562	34,258	7,020	81,506	15,801	2,206	58,029	22,341	221,161

**Areas under private irrigation**

In five important areas irrigation has been developed by private pumping. In the Lockyer Valley, thirty miles west of Brisbane, more than a third of an estimated total irrigable area of 60,000 acres is under irrigation. The valley comprises an extensive flood plain where heavy black alluvial soil thickly overlies gravels and sands carrying water suitable for irrigation, which is necessary for continuous agricultural production. A number of small weirs with a total storage of 1,340 acre feet have been constructed on Lockyer Creek by the Irrigation and Water Supply Commission; these also tend to augment and conserve underground supplies. Approval has recently been given for the construction of an off-stream storage in the Atkinson's Lagoon area which will be supplied by diversion from Buaraba Creek and several adjoining catchments. The storage will provide a regulated supply of water in Buaraba Creek and along the lower end of Lockyer Creek. The Lockyer Valley produces a substantial proportion of Queensland's onions, potatoes, pumpkins, lucerne, hay, green fodder, maize, and dairy products.

The Callide Valley in central Queensland is an important source of grain, dairy products, fodder, and cotton and is largely dependent on irrigation from underground water resources. Some 10,000 acres are now irrigated from underground supplies. The broad expanses of alluvium in the Pioneer Valley near Mackay have been extensively developed for cane production. The area under irrigation from groundwater and surface supplies is some 12,000 acres. The lands in the vicinity of Bundaberg are cultivated for sugar cane production and over 40,000 acres are irrigated from surface and underground supplies.

The other important area is the fertile delta region of the Burdekin River, where the irrigated area is over 67,000 acres. The delta has ground water supplies at shallow depth, and these have been tapped to obtain supplies in the dry periods of the year. Sugar is the main crop irrigated, together with citrus fruits, pineapples, vegetables, and tobacco. In 1940 the Burdekin River Trust was formed to safeguard the sugar areas of the delta from erosion and floods, and an irrigation research station studies the development of pastures and crops. A scheme to replenish the subterranean water supplies in the North Burdekin Delta by pumping from the Burdekin River is in operation under the control of the North Burdekin Water Board. There is a similar Board in operation in the South Burdekin Delta.

**Government irrigation areas and projects**

The Irrigation and Water Supply Commission has constructed and operates five dams and forty-four weirs with a storage capacity of 568,121 acre feet. Water from these storages supplies the following four irrigation areas operated by the Commission and supplements numerous streams from which pumping for private irrigation takes place.

*Mareeba-Dimbulah Irrigation Area.* In 1952 an irrigation undertaking was established to assist tobacco production in the valleys of the Walsh and Barron Rivers. Tinaroo Falls Dam on the Barron River (330,000 acre feet) has been completed, and construction is nearing completion on irrigation works to serve 78,000 acres (comprising 910 tobacco farms and 180 mixed farms), of which 49,000 acres will be irrigated. One hundred and ninety-eight miles of channels have been constructed, and irrigation water from the dam is available to 548 farms. Tinaroo Falls Dam is also providing a regulated flow of water in Barron River at Kuranda for the generation of hydro-electric power at Barron Falls.

*Burdekin River Irrigation Area.* The Clare, Millaroo and Dalbeg sections of the Burdekin River Irrigation, Hydro-electric and Flood Mitigation Project have been completed. Located from twenty-five to sixty-five miles from the mouth of the Burdekin, these areas comprise 18,862 acres and obtain water from central pumping stations drawing from the river. Two storages of 7,670 acre feet and 2,550 acre feet capacity have been constructed about seventy-nine miles and seventy-two miles respectively from the mouth of the river. Sugar cane production predominates in the area.

*Dawson Valley Irrigation Area.* A scheme for the development of the Dawson Valley providing for the irrigation of 70,000 acres was inaugurated in 1923, but work was discontinued after three weirs had been built in this area. Their total storage is 10,280 acre feet, covering about sixty-one farms (4,894 acres) in production. Cotton and grain account for the major part of the production from irrigated areas. Further development of the scheme is dependent on the provision of additional storage works.

*St George Irrigation Area.* This area comprises twenty farms, on which some 6,200 acres are being irrigated from a weir on the Balonne River (8,200 acre feet). Fat lambs, wool, and fodder and cotton crops are the main products. Approval has been given for the construction of additional storage and the provision of irrigation and other works to serve a further thirty-two farms. The major storage, to be built on the Balonne River (Kajarabie Dam), will have a capacity of 81,000 acre feet.

Several additional projects have recently been completed and work is in progress on others. Moogerah Dam (Warrill Valley Project) on Reynolds Creek (75,000 acre feet) is capable of serving some 7,000 acres of the Warrill Valley, and is providing water for the thermal power station now under construction at Swanbank, near Ipswich. Borumba Dam (Mary Valley Project) on Yabba Creek (34,500 acre feet) makes water available to maintain the town water supply for Gympie and allows extension of the area irrigated from the Mary River to about 18,000 acres. Callide Dam (37,800 acre feet) on Callide Creek, nine miles upstream from Biloela, will provide cooling water for the Calcap power station and compensation water for maintenance of underground supplies along Callide Creek; provision has been made to increase the storage capacity to 87,000 acre feet. Leslie Dam (Upper Condamine Project), on Sandy Creek, has an initial capacity of 38,200 acre feet, with provision for later increase to 87,000 acre feet. Water from the dam is available for irrigation of sections of the Darling Downs downstream the Condamine River as far as Cecil Plains and for a supply to the city of Warwick. A 61,000 acre feet dam under construction at Coolmunda (Macintyre Brook Project) will allow irrigation of up to 8,000 acres. Wuruma Dam (Upper Burnett Project), under construction on the Nogoa River, will have a storage capacity of 157,000 acre feet for irrigation of 11,000 acres along 100 miles of the Burnett River. The Eungella Dam (Bowen-Broken Project), under construction on the Broken River, will have a storage capacity of 104,000 acre feet. It will provide cooling water for the Collinsville power station and irrigation water along the Bowen and Lower Burdekin rivers. The development of rivers constituting portion of the Queensland-New South Wales border, under the authority of the Dumaesq-Barwon Border Rivers Commission, is described on page 966.

#### **Rural Water Supply Areas**

Although provisions existed in the Water Acts for many years for the constitution of rural water supply Areas and Boards, little advantage was taken of these powers until 1964 when an amendment of the Acts extended the purposes for which these Areas and Boards may be constituted and the methods of rating and financing of works, and provided for resumption or acquisition of lands by such Boards. This form of water supply is being sought increasingly by groups of landholders in various parts of Queensland to provide a reasonably economical measure of permanent supply for stockwatering, dairy and domestic purposes in areas prone to drought, and thus achieve a permanent form of drought relief. Usually the capital cost of works is met by a 50 per cent subsidy by the Government and the balance by a Board borrowing by Government guaranteed loan on the security of debentures.

At present six Rural Water Supply Areas, Grevillea, Back Creek, Brigooda, Tarampa, Coreen, and Roadvale are operating, supplying 243 holdings, covering 106,000 acres and reticulated by ninety-seven miles of pipelines. Other schemes are in course of construction at Proston, Kooingal and Merlwood; these will supply a further 254 consumers by 128 miles of pipelines and serve 86,200 acres.

Water conservation, irrigation and drainage schemes may also be carried out under these Acts, and two group irrigation proposals and ten group drainage proposals are currently under investigation. No subsidy has yet been considered for these proposals.

#### **Underground water—Great Artesian Basin and other sources**

The use of underground water supplies has been a very important factor in agricultural and pastoral development in Queensland. The Great Artesian Basin is the major source of stock water supplies over more than half the State. Elsewhere, supplies obtained at shallower depths, in porous, fractured or fissured rocks, are extensively used for domestic and stock purposes. Underground water also supports more than half the irrigated area in the State, supplies being obtained chiefly from alluvial formations along river valleys, and from river deltas, the most conspicuous example of which is the Burdekin River (*see* page 977).

#### **Great Artesian Basin**

Western Queensland, beyond the 20-inch rainfall belt, is predominantly pastoral and is mainly dependent for water supplies on artesian and sub-artesian bores and, where surface storage is not

readily available, on excavated tanks. The Great Artesian Basin in Queensland corresponds approximately with the area lying west and south of the Great Dividing Range, excluding the Cloncurry mineral field and the Barkly Tableland. It comprises 421,000 square miles or nearly two-thirds of the total State area of 667,000 square miles.

*Artesian water.* Although the number of bores has gradually increased over the years, the total flow of all bores has declined from the peak flow of 351 million gallons a day. A report on the nature and structure of the Great Artesian Basin, presented in 1954, indicated that the output would continue its decline during the next sixty years, at which stage the flow from the remaining flowing bores would be of the order of 110 million gallons a day. The discharge from windmills, springs and other leakages, together with the underflow past the Queensland borders, would then be about 20 million gallons a day. It was further expected that the total discharge, of the order of 130 million gallons a day, would be in equilibrium with the recharge of the basin. It was expected that numbers of bores on higher ground would cease to flow during the next sixty years and the area served by the flowing bores would contract by perhaps twenty per cent.

Up to 30 June 1967, 3,012 artesian bores had been drilled, of which 1,980 were still flowing. The total depth drilled amounted to 4,215,558 feet and the estimated daily flow was 197 million gallons. Although very few bores exceed 2,000 feet in depth (the average depth is 1,400 feet) and a new bore greater than 4,000 feet deep is exceptional, the deepest bore recorded was sunk to 7,009 feet. Some bores which had been classified as 'ceased' have been inspected and found to be still flowing, while other ceased bores have responded to deepening and have recommenced flowing. Both the pressure and flow of artesian bores are steadily diminishing, the rate of decrease varying widely throughout the basin. Present average rates of diminution are: pressure, 1-2 feet of head; total flow, 2-3 per cent per annum. The greater part of the artesian discharge is distributed by some 15,500 miles of open earth channels, from which a large proportion of water is lost by soakage and evaporation, less than 10 per cent being actually used by stock.

Although artesian beds underlie a large area of the State, only 79,000 square miles are primarily watered by bore drains. The remaining area is watered by artesian bores (with small or no flow and limited drains), sub-artesian bores, excavated tanks, dams, and natural waterholes. At the present time an increasing use is being made of pipelines for the reticulation of artesian water. In many districts artesian bores do not provide economical watering facilities because of depth, limited area to be watered, and difficult terrain for distribution of water by drains. The quality of artesian water from the greater part of the basin is not suited for prolonged use for irrigation on most soils, nor are the supplies sufficient for both large scale irrigation and stock-watering. Practically the whole of the final steady-rate discharge from flowing bores will be needed for the watering of stock.

Shallower supplies, which come from beds unconnected with artesian beds, are of variable quality and volume. These supplies are available at depths of less than 1,000 feet over a large area of the basin. A total of 12,082 sub-artesian bores within the Great Artesian Basin have been registered in Queensland. An important practical consideration is that the main artesian beds are continuous and the sub-artesian beds are not continuous.

*Bore Water Areas.* The constitution of Bore Water Areas was inaugurated in 1913 to aid pastoral settlement in districts where large flows were available at a cost beyond individual capacity, and to conserve artesian supplies by fully utilising flows from the existing bores on the land resumed for closer settlement. Bores and drains are constructed from loan funds repayable over a period of years. The areas are administered by local boards or by the Commissioner of Irrigation and Water Supply, acting as a board. Rates are levied to meet interest, redemption, maintenance and administration costs. Statistics for the year 1966-67 are: areas constituted, 74; administered by the Commissioner, 55; administered by local boards, 6; number abolished, 13; area benefited, 4,806,757 acres; average rate per acre, 1.07 cents; number of flowing bores, 59; total flow, 24,753,000 gallons a day; drains served, 2,515 miles.

#### Other underground sources

Outside the Great Artesian Basin, ground water supplies can conveniently be divided into two broad groupings, (a) those obtained in porous, weathered, fissured, or fractured rocks, and (b) those obtained in unconsolidated sediments of Cainozoic age. In the first group, supplies, often within short distances, are widely variable both in quantity and quality, but are normally sufficient only for stock-watering purposes. Because storage is generally small, seasonal fluctuation of water level tends to be high, and this can have a significant effect on the supply available during dry seasons. Small to moderate irrigation supplies (up to a few thousand gallons an hour) are sometimes obtained, and, in exceptional cases, particularly with basalts and limestones, supplies may be as much as 10,000 gallons an hour. The second group comprises the main irrigation supplies, and, although a wide range may be found in the supply normally available from individual bores in any area, pumping rates as high as 10,000 gallons an hour are common. The availability of underground water has been investigated in a

considerable number of alluvial valleys in south-eastern Queensland and in a number of coastal areas, particularly in the vicinity of the estuaries of the Burnett, Pioneer, Haughton, and Burdekin Rivers, where underground water is the main source for irrigation of sugar cane.

Reference has already been made to the importance of underground water for irrigation in the Lockyer and Callide Valleys (see page 977). Other areas in which irrigation supplies from alluvial formations have been extensively utilised include the Monto area, parts of Barker and Barambah Creeks, Warrill Creek, Cressbrook Creek, the Upper Logan River, Don River (Bowen), Bremer River, and parts of the Condamine River and its tributaries. Government authorities do not normally undertake private drilling for landholders, but assistance is given in the location and development of ground water supplies through the provisions of *'The Farm Water Supplies Assistance Acts, 1958 to 1965'* (see below). This assistance has considerably accelerated the use of underground water for irrigation, and there is no doubt that there are many areas with a large potential for future expansion.

#### Stock watering

A predominant interest in the field of water conservation has been the provision of stock and domestic water supplies in Queensland's great pastoral areas, which contain more than a third of the Commonwealth's cattle and about an eighth of the sheep. In addition to the stabilisation of water supplies in the pastoral areas, the provision of water along stock routes for travelling stock has received much attention in recent years.

*Main stock routes.* The Queensland Irrigation and Water Supply Commission acts as consultant and constructing authority to the Stock Routes Co-ordinating Board for watering facilities on stock routes. On completion, facilities are vested in local authorities for control and maintenance. From 1935, when the scheme was inaugurated, to 30 June 1967, 667 facilities had been completed, and at 30 June 1967, seventeen facilities were under construction or investigation. A State-wide investigation is being carried out by the two authorities mentioned above to ascertain the general movement of stock, determine primary and secondary routes, register existing water facilities, and formulate a co-ordinated plan in regard to the provision of new watering facilities.

*Channel Country stock routes.* Under the *States Grants (Encouragement of Meat Production) Act 1949-1954* the Commonwealth Government agreed to meet half the cost of providing additional watering facilities in stock routes leading into, along, and out of, the Channel Country and on the route from Camooweal to Mount Isa. These routes connect with the main far-western route included in the State scheme inaugurated in 1935. Under this scheme, which was completed during 1962-63, thirty-seven watering facilities have been constructed, at a total cost of \$599,184.

#### Technical and financial assistance to farmers

*'The Farm Water Supplies Assistance Acts, 1958 to 1965'* are designed to improve the standard of water supply installations on individual holdings, encourage greater development in individual irrigation schemes, provide greater stability of production, and avoid losses in time of drought as well as generally increase production. To achieve this purpose, the Acts authorise the provision of technical and financial assistance to landowners for the investigation, design and installation of approved works of farm water supply. All projects for which finance is provided under the Acts are carried out under Commission guidance, and for the payment of a small charge the Commission will advise on the construction of works designed by its staff, but for which the landowners do not require financial assistance under the acts.

During 1966-67, 730 requests (541 for technical assistance only and 189 for technical and financial assistance) were dealt with in addition to advice on a further 519 requests on ground-water supplies. An amount of \$1,015,521 was approved for advances under the Acts in 1966-67, and the amount advanced was \$799,664.

### South Australia

Brief particulars of the climatic conditions in South Australia are given on page 1129 of Year Book No. 37. (See also the chapter Physical Geography and Climate of this issue.)

#### Administration

Water supplies, other than irrigation works, are under the control of the Engineering and Water Supply Department, which administers the Waterworks Act, 1932-1966 and Water Conservation Act, 1936, both of which empower the Minister of Works to impound or divert the water from any lake, watercourse or underground source for the purpose of establishing and maintaining public water supply schemes. The Waterworks Act, 1932-1966 governs the principal reticulated water supplies in proclaimed water districts throughout the State. A feature of these supplies is the extensive network of water mains supplying country townships and farmlands where local water resources are practically non-existent.

Under the Water Conservation Act, 1936, small dams, wells, bores, rainsheds, storages and, in some instances, minor reticulation works are provided in remote areas to assist local settlers in development and to supply travellers and travelling stock.

### Irrigation

Australian irrigation originated in the upper Murray in South Australia and the Mildura area of Victoria. South Australian irrigation commenced with an agreement between the Government and the Chaffey brothers in 1887 whereby an area of land at Renmark was made available for the establishment of certain irrigation works. In South Australia, irrigation is almost exclusively confined to the Murray Valley. Except for quantities held in various lock pools, no water from the Murray is stored in South Australia. Water is either pumped onto the land or gravitated from the river.

The two major authorities administering irrigation areas are the Department of Lands and the Renmark Irrigation Trust. The Trust is controlled by a local board of management consisting of seven members. This area differs from other South Australian irrigation areas in that the land is freehold instead of leasehold and is self-contained and self-controlled. Every settler is entitled to vote for the election of Trust members. The Trust maintains eighty miles of reticulation channels.

The following table shows particulars of the areas of crops and pastures irrigated in the various areas during 1966-67 and in South Australia as a whole during the seasons 1962-63 to 1966-67.

AREA OF LAND IRRIGATED: SOUTH AUSTRALIA, 1962-63 TO 1966-67  
(Acres)

<i>Season and authority</i>	<i>Vine fruits</i>	<i>Tree fruits</i>	<i>Citrus fruits</i>	<i>Other crops (a)</i>	<i>Pastures</i>	<i>Total</i>
<b>1966-67—</b>						
Department of Lands Irrigation						
Areas—						
Orchard land—						
Berri . . . . .	4,702	1,412	1,609	..	..	7,723
Cadell . . . . .	482	222	183	..	..	887
Waikerie . . . . .	1,592	807	1,453	..	..	3,852
Cobdogla . . . . .	4,425	255	345	..	..	5,025
Moorook . . . . .	303	115	282	..	..	700
Kingston . . . . .	141	51	278	..	..	470
Mypolonga . . . . .	..	271	530	..	..	801
Chaffey-Ral Ral Division .	757	246	13	..	..	1,016
War service land settlement—						
Chaffey-Cooltong Division .	392	200	577	..	..	1,169
Loxton . . . . .	3,271	785	2,184	..	..	6,240
Cobdogla-Loveday Division	228	35	38	..	..	301
Reclaimed swamp land—						
Monteith . . . . .	..	..	..	..	986	986
Mypolonga . . . . .	..	..	..	..	1,306	1,306
Wall . . . . .	..	..	..	..	512	512
Murray Bridge-Burdett						
Division . . . . .	..	..	..	..	109	109
Mobilong Division . . . . .	..	..	..	..	432	432
Long Flat . . . . .	..	..	..	..	341	341
Neeta . . . . .	..	..	..	..	561	561
Pompoota . . . . .	..	..	..	..	425	425
Cowirra . . . . .	..	..	..	..	571	571
Jervois . . . . .	..	..	..	..	3,688	3,688
<i>Total, Irrigation Areas .</i>	<i>16,293</i>	<i>4,399</i>	<i>7,492</i>	<i>..</i>	<i>8,931</i>	<i>37,115</i>
Renmark Irrigation Trust . .	5,550	1,904	1,651	136	125	9,366
Private landowners . . . . .	6,425	16,676		35,925	33,250	92,276
<b>Total, 1966-67 . . . . .</b>	<b>28,268</b>	<b>32,122</b>		<b>36,061</b>	<b>42,306</b>	<b>138,757</b>
1965-66 . . . . .	28,850	31,089		27,302	41,594	128,835
1964-65 . . . . .	28,286	30,094		28,795	35,964	123,139
1963-64 . . . . .	27,954	28,787		38,193	22,936	117,870
1962-63 . . . . .	27,384	26,876		36,745	21,808	112,813

(a) Includes fodder and fallow land.



### Water supply schemes

*Adelaide Metropolitan Water Supply.* Adelaide and surrounding areas of development including Elizabeth derive their water from eight reservoirs in the nearby Mount Lofty Ranges and by means of pumping stations and a pipeline from the Murray River at Mannum. The reservoirs have a storage capacity of 97,400 acre feet and the pipeline has a capacity of 88,000 acre feet a year. The consumption for the whole area for the year 1966-67 was 102,900 acre feet, equivalent to a consumption of 100 imperial gallons per head per day. The capital cost to 30 June 1967 was \$110,276,000.

*Country reticulated supplies.* Areas extending to a distance of 90 miles north of Adelaide are supplied from the Warren, Barossa and South Para Reservoirs (50,350 acre feet) in the Barossa Ranges. Supplies to these areas are supplemented by River Murray water delivered into Warren Reservoir through a branch from the Mannum-Adelaide pipeline. A pipeline to pump water from the River Murray at Swan Reach directly into the Warren Trunk Main at a point near Stockwell is at present under construction. Agricultural towns and areas further north are supplied from Beetaloo, Bundaleer and Baroota Reservoirs, and the Morgan-Whyalla Pipeline. The original 223-mile pipeline from Morgan to Whyalla and a second and larger pipeline completed in 1966 are at present able to carry 30,000 acre feet of water a year from the River Murray. The ultimate designed capacity of the two pipelines is 61,000 acre feet per year. A large part of Eyre Peninsula is supplied, through the 240-mile Tod River Main and the 104-mile East Coast Main, with water from the Tod River Reservoir (9,160 acre feet), the sand beds of the Uley-Wanilla Basin, the Lincoln Basin, and Poldia Basin. Along the Murray River all towns are supplied from the river. Water from the river is also reticulated through adjacent farmlands for up to 30 miles, and a pipeline currently being extended from Tailem Bend to Keith will provide the means of reticulating Murray water to numerous towns and a large area of farmlands in the upper south-east. Surface and underground resources have been developed to supply most rural centres not covered by the larger schemes. Water conservation and distribution works in country districts to 30 June 1967 have cost \$125,346,000 (exclusive of river control and irrigation works on the Murray River) and contain 7,903 miles of water mains.

### Underground water

Underground water supplies in South Australia come under the supervision of the Department of Mines, which has explored for and developed groundwater supplies in South Australia for many years. This search has involved geological surveys throughout much of the State, supported by drilling operations carried out by departmental drilling plants.

By virtue of the Underground Waters Preservation Act, 1959-1966, the Department of Mines is empowered to exercise control over water boring operations and groundwater usage in 'defined areas'. There are at present two such areas, the North Adelaide Plains and the Kingston-Beachport area in the south-east of the State.

Results of groundwater surveys are published from time to time as Bulletins or Reports of Investigation of the Department of Mines. The *Groundwater Handbook*, published in 1959, outlines the basic principles controlling the occurrence of groundwater and the methods of drilling for, and development of, groundwater supplies.

In the north-east of the State, the deepest section of the Great Artesian Basin is not extensively developed because development costs are high in proportion to land utilisation capacity. Deep boreholes have been drilled by the Government to provide water along stock routes, and pressure waters have been utilised around the basin margin. Waters from the South Australian section of the Great Artesian Basin are generally suitable only for stock use because of their salt content. The marginal waters occur at comparatively shallow depth, as at Maree township, where the artesian bore is 575 feet deep. In addition to pressure waters, non-pressure waters are sometimes obtainable at shallower depths and these provide pastoralists with stock water supplies which can be readily and economically developed.

Usage of groundwater of the Murray Basin has allowed development of the Murray-Mallee country and the south-east of the State. Mount Gambier draws its water supply from the Blue Lake, which is fed from the Basin, and many other townships obtain their water supplies from boreholes.

About 100 boreholes tap an artesian aquifer in the Kingston-Beachport area, where flow rates have exceeded 50,000 gallons per hour in some areas. This water has been extensively used for flood irrigation on improved pastures. Intensive development of the artesian aquifers in this area has resulted in falling flow rates and water levels over the past few years, and it has been found necessary to declare this area a 'defined area' in the terms of the Underground Waters Preservation Act, 1959-1966.

On Eyre Peninsula, the Uley-Wanilla Basin has been a source of groundwater since 1948, but by 1963 the water level had lowered critically, and pumping was suspended until 1966. The Lincoln Basin is now fully developed, yielding up to 20 million gallons per week, and providing water for the

town of Port Lincoln since 1960. Development of the Polda 'aeolianite' aquifer began in 1962. This basin is centred 25 miles west of Lock. The present pumping plant has a capacity of 7 million gallons per week. The water is reticulated to towns and farming properties on the Upper Eyre Peninsula. Large diameter boreholes are each capable of yielding 20,000 gallons per hour. Investigations of the aeolianite aquifer are currently being undertaken in County Musgrave, to the west of the Polda area. Investigations of the South Uley Basin have been completed; one borehole yielded 100,000 gallons per hour, but a safe yield of 22,500 gallons per hour was recommended to safeguard against aquifer depletion.

Pastoralists, farmers, market gardeners, and others have been assisted with advice on drilling, and the Department of Mines maintains and operates 24 drilling plants, which to date have developed an underground water supply potential in excess of 150 million gallons a day throughout the State. The whole of the Murray River Basin has been examined critically to ascertain the extent of land which could be used for lucerne, and considerable tracts of previously undeveloped country in the upper south-east Yorke Peninsula have been found to have usable water and have been opened up.

#### **Farm water schemes**

The Department of Mines gives assistance to individual farmers in the provision of supplies from underground sources, and the Department of Agriculture provides an advisory service on water conservation and irrigation designs, on farms, and on the suitability of underground water for irrigation and stock purposes. In addition, a great part of the farming areas is supplied with water under pressure from the extensive distribution systems connected to various reservoirs and the Murray River.

#### **South-eastern drainage**

In the south-east of South Australia it has been necessary to construct drainage schemes to dispose of surplus water from areas where a series of valleys or flats is separated by low ranges, parallel to the coastline, which prevent natural drainage. The Millicent Drainage System, completed in 1885, reclaimed 100,000 acres. The South-Eastern Drainage Area System, which is controlled by the South-Eastern Drainage Board, comprises drains constructed by the Government at national cost, plus those undertaken by the Government in co-operation with the landholders. The area is bounded on the east by the State boundary, and on the west by the sea coast. It extends from about 55 miles north of Kingston, southerly to near Millicent and Kalangadoo. Up to 1948 about 430 miles of drains had been provided at a cost of \$1,441,752. These were of a developmental nature intended more to promote the rapid removal of floodwaters than to provide a complete system of drainage. Since 1948 the complete drainage of the Biscuit, Reedy Creek and Avenue Flats in the Western Division has been in progress. The southern section of 260,000 acres, which involved the excavation of 8,100,000 cubic yards and the provision of 343 miles of new or enlarged drains, has been completed. Work on the northern section of 140,000 acres is virtually complete with the construction of 85 miles of drains which involved the excavation of 2,989,880 cubic yards of material. In addition, work is in hand for the drainage of 727,000 acres of land in the Eastern Division of the south-east, situated east of Bakers Range, and extending from near Kalangadoo to north of Naracoorte. Part of the first stage of this work provided for the construction of a main diversion drain (consisting of the enlargement of an existing drain for a distance of 24 miles and the excavation of 22 miles of new drain) from Beachport to Struan. The work to date has required the excavation of 6,329,600 cubic yards of material; the total length of the diversion drain is 46 miles. Work is proceeding on the internal drainage of the area, and 267,200 cubic yards of excavation have been carried out in constructing 9½ miles of new drains and enlarging existing drains. The capital cost of drainage in the South-Eastern Drainage Area System to 30 June 1967 was \$17,128,300, and the length of drains constructed was 835 miles. An extensive system of private drains (many of which are connected to the drains constructed under Government authority) also exists in the south-east of the State.

#### **Murray River Irrigation District**

Excess waters from the irrigation of orchards in the Murray River Irrigation Districts are building up a perched water table, which is rising to the levels of the tree root system. Investigations have proved that adequate drainage can be obtained in the underlying limestone aquifer. The building up of groundwater pressures due to drainage in these aquifers is being studied, as the outflow of saline waters into the Murray River surface waters must be prevented.

### **Western Australia**

Brief particulars of the climatic conditions in Western Australia are given on page 1133 of Year Book No. 37. (See also the chapter *Physical Geography and Climate* of this issue.)

### Administration

The Minister for Water Supply, Sewerage and Drainage administers the departmental irrigation schemes under the *Rights in Water and Irrigation Act, 1914-1964*. He is advised by an Irrigation Commission representing the local irrigationists and governmental, technical and financial branches. He also administers, under the *Country Areas Water Supply Act, 1947-1964*, the water supplies to 216 towns and 4,200,000 acres of reticulated farmland. As Minister for Works he controls minor non-revenue producing supplies to stock routes and a few mines and agricultural areas with their associated communities. Five town supplies are administered by local boards under the *Water Boards Act, 1904-1964*, which provides a large degree of autonomy with ultimate Ministerial control.

### Irrigation

Irrigation schemes have been established by the Government on the coastal plain south of Perth in the Waroona, Harvey and Collie River Irrigation Districts between Waroona and Dardanup, the water being channelled from dams in the adjacent Darling Range.

Logue Brook Dam with a capacity of 19,717 acre feet, Harvey Weir (6,495 acre feet) and Stirling Dam (46,191 acre feet) supply the Harvey Irrigation District, the rated area of which is 13,290 acres. The Harvey District links up with the Waroona Irrigation District, which is served by Waroona Dam (12,105 acre feet), Drakes Brook Dam (1,855 acre feet) and Samson Brook Dam (7,437 acre feet) and comprises a rated area of 3,060 acres. Wellington Dam on the Collie River with a capacity of 150,107 acre feet serves an area of 10,870 rated acres in the Collie River Irrigation District. Pastures for cattle comprise 89 per cent of water usage in these districts.

During the past thirty years a centre of tropical agriculture has been developed at Carnarvon, near the mouth of the Gascoyne River. Private pumping from sands of the Gascoyne River is the principal source of irrigation water for the 158 plantations. Because of the high risk of drawing in surrounding saline ground waters by over-pumping, the usage of water by the planters is controlled strictly by the Government. The Government is developing up-river sources and delivers water by pipeline to 23 plantations in the district. Bananas for the Perth market and fruit and vegetables for the Perth and Adelaide markets are the principal crops. A tropical research station is maintained at Carnarvon by the Department of Agriculture.

A project has been embarked upon to provide water supplies for irrigation in the area traversed by the Ord River in the Kimberley Division. The project provides for the eventual development of an area of 178,000 acres of land agriculturally and topographically suitable for irrigation, and comprises four stages. The first stage is now complete with 30,000 acres of the district supplied from the Diversion Dam which holds 80,000 acre feet of water. Thirty farms averaging 660 acres each have been developed for cotton growing in addition to the original 2,400-acre pilot farm. The remaining stages envisage the construction of an earth and rock-fill structure storing 4.6 million acre feet of water (equivalent to approximately 1,250,000 million gallons), a distribution irrigation network to serve a further area of 148,000 acres, approximately one-third of which is located in the Northern Territory, and the construction of a hydro-electric power station at the site of the Main Dam.

On the Liveringa flood plain, water is diverted from the Fitzroy River through Uralla Creek to a natural storage of about 1,200 acre feet, which, together with a dam on Uralla Creek (4,600 acre feet), provides for irrigation at Camballin 65 miles south-east of Derby. Irrigated crops of rice and sorghum are grown in the area.

AREA OF LAND IRRIGATED: WESTERN AUSTRALIA, 1962-63 TO 1966-67  
(Acres)

Season	Vegetables	Fruit	Vineyards	Cotton	Other crops(a)	Pastures	Total
1962-63	9,375	9,588	924	(b)	4,447	27,167	51,501
1963-64	9,166	10,425	966	1,526	6,153	26,958	55,194
1964-65	9,379	11,710	1,081	5,496	5,259	30,110	63,035
1965-66	9,944	11,566	844	8,307	6,707	30,039	67,407
1966-67	9,770	11,704	795	11,892	4,676	31,790	70,627

(a) Includes fodder crops. (b) Not available for publication, included with Other crops.

### Country water supplies controlled by Department of Public Works and Water Supply

Since 1947 enlargement and extensions of the Goldfields and Agricultural Water Supply and the development of the Great Southern Towns Water Supply have been carried out, mainly in accordance with a project known as the Modified Comprehensive Scheme. Under this scheme water has been supplied to towns and farms in an area of 4.1 million acres in mixed farming (cereal

and sheep) districts of Western Australia. The modified scheme was completed in 1961 at a cost of \$20.6 million, of which the Commonwealth contributed \$10 million under the *Western Australia Grant (Water Supply) Act 1948*. A further request was made by the State Government in 1963 for a grant of \$10.5 million representing half the estimated cost of proposed extensions which would increase by 3.7 million acres the area served by the scheme. The Commonwealth agreed to provide assistance in the form of an interest-bearing loan up to a maximum of the amount requested, advances to be made during a period of eight years commencing 1965–66. Legislative authority for the loan is given by the *Western Australia (South-west Region Water Supplies) Agreement Act 1965*.

Mundaring Reservoir on the Helena River, 26 miles from Perth, is the source of water supplied to the Eastern Goldfields. It has a capacity of 62,435 acre feet and is connected to Kalgoorlie by a pipeline with extensions to towns and agricultural areas. At 30 June 1967 the Goldfields and Agricultural Water Supply was serving 116 towns and localities, and water was being reticulated to farms in an area of 4.8 million acres. The total length of pipelines was 4,029 miles and the number of services was 25,554. Consumption during 1966–67, including supplies drawn from local schemes and from the Metropolitan Water Supply, was 2,974 million gallons.

The Great Southern Towns Water Supply pipes water from Wellington Dam to towns on the Great Southern Railway from Brookton to Katanning as well as a number of other towns. At 30 June 1967 the Supply was serving 24 towns, the total length of pipelines was 452 miles, and the number of services was 8,161. Consumption during 1966–67, including supplies drawn from local sources, was 840 million gallons.

One hundred and one local schemes supply water from stream flow, dams, tanks, wells, and bores, mainly to country towns. At 30 June 1967 the total length of water mains was 833 miles and the number of services was 23,745. During 1966–67 consumption was 2,061 million gallons.

#### **Other country water supplies**

As well as the schemes controlled by the Department of Public Works and Water Supply, there are five local Water Boards which draw supplies from stream flow, dams, wells, and bores. In addition, some local authorities supply water within their boundaries. The Forests Department and sawmilling companies operate schemes to supply water to their mill towns. Railways of the Commonwealth and State Governments make independent provision for supplies of water for their own purposes, although considerable additional quantities are consumed by the railways from other sources, such as those controlled by the Department of Public Works and Water Supply and the Metropolitan Water Supply, Sewerage and Drainage Board.

#### **Underground water**

Considerable use is made of underground water by individual farmers, pastoralists, market gardeners, etc., and it is estimated that over 50,000 bores are in use in the State. The quality of the water varies from place to place and much of it is too saline for irrigation or even stock. However, artesian aquifers are tapped to supply or augment the town supplies of Perth, Bunbury, Busselton, Eaton, and Denham, and non-pressure water is used in the public supplies of 37 other towns.

Considerable advances in the knowledge of aquifers and quality of water in the main sedimentary basins have been made as a result of extensive geological surveys by oil exploration companies and exploratory drilling by the Mines Department.

The Public Works Department and the Metropolitan Water Supply, Sewerage and Drainage Board are responsible for development work. The Geological Survey Branch of the Mines Department is responsible for all exploratory works, as well as for investigating and assessing the State's groundwater resources, advising local Government authorities, private industry and individuals on groundwater problems, and supervising departmental drilling.

Groundwater exploration projects are in progress or have recently been completed for the towns of Port Hedland, Exmouth, Geraldton, Morawa, Jurien Bay, Yunderup, Mandurah, Albany, Esperance and Watheroo, and additional supplies have been located for the Perth metropolitan area. A long-term systematic exploratory drilling programme in the Perth Basin is continuing.

### **Tasmania**

Brief particulars of the rainfall pattern in Tasmania are given on page 1136 of Year Book No. 37. (See also the chapter Physical Geography and Climate of this issue.)

#### **Main purposes of water conservation and utilisation**

Because of the generally more adequate rainfall in Tasmania, scarcity of water is not such a problem as it is in most mainland areas, though not all streams are permanently flowing. The only large scale conservation by reservoirs is for hydro-electric power generation, but there are

some moderately sized dams built by mining and industrial interests and by municipal authorities for town water supplies. 'Run of the river' schemes are quite adequate for assured supply in many municipalities.

Until a few years ago irrigated areas were negligible except for long established hop fields, but there is a rapidly expanding use of spray irrigation on orchards, pastures, potatoes, and beans. Until recent years there has been almost complete dependence on natural stream flows, but the need for some regulating storages has become apparent. Increasingly, farmers are constructing storages of their own, and the extension of this practice is foreseen as the logical solution in most areas, as valleys are narrow and steep sided. Single large reservoirs cannot economically serve large areas of suitable land, as nearly every valley is separated from others by pronounced hills, prohibiting the construction of cross-country channels.

Underground water suitable for stock, minor irrigation works and limited domestic use is exploited in the consolidated rocks of south-east, midlands and north-western Tasmania. In the midlands and south-east of the State nearly all groundwater is recovered from Permian and Triassic rocks. In the north-west, water is recovered from a variety of rocks ranging from Precambrian dolomites, quartzites and schists to Tertiary basalt. The Precambrian rocks are the highest yielding consolidated rocks. The basalts have been shown to be reliable aquifers yielding good quality water.

Some water is also obtained in the unconsolidated Tertiary sediments of the central north. These sediments, which are dominantly clay, yield fairly saline water. Water is thought to be contained in hair-line shrinkage fractures in weathered clays. Underground water investigations are carried out by the Mines Department and a drilling programme is currently in progress with the object of assessing the stratigraphy and reserves of the basins. Gravel zones between basalt flows in the north-west yield up to 5,000 gallons per hour. On King and Flinders Islands water of variable quality suitable for stock and limited domestic use is obtained from aeolian sands. The township of Currie on King Island obtains up to 200,000 gallons a day for domestic use from this source. The Palaeozoic mudstones and tertiary sediments of the north-east are being explored as a source of water.

Groundwater projects have been recently completed in the Cygnet district, and work is in progress in the Longford basin and the Coal River basin.

#### **Administration**

In Tasmania, water supply was once exclusively the responsibility of local government authorities, but two statutory authorities now operate bulk supply schemes, piping water for distribution by the local government authorities in the Hobart and Launceston regions, and directly to certain industrial consumers. The Rivers and Water Supply Commission is empowered to take water at streams and lakes, or to issue others with licences to do so; licensing covers supply to specific industries and municipalities as well as ordinary riparian rights. The Commission is concerned with drainage trusts' operations, river improvements (including repairs after flood damage), stream gauging, and its own regional water schemes.

The second body, the Metropolitan Water Board, has overall control of water supplies to the cities of Hobart and Glenorchy and the municipalities of Kingborough and Clarence; these authorities, however, are responsible for reticulation. The Board also controls a second scheme serving other southern municipalities. In the rest of the State, water supply is still completely a function of local government, subject to the approval of plans and finance by the Rivers and Water Supply Commission.

#### **Regional water schemes**

Four regional water schemes are in operation. The first draws water from the east bank of the River Derwent at Lawitta to provide domestic and industrial supplies in five southern municipalities, and the second, which increases existing supplies to Hobart and suburbs, pumps water from the west bank of the River Derwent at Lawitta. These two schemes are controlled by the Metropolitan Water Board. In addition, the State Government has constructed two other regional water schemes; the first, to serve the aluminium refinery at Bell Bay on the eastern bank of the River Tamar and to supply bulk water to several municipalities; the second, to supply water along the western bank of the Tamar. The two northern schemes are the responsibility of the Rivers and Water Supply Commission.

Potential sources capable of greater development without storage exist on the Derwent, South Esk, Huon, Lake, Mersey, and Forth Rivers. There is also a great reserve of untapped permanent streams in the western half of the State, which is largely unsettled. The State's largest rivers discharge in the west, but diversion to the eastern half of the watersheds is not regarded as practicable.

#### **Industrial water schemes**

Three principal industrial water schemes have been installed privately—for a paper mill near Lawitta on the Derwent River, for a paper mill at Burnie using water from the Emu River, and for a factory at Heybridge reticulating water from Chasm Creek. The State Government has constructed

some water schemes for use primarily for industrial purposes. These include the scheme serving the aluminium refinery at Bell Bay referred to above, a storage supplementing the summer flows of the Kermadie River for use by a wood-pulping plant at Geeveston, and the recently completed Prosser River Scheme which supplies water to a sodium alginate industry at Louisville near Orford and supplements the water supply of the township of Orford.

### Irrigation

There are no State irrigation projects at present, but the Rivers and Water Supply Commission is investigating the possibility of establishing several schemes, notably in the Cressy area, the Huon region, and the valleys at the Jordan and Coal rivers. The *Water Act 1957* provides for irrigation works to be undertaken by municipalities and by trusts constituted for the purpose, but no such works have been undertaken to date. With the exception of the Lawrenny estate at Ouse, which is the largest single area under irrigation in the State, and also the only formally constituted irrigation district, there are no extensive schemes utilising one common source of water supply in Tasmania. The larger proportion of the area under irrigation is watered by pumping systems.

AREA OF LAND IRRIGATED: TASMANIA, 1962-63 TO 1966-67  
(Acres)

Season	Vegetables	Fruit	Hops	Other crops(a)	Pastures	Total
1962-63 . . .	4,100	4,446	1,465	2,839	11,435	24,285
1963-64 . . .	6,319	5,933	1,463	4,162	15,693	33,570
1964-65 . . .	8,302	5,955	1,553	4,318	14,194	34,322
1965-66 . . .	12,994	7,241	1,524	5,786	17,651	45,196
1966-67 . . .	12,979	8,287	1,495	6,353	18,111	47,225

(a) Includes fodder and fallow land.

### Northern Territory

Some particulars of the climate and main topographical features of the Northern Territory are given on page 1138 of Year Book No. 37, and in this issue information on climatic conditions will be found in the chapter Physical Geography and Climate, and a brief outline of contour and physical characteristics in the chapter The Territories of Australia.

### Administration

Under the *Control of Waters Ordinance 1938-1965* of the Northern Territory, natural waters are vested in the Crown. Where a watercourse or lake forms a boundary of any land alienated by the Crown, the beds and banks are deemed to remain the property of the Crown (except in special cases) and the diversion of water is prohibited except under prescribed conditions. There is a Water Resources Branch of the Northern Territory Administration under the control of a Director. The functions of the branch include systematic stream gauging, collection of data on surface and underground water supplies, planning of water use for irrigation and town water supplies, and flood prevention and control.

Under the *Water Supplies Development Ordinance 1960-1963* the Water Resources Branch gives financial assistance to landholders for the development and improvement of water supplies on agricultural and pastoral leases. Another function of the branch, which is increasing in importance as it builds up a body of technical data and information about the Territory's water resources, is the dissemination of this knowledge by the provision of advice and technical assistance to professional drillers and to landholders.

### Underground water

The marked seasonal rainfall over the whole of the Northern Territory is one of the basic factors affecting the pastoral industry, which provides a large proportion of the Territory's income. Underground water supplies are of great importance in the Territory, where most of the cattle numbers are dependent on underground supplies for three to five months each year, because of the inadequacy of surface water during the dry season.

Rainfall is one of the factors controlling cattle numbers, but geological features, controlling both soils and the storage of underground water, are equally important. In the northern-most portion of the Territory, which receives from 25 to 60 inches of seasonal rainfall a year, surface water supplies are,

in general, adequate for the pastoral industry. Despite this, however, the area has a comparatively low carrying capacity for cattle, and the pastoral industry is concentrated more in inland areas where feed retains more nutritive value in winter, despite dry conditions. South from this well-watered northern-most portion, the Territory becomes progressively drier, with an average annual rainfall of only five inches at the margins of the Simpson Desert in the south-east corner. In the lower rainfall areas the search for potable underground water becomes exacting, but in the Ord-Victoria region and the Barkly Tablelands the best pastures are generally in areas where sub-surface conditions are suitable for the storage of underground water.

In the Ord-Victoria region the best grass lands overlie volcanic rocks and extend over some 10,000 square miles. Outcrops of sandstone, limestone and shale also occur in this area and underlie the volcanic rocks in most places. In general, these sedimentary rocks dip gently to the east, and sub-artesian conditions prevail. Underground water in this region is obtained from sandstone aquifers which yield supplies ranging up to 4,000 gallons an hour. Most of the bores are required in areas where the sediments are overlain by basalts; selection of bore sites is usually difficult. Supplies of shallow groundwater from joints, cracks and faults in the basalt are insignificant, and virtually all the bores obtain water from the sub-basalt sandstone aquifers. Successful bores in this area have ranged in depth from 200 feet to more than 900 feet. There are also small basins of younger sedimentary rocks in the region, some of which yield sub-artesian, and in places artesian, water and provide areas of good pastures.

The Barkly Tablelands, which extend into Western Queensland, overlie flat-lying limestone, sandstone and shale of the Barkly Basin. In most places underground water is under pressure but no flowing bores are known. Sandstones and beds of limestone with fractures and solution cavities provide a number of aquifers within the Basin. The hydraulic surface (to which pressure water will rise in bores) ranges between 500 and 600 feet above sea level, and adequate supplies for the watering of stock are available at depths ranging from 150 to 400 feet from the surface. The water from over 90 per cent of the bores is suitable for stock and over 50 per cent of it is suitable for human consumption. Investigations by the Commonwealth Bureau of Mineral Resources, Geology and Geophysics indicate that underground water supplies will be more than sufficient for the future development of the pastoral industry on the Tablelands.

In the Alice Springs district valuable pastures occur on a great variety of rock types, and from some of these very little underground water is available. Many shallow bores obtain water from alluvium near stream channels. There are also many successful bores in porous sands and limestone in Mesozoic and Cainozoic sedimentary basins and in some Upper Proterozoic and Palaeozoic limestones and sandstones. Small supplies of underground water are obtained from bores intersecting joint zones in metamorphic rocks and granite of Archaean age. However, except in areas close to recharge, the water quality varies from moderate to poor.

The Water Resources Branch of the Northern Territory Administration has intensified research aimed at increasing the water supplies for Alice Springs and Darwin. Bores into the Palaeozoic Mereenie sandstone, twelve miles south of Alice Springs, have intersected sub-artesian aquifers at depths between 500 and 1,000 feet, and water from these bores is now the main source for the town supply. Promising finds of water have also been made in the Ti Tree and Dulcie basins to the north of Alice Springs, with possible potential for irrigation use. Tennant Creek obtains its water supply from two small sedimentary basins located respectively nine miles and sixteen miles south of the town, known as the Cabbage Gum and Kelly Well basins, which currently supply more than 1,000,000 gallons per week to the town reticulation. High yielding dolomite aquifers of lower Proterozoic age in the area sixteen miles south of Darwin have been developed and are augmenting the Darwin water supply.

At 30 June 1967, 5,478 bores and wells were registered in the Territory. Of these, 3,504 were for pastoral use, 314 were for agricultural use, 388 served town and domestic water supplies, 34 were in use on mining fields, 621 were investigation bores, 403 were Government established stock route bores, and 214 were classified under other uses. These include successful bores which have collapsed, and bores which were unsuccessful owing to drilling difficulties, or to insufficient quantity or poor quality of underground water.

### **Irrigation**

There are no large water conservation projects in the Territory with the exception of the Manton Dam (12,700 acre feet), which serves Darwin with a reticulated supply. Some water is drawn from the rising main between the Manton Dam and Darwin for irrigation purposes, but the trend is for properties in this area to develop their own water supplies, either by boring or by pumping from watercourses or lakes. Investigations for additional water to augment Darwin's water supply are proceeding on the Darwin River, and in the McMinns Lagoon area.

The hydrological investigations required in the Northern Territory as part of the National Water Resources Assessment Programme are being carried out by the Water Resources Branch. A network of bore gauging stations is being built and operated for this purpose, and the results will help development planning as well as providing data for environmental scientists. In particular areas of development where water supply or irrigation proposals require surface water data, supplementary gauging stations are being built to obtain this information. Since the start of stream-gauging activity in the Northern Territory the Water Resources Branch has established 273 gauging stations. As at 1 June 1967, the Northern Territory stream-gauging network comprised 191 operating stations; of these, 125 were base stations for measuring stream flow and 66 were supplementary stations.

Agricultural activity in the Territory is not extensive, being confined to the Darwin, Adelaide River, Coomalie Creek, Daly River, Katherine River, and Alice Springs areas, with only small acreages being utilised. In the Territory 45 licences to divert water from streams have been issued. The total licensed area for irrigation is 2,652 acres, but the actual area irrigated is less than this. There are also a number of farms irrigated from bore supplies, particularly in the Alice Springs area. Purposes for which irrigation water is used include the growing of fruit, vegetables, crops and pastures, and also dairying and mixed farming. Some 300 acres of irrigated rice were grown commercially on the Adelaide River in the 1964-65 season in a pilot farm project.

The Northern Territory Administration and the Commonwealth Scientific and Industrial Research Organization are investigating the potentialities of the Katherine area for agricultural production. In this area there are fifteen licensed stream diversions covering an area of 460 acres, and investigations are continuing into the possibility of using the Adelaide and Daly Rivers for irrigation. A dam site is under investigation at Adelaide River Township. The Daly River appears promising for irrigation purposes as it has a minimum dry season flow of 275 cusecs and a reliable annual flow, without regulation, of 300,000 acre feet. The mean annual flow of the river is more than 2,000,000 acre feet per year. Extensive surveys are being carried out on the coastal plains in the Daly area, including details of topography, hydrology, and soils. Surveys of a dam site at Nancarrow are being undertaken.

### Papua and New Guinea

Rainfall in Papua and New Guinea varies considerably from approximately 240 inches near Linden-hafen (New Britain) and 230 inches at Kikori (Papua) to about 70 inches near Marienburg (New Guinea) and 40 inches at Port Moresby (Papua). For a general description of these territories see the chapter The Territories of Australia of this Year Book. Irrigation has not been developed on any organised basis owing to the availability of high rainfall and the nature of agricultural development.

The Territory of Papua and New Guinea is well served with large rivers deriving their water from heavy tropical rains and high mountains which rise to over 14,000 feet, but complete data regarding water resources are not available. During 1966-67 the Commonwealth Government continued to implement the policy of establishing a national network of stream-gauging stations which can be used in assessing the water resources of the Territory, while continuing to collect hydrological data for specified proposed hydro-electric projects.

The largest rivers in the Territory include the Fly (700 miles long, situated in the western division of Papua), the Sepik (700 miles), the Ramu (450 miles), the Purari (300 miles), and the Markham (110 miles). The main water conservation interest in New Guinea at present is the hydro-electric potential, which is extensive. An outline of schemes at present in operation is given in Chapter 27, Electric Power Generation and Distribution.





## DROUGHTS IN AUSTRALIA\*

### Droughts

The following discussion of droughts in Australia is taken mainly from two Bureau of Meteorology publications: *Droughts in Australia*, by J. C. Foley (Bulletin No. 43, 1957); and *Rainfall Deciles as Drought Indicators*, by W. J. Gibbs and J. V. Maher (Bulletin No. 48, 1967). Droughts which were confined to comparatively small areas of Australia are not mentioned below but are treated in detail in these Bureau of Meteorology publications, which also give comprehensive rainfall data and detailed descriptions of data treatment and analysis methods.

#### What is drought?

There is no universally agreed definition of drought, but a definition which may be widely accepted is 'severe water shortage'. This definition begs the question somewhat, as it requires a further definition of 'shortage' or alternatively the specification of the amount of water needed. Water need depends on the types and numbers of animal and plant communities using the water, so that the concept of drought cannot be divorced from the use to which water is put.

Drought is in many ways a relative term. Crops, vegetation, industries, and land use in different parts of the world are more or less adjusted to the moisture or water normally available. A rainless period that would constitute a drought in one region may not be unusual or injurious in another. Drought is also a relative term in a given area, since conditions which a market gardener would regard as drought may cause a pastoralist no concern.

The vulnerability of a nation's economy to drought changes with time. Increased development, particularly in the spheres of transport and water conservation, and diversification of the economy may mitigate the serious adverse effects of extended dry periods which in earlier years would have been regarded as disastrous.

Development does not always act to decrease the effects of drought. Population increases and the establishment of secondary industries create an increased water need and give rise to problems of combating drought in new areas and sectors of the economy.

Water need is thus a function of time and place and depends on many factors. The nature and intensity of land and water use, transport facilities, water storage capacity, number of stock involved, and the development of drought resistance in plants are among the factors which affect water need and the impact of drought on primary and secondary industry and the community in general. The only objective method of defining drought is to specify minimum water needs for a particular purpose and this can then be compared with water available.

#### Rainfall as a drought index

The natural availability of water depends on rainfall, although other effects such as evaporation, wasteful use of water, moisture storage in the soil, and storage of water in artesian basins or reservoirs must be taken into account. Nevertheless rainfall is the best single index of water availability and monthly rainfall totals are sufficient for most studies of the occurrence, spread, and breaking of droughts.

Thus, if the minimum water need for a given period of time is met by rainfall of a given amount 'x', drought may be said to occur whenever the rainfall during that time interval is less than 'x', and the severity of drought linked to the amount by which rainfall falls short of the requirement.

Rainfall has several advantages over other criteria, such as the effects on plants and animals, as a basis for study. Rainfall data are numerical, and methods for their observation, collection, and processing have been substantially unchanged over the past 100 years. The data are therefore amenable to statistical analysis by electronic computers. They also provide uniformity, reliability, and completeness of statistics to a degree that is impossible to obtain if other criteria are used as a basis for study.

Effective comparisons, based on rainfall data, can be made between droughts occurring at various stages in the development of the Australian economy, and meaningful conclusions can be drawn regarding the probability of future drought occurrence, severity, and extent.

Rainfall records are available for more than 10,000 stations in Australia, of which about 7,000 are currently in operation. The length of record varies greatly; at some stations records have been taken for more than 100 years and fifty per cent of stations have records exceeding 70 years.

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\* The following article on Droughts in Australia was specially prepared for this issue of the Year Book by the Director of the Commonwealth Bureau of Meteorology.

### Drought study

Scientific study of the areal extent of drought and its frequency of occurrence is essential for the proper planning of agricultural, pastoral, industrial, and economic activities. Such studies can provide an assessment of drought risk and assist the planning of short-term action (such as declaration of drought occurrence and choice of areas to which stock might be moved).

An additional, useful field of research is the determination of the water needs of crops, animals, industry, and communities. This information is basic to any drought study and is essential if drought is to be defined in a meaningful way.

Surveys of the impact of drought on the Australian economy at various stages of its development are not only of historical interest. They provide information which can enable planners to profit from past experience and to seek remedies for circumstances which aggravated the disastrous effects of previous droughts.

Foley (1957) used reports of conditions of crops and livestock published in official bulletins, journals, and newspapers, together with rainfall analyses, to produce a comprehensive historical review of Australian rainfall and the effects of drought on primary industry. This work has been continued by other workers in the Bureau of Meteorology. The Bureau bases its current drought research programme on the statistical analysis of rainfall, but this has not been done to the exclusion of other factors significant in drought analysis and study.

### Drought prediction

For many years there has been great interest in the variations of rainfall in time. Investigators have sought for any regularly recurring cycles of rainfall patterns, and for any tendency for dry and wet periods to persist. However, as yet no reliable method for the long-range forecasting of rainfall and drought has been devised.

Many writers have reported cycles with various periods, but their conclusions have been unable to withstand the test of critical statistical analysis. Further studies in this direction are planned by the Bureau of Meteorology, concentrating on very low rainfalls and using the latest statistical techniques combined with the calculation and analysis facilities of large, high-speed computers.

There have been numerous studies of persistence effects in meteorology. Maher (1966) has found a persistence effect, which is statistically significant, in day to day rainfall at a number of Australian rainfall stations. An examination of the records of thirty-one stations led him to conclude that the average lengths of run of monthly rainfall equal to or less than the median value were significantly greater than would be expected in a random series.

### Treatment of data

Rainfall, unlike many other meteorological elements such as temperature and pressure, is non-continuous in time and space. As a result the statistical description of rainfall occurrence is quite complex.

The best known and most commonly used rainfall statistic is the arithmetic mean (often called the 'average' or 'normal'). Monthly means are computed by adding the rainfalls in a given month over a long period and dividing the total by the number of years of record.

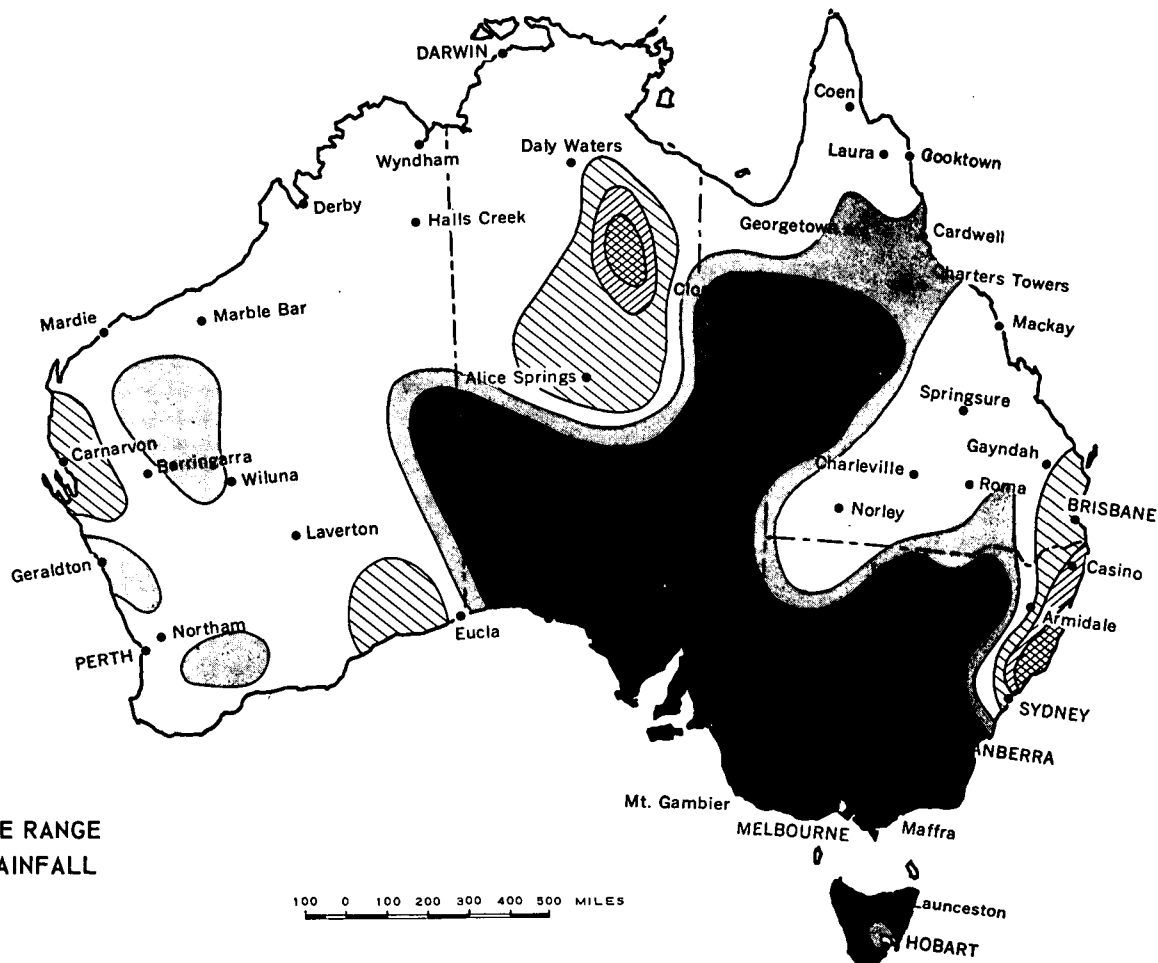
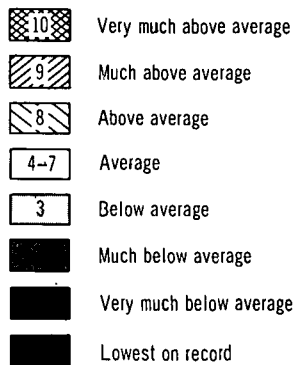
Another statistic is the 'median' or '50 per cent' value, which is the value exceeded by half the occurrences and not exceeded by the other half. With many meteorological quantities the mean or median values are equal or very close, and the use of 'average' for either value causes no confusion. Although this is often the case with annual rainfall, for shorter periods (three months or less) the mean can differ significantly from the median.

This is exemplified by January rainfalls for Sydney, Melbourne and Alice Springs, and July rainfall for Halls Creek.

MONTHLY RAINFALLS  
(Inches)

<i>Place</i>	<i>Month</i>	<i>Mean</i>	<i>Median</i>
Sydney . . .	January . . .	3.73	2.78
Melbourne . . .	January . . .	1.89	1.43
Alice Springs . . .	January . . .	1.54	0.61
Halls Creek . . .	July . . .	0.25	Nil

# ANNUAL RAINFALL



DISTRIBUTION OF DECILE RANGE  
NUMBERS OF ANNUAL RAINFALL

1967

100 0 100 200 300 400 500 MILES



In these cases the mean value is not the same as the median value. At Alice Springs the January mean of 1.54 inches is equalled or exceeded in only about 35 per cent of years, and at Halls Creek the July mean of 0.25 inches is equalled or exceeded in about 20 per cent of years. In fact, at Halls Creek July rainfall is nil in almost 70 per cent of years, although the mean is 0.25 inches. For this reason it is preferable to describe monthly, and longer periods up to annual, rainfalls by the median or 50 per cent value rather than the mean.

To obtain some idea of the 'spread' or variability of monthly rainfall, the amount which is not exceeded in the driest 10 per cent of years (the first decile) and that exceeded in the wettest 10 per cent of years (the ninth decile) are often quoted.

Decile values divide each 10 per cent of occurrences from the driest to the wettest years and give some indication of rainfall variability. The Bureau of Meteorology has adopted decile ranges for drought studies. The first decile range (decile range 1) is the range of the driest 10 per cent of rainfalls, the second decile range is the next driest 10 per cent and so on. The middle 40 per cent of rainfalls (decile ranges 4-7) can be considered as 'average', although in some cases the arithmetic mean may lie outside this range.

### Decile maps

Maps for each year from 1885 to 1965 showing the decile ranges in which annual rainfall occurred are given in *Rainfall Deciles as Drought Indicators*, together with maps showing the rainfall amount corresponding to the first, fifth and ninth deciles. The yearly maps show a measure of rainfall anomaly rather than the actual amount of rainfall and this assists rapid assessment of the rainfall situation over areas where the mean and median amounts of rainfall differ greatly. The map opposite showing the distribution of decile range numbers of 1967 annual rainfall is an example of a decile map.

The following terminology is used in this map and in Bureau of Meteorology publications such as the *Monthly Rainfall Review*, *Seasonal Summary* and *Statement on Drought*.

<i>Extent of range</i>	<i>Formal title</i>	<i>Descriptive name</i>
Lowest 10 per cent of monthly rainfalls	Decile range 1	Very much below 'average'
Next lowest 10 per cent	Decile range 2	Much below 'average'
Next lowest 10 per cent	Decile range 3	Below 'average'
Middle 40 per cent of monthly rainfalls	Decile ranges 4-7	'Average'
Next higher 10 per cent	Decile range 8	Above 'average'
Next higher 10 per cent	Decile range 9	Much above 'average'
Highest 10 per cent of monthly rainfalls	Decile range 10	Very much above 'average'

The map opposite clearly depicts abnormally low rainfalls during 1967 over South Australia, Victoria, south-western Queensland, and much of Tasmania and New South Wales. The 1967 annual rainfall was lower than any annual total previously recorded at most observing stations in the area described as 'lowest on record' in the map. Considered in combination with similar maps for previous years, this map provides an indication of the extent and severity of drought in 1967.

### Assessment of drought areas

Areas on annual decile maps where rainfalls were in the first decile range can be used as an arbitrary and approximate assessment of drought areas, although this index has the following limitations:

- (a) rainfall totals are for calendar years, and droughts occur over periods lasting from one month to a number of years;
- (b) in the northern half of Australia the 'water year' does not coincide with the calendar year; and
- (c) drought occurrence depends on land use as well as rainfall.

This index of drought gives a good correspondence with the occurrence of major droughts as given by Foley (1957) and based on newspaper and other reports as well as rainfall statistics. However, *the index gives only an approximate indication of drought risk and the manner in which drought areas cover the continent*. In some areas drought may occur or continue with rainfall in the second, third, or higher decile ranges.

**Drought frequency**

Two of the conclusions reached by Gibbs and Maher from their study of rainfall decile maps were as follows.

- (a) It is most unlikely that the whole of the Australian continent will ever be drought-affected at any one time.
- (b) If 'drought' is defined as the occurrence of a year with rainfall in the first decile range, then for 20 years in every 100 the whole of Australia is likely to be free of major droughts. The frequency of completely 'drought' free conditions in a given State might be expected to range from 46 in 100 years in Western Australia to 74 in 100 in Tasmania. 'Drought' affecting half the Australian continent might be expected twice in 100 years.

**History of drought in Australia to 1957**

Foley (1957) used reports of conditions of crops and livestock, published in official bulletins or in newspapers, together with rainfall analyses to determine the history of drought in Australia. Foley gives a comprehensive review for each Australian State and a briefer discussion for the Commonwealth as a whole. A summary taken from Foley's review is given by Gibbs and Maher (1967) and supplemented by later reports for the period 1955 to 1966. Readers interested in the detailed history of drought in Australia are referred to these works. An earlier account of droughts in Australia, derived from Foley's review, will be found in a special article in Year Book No. 45, pages 51-6.

The following list of widespread droughts experienced in Australia since rainfall records commenced is taken from Foley's review. The drought period 1958 to 1968, too recent to be included by Foley, has been treated separately because of its topical interest.

**MAJOR DROUGHTS TO 1957, AND REGIONS MAINLY AFFECTED**

- |                               |  |
|-------------------------------|--|
| <i>1864 to 1866 (or 1868)</i> | The little data available indicate that this drought was rather severe in Victoria, South Australia, New South Wales, and Queensland, and also in Western Australia.   |
| <i>1880 to 1886</i>           | Victoria (north and Gippsland), New South Wales (mainly northern wheat belt, northern tablelands and south coast), Queensland (1881 to 1886 in south-east with breaks, otherwise mainly in coastal areas, the central highlands and central interior in 1883 to 1886), and South Australia (1884 to 1886 mainly in agricultural areas).  |
| <i>1888</i>                   | Victoria (north and Gippsland), Tasmania (1887 to 1889 in the south), New South Wales, Queensland (1888 to 1889), South Australia, Western Australia (central agricultural areas).   |
| <i>1895 to 1903</i>           | Practically the whole of Australia, but most persistent on the coast of Queensland, in inland areas of New South Wales, in South Australia, and in central Australia.<br><br>This was the most widespread and severe drought in the history of Australia. Sheep numbers which had reached more than 100 million were reduced by approximately half and cattle numbers by more than 40 per cent. Average wheat yields exceeded 8 bushels per acre in only one year of the nine and dropped to 2.4 bushels per acre in 1902. |
| <i>1911 to 1916</i>           | Victoria (1913 to 1915 in north and west), Tasmania (1913 to 1915), New South Wales, particularly inland areas, Queensland, Northern Territory (mainly in the Tennant Creek-Alexandria Downs area), South Australia (some breaks in agricultural areas), and Western Australia (1910 to 1914).   |
| <i>1918 to 1920</i>           | Queensland, New South Wales, South Australia, Northern Territory (Darwin-Daly Waters area and central Australia), Western Australia (Fortescue area), Victoria, and Tasmania.  |
| <i>1939 to 1945</i>           | New South Wales (severe on the coast), South Australia (persistent in pastoral areas), Queensland, Tasmania, also (more particularly in 1940 and 1944 to 1945) in Western Australia, Victoria, and central Australia, Tennant Creek-Alexandria Downs area in 1943 to 1945.   |

**DROUGHTS OF A LESSER DEGREE OF SEVERITY, AND AREAS AFFECTED**

- 1922 to 1923 and 1926 to 1929* Queensland (severe), New South Wales (intermittent), Western Australia (more particularly Fortescue—1922 to 1929), South Australia (mainly pastoral areas), central Australia (1924 to 1929), Northern Territory (1926 to 1929), Victoria (1925 to 1927, severe in the north 1925 to 1929), Tasmania (1925 to 1927, not continuous).
- 1935 to 1938* Western Australia (severe in pastoral and northern agricultural areas), Queensland (breaks on the coast), Victoria (north and Gippsland), New South Wales (not continuous except on the northern tablelands), Northern Territory, South Australia (1935 to 1936 in pastoral areas and 1938 in agricultural areas), Northern Tasmania (1935 to 1937, not continuous).
- 1946 to 1949* Queensland (central coast and highlands and central interior, elsewhere mainly in 1946), Northern Territory, New South Wales (mainly in 1946 to 1947), Western Australia (more particularly in central agricultural areas in 1947 to 1950), and northern Tasmania (1948 to 1949).
- 1951 to 1952* Queensland and Northern Territory, Western Australia, especially pastoral areas (1951 to 1954).

**Drought period 1958 to 1968**

This drought was one of the most widespread in recorded Australian history and probably second only to the 1895 to 1903 drought in severity.

For more than a decade from 1957, drought was consistently in the news and frequently made headlines from 1964 onwards. This is treated as one major drought period here, but could, perhaps, be subdivided into two which overlapped, both in time and area. Central Australia and vast areas of adjacent Queensland, South Australia, Western Australia, New South Wales, and northern Australia were affected, with varying intensity, between 1957 and 1966, and south-eastern Australia experienced a severe drought between 1964 and 1968.

Rainfall deficits were not serious in the Northern Territory in 1957, but the failure of rains in 1958 led to widespread drought, which also extended to the Kimberley districts of Western Australia. The position was aggravated by a very dry year in 1961, by which time the drought had extended over the greater part of the continent. Further extended dry periods, culminating in abnormally low rainfalls in 1964 to 1966, over central Australia and parts of New South Wales and Queensland, produced one of the most severe droughts recorded in 170 years of European settlement in Australia.

Crops and pastures failed, sheep and cattle numbers were heavily reduced, and water storages, particularly in New South Wales, were so reduced that irrigation had to be restricted.

Rains in 1966 broke the drought in central Australia, and the position also improved over much of South Australia and New South Wales during 1966, but deteriorated again in 1967.

South Australia had experienced drought of varying severity from 1957, but Victoria was relatively unaffected until 1965. However, by the end of 1967 sustained dry weather had produced an extremely severe drought over southern and western parts of New South Wales, and most of South Australia, Tasmania, Victoria, and south-western Queensland. The map facing page 993 gives a good indication of the area affected. The 1967 rainfall at many places in south-eastern Australia was the lowest annual rainfall on record.

The serious adverse effects on primary industry produced by this drought were in many ways similar to those produced by others listed on page 994; however, several factors combined to reduce the economic loss in the pastoral sphere. The most significant of these were the greatly reduced numbers of rabbits compared with earlier years, the availability of transport which facilitated fodder supply and permitted a form of nomadic grazing, and the increased meat-work activities during the period.

However, attention was focused on the vulnerability to drought of irrigation areas, secondary industries, and centres of population. Water storages and river flows dropped to very low levels, in some cases the lowest on record, resulting in restrictions on the use of water which affected irrigation supplies and some spheres of secondary industry. Water consumption was also heavily restricted at some centres, including Canberra and the Melbourne metropolitan area. Resulting side effects on small businesses and industries were numerous and far reaching.



Excellent rain in the autumn of 1968 brought the drought over south-eastern Australia to an end in most respects. The autumn rain did not, however, replenish the depleted water storages sufficiently to provide satisfactorily against an early return of dry weather. This illustrates the fact that the 'break' of a drought is as difficult to define as drought itself, since the amount of water necessary to enable pastures to recover after a long drought may be very different from that required to provide satisfactory storage for irrigation, industrial, and other consumer needs.

### Conclusions

The history of drought in Australia reveals that during the last 100 years there have been at least eight major droughts affecting the greater part of the continent and several other droughts causing severe losses in restricted areas. The droughts of 1895 to 1903 and 1958 to 1968 were the most disastrous in their effects on primary production.

Large and irregular variations in rainfall will continue to occur in Australia, and it is quite possible that rainfall deficiencies at some time in the future will exceed any experienced in the last 100 years.

Drought studies and forecasting research are continuing. These will facilitate the planning of measures to combat the effects of drought, but there is no immediate prospect of reliable long term prediction of rainfall.

Drought is part of the Australian scene, and it will continue to be necessary to study and implement measures to counteract its adverse effects and reduce the vulnerability of the economy. These measures include the conservation of fodder and water, the provision of adequate transport facilities for removal of stock, the supply of fodder and water to drought stricken areas, and research in many fields related to water, land, and fodder use.

### References

- |                                |       |      |   |
|--------------------------------|-------|------|---|
| FOLEY, J. C.                   | . . . | 1957 | Drought in Australia. Bulletin No. 43, Bureau of Meteorology, Melbourne.  |
| MAHER, J. V.                   | . . . | 1966 | Drought Assessment by Statistical Analysis of Rainfall. Proceedings of WMO Regional Seminar on Agrometeorology, Melbourne, Nov.-Dec. 1966. (Bureau of Meteorology. In press.) |
| GIBBS, W. J., and MAHER, J. V. |       | 1967 | Rainfall Deciles as Drought Indicators. Bulletin No. 48, Bureau of Meteorology, Melbourne.  |

## CHAPTER 23

### FORESTRY

For further details on subjects dealt with in this chapter *see* the annual bulletins *Non-Rural Primary Industries* and (for sawmills, etc. operations) *Manufacturing Industry*.

#### Source of statistics

Statistics relating to forestry are, in general, provided by the various authorities concerned with forestry administration. Particulars of forest reservations contained in this chapter have been collected by the Statisticians of the various States, mainly from information provided by the State forestry authorities. Other information on forested areas, together with certain other data, has been provided by the Commonwealth Forestry and Timber Bureau. Statistics of timber and by-products have been compiled from the annual factory collections undertaken by the Statisticians in the several States. Figures of production of gums, resins and tanning barks have been provided by the State forestry authorities. Data of imports and exports of forest products and timber and timber products have been compiled in the Commonwealth Bureau of Census and Statistics as part of the statistics of overseas trade. The figures shown relate, in general, to years ended 30 June.

#### Forestry in Australia

##### Objects of forestry

The main object of forestry authorities is to manage the forests of the country in a manner that will provide the maximum benefits, both direct and indirect. Direct benefits include the provision of essential commercial commodities such as structural timber, pulpwood, plywood, veneers, firewood, bark products, tars, oil, and resins. Indirect benefits include protection of soil and stock from wind and exposure, regulation of stream flow, provision of recreational facilities, and aesthetic effects. Forestry also aims at improving existing forests and woodlands by properly controlled exploitation, by protection from such destructive agencies as fire and insect attack, and by inducing regeneration where it is desirable. The provision of a partial tree cover on denuded lands where this cover is necessary for protective purposes, and a complete cover when the land is better under forest than under any other land use, are further aims of forestry.

##### General account of forests and timbers

The area of land in Australia suitable for the production of commercial timber as a primary crop is very small in comparison with the size of the continent. Broadleaved forests (hardwoods) cover 97 per cent of the total forested area, and approximately 94 per cent of the broadleaved forest area is occupied by eucalypts.

*Eucalypts.* The genus *Eucalyptus* is remarkable in that it includes over 600 species, ranging in size from the mighty forest giants, mountain ash (*E. regnans*) of Victoria and Tasmania, and karri (*E. diversicolor*) of Western Australia, down to the small mallee species which inhabit vast areas of the inland. The habitats range from the dry inland areas to the high mountain areas in the Australian Alps, from areas with the annual rainfall as low as 10 inches to those where it is 150 inches. Of the 600 species, only about 100 are used for sawmilling, and not more than 40 of these are exploited extensively.

The better class of eucalypt forest is concentrated mainly in the higher rainfall areas such as the east coast, the highlands of southern New South Wales, Victoria and Tasmania, and the south-western corner of Western Australia. The more important species include blackbutt (*E. pilularis*), tallowwood (*E. microcorys*), flooded gum (*E. grandis*), and red mahogany (*E. resinifera*) of New

South Wales and Queensland; alpine ash (*E. delegatensis*) of New South Wales, Victoria and Tasmania; mountain ash (*E. regnans*), messmate (*E. obliqua*) and blue gum (*E. bicostata*) of Victoria and Tasmania; and karri (*E. diversicolor*) of Western Australia. For height and grandeur, mountain ash and karri are unequalled among the broadleaved trees of the world and are excelled only by a few North American coniferous (softwood) species.

In the coastal regions with lower rainfall the eucalypt forests contain many durable species such as the ironbarks, grey gums and bloodwoods of the east coast, and jarrah (*E. marginata*) and tuart (*E. gomphocephala*) of Western Australia. The spotted gum (*E. maculata*) occurring in New South Wales and Queensland is another example.

Along most of the inland streams and adjacent flood-plains there are riverain forests consisting mainly of river red gum (*E. camaldulensis*), a very durable broadleaved tree which has supplied large quantities of sawn timber, railway sleepers and fence posts.

Eucalypts also occur in open forest and savannah woodland formations in areas receiving a reliable rainfall of about 10 to 20 inches per annum, as on the goldfields of Western Australia where salmon gum (*E. salmonophloia*), brown mallett (*E. astringens*) and wandoo (*E. wandoo*) occur. These forests are of considerable value for firewood, as mining timbers and for fencing. Minor forest products such as sandalwood, tan bark, essential oils, etc., also come from isolated areas in this type of country, and in the more arid areas.

In 1966-67 the volume of eucalypt sawn wood produced was 945 million super feet.

*Other broadleaved timbers (hardwoods).* Broadleaved genera other than *Eucalyptus* cover a comparatively small portion of the forested land in Australia; however, the areas concerned provide a great variety of timbers suitable for a multitude of uses. There are two basic types of forest containing supplies of broadleaved timbers other than eucalypts, namely, the tropical and sub-tropical rainforests of coastal New South Wales and Queensland and the temperate rainforests of southern Victoria and Tasmania, both of which yield species known collectively as rainforest or brushwood species. The total volume of brushwood species produced in 1966-67 was estimated at 64 million super feet, i.e. less than 7 per cent of the total broadleaved timber cut in Australia.

The tropical and sub-tropical rainforest along the eastern coast of Australia contains a large number of different species. Tropical rainforest occurs in northern Queensland in the vicinity of Cairns and on the Atherton Tableland, providing such well-known cabinet woods as Queensland maple (*Flindersia brayleyana*), Queensland walnut (*Endiandra palmerstonii*) and the silky oaks. The sub-tropical rainforest found in southern Queensland and northern New South Wales yields the tulip oak, crab apple (*Shizomeria ovata*) and white beech (*Gmelina leichhardtii*). Coachwood (*Ceratopetalum apetalum*) and sassafras (*Doryphora sassafras*) occur in regions to the south near Dorrigo and have yielded valuable timber for many years.

Turpentine (*Syncarpia glomulifera*), an excellent harbour pile timber resistant to marine borer attack, and brush box (*Tristania conferta*), a superior structural and decking timber, are found in association with some eucalypts in the wetter rainfall areas on the north coast of New South Wales and in southern Queensland.

Temperate rainforest which is to be seen in southern parts of Victoria and western Tasmania consists of myrtle beech (*Nothofagus cunninghamii*), but produces also southern sassafras (*Atherosperma moschata*) and blackwood (*Acacia melanoxylon*).

*Conifers (softwoods).* One of the most important species of native conifers is white cypress pine (*Callitris hugelii*). The main cypress pine forests of commercial value occur in New South Wales and southern Queensland west of the Great Dividing Range. The trees are comparatively small, but the timber has particular value owing to its durability and resistance to termites. It is suitable for use as scantlings, flooring, linings, weatherboards, poles, and posts. As much of the area originally covered by cypress pine has been cleared for wheat farming and grazing, the production from the remaining State forests is now strictly regulated to ensure a continuous supply. The volume of cypress pine cut in 1966-67 was approximately 57.9 million super feet.

Another important native conifer is hoop pine (*Araucaria cunninghamii*), which occurs naturally in the sub-tropical rainforest of southern Queensland and northern New South Wales associated with tulip oak, crab apple, white beech, coachwood, and sassafras. The greater part of the original hoop pine forests has been exploited, but considerable areas have been replanted to this species in Queensland and, to a lesser extent, in New South Wales.

Other native conifers which have played a useful but minor part in the Australian timber industry include bunya and kauri pines (*Araucaria bidwillii* and *Agathis palmerstonii*) of Queensland, and celery-top, Huon and King William pines (*Phyllocladus asplenifolius*, *Dacrydium franklinii* and *Athrotaxis selaginoides*) of Tasmania. Kauri pine is found in the tropical rainforest of northern

Queensland in association with non-eucalypt broadleaved trees, while bunya pine occurs in the sub-tropical rainforests. In the temperate rainforests of Tasmania celery-top, Huon and King William pines are found in association with myrtle beech, southern sassafras and blackwood.

#### Extent of forested areas

Estimates prepared for the Ninth British Commonwealth Forestry Conference held in India in 1968 show the total area of forest in Australia as 599.7 million acres, or about 32 per cent of the total land area of the continent. In making these estimates the Food and Agriculture Organization definition of 'forest' (published in *World Forest Inventory*, 1958, page 123) was used. This definition includes areas of sparse or stunted tree growth, and in the case of Australia some four-fifths of the total forest area falls into this category.

#### CLASSIFICATION OF FOREST AREA(a): AUSTRALIA

(Source: Forestry and Timber Bureau)

('000 acres)

Type of forest	Area
<b>LANDS</b>	
Economically exploitable forest land—	
Productive forests—	
Coniferous (softwood)(b)	3,021
Other(c)	34,166
<i>Total, productive forests</i>	<i>37,187</i>
Non-productive areas—unstocked(d)	11,455
Not economically exploitable forest land	39,038
Woodlands(e)	512,010
<i>Total, forested area</i>	<i>599,690</i>

#### OWNERSHIP OF ACCESSIBLE FORESTS

Publicly-owned forests—	
State forests	29,699
Other forests	22,472
<i>Total, publicly-owned forests</i>	<i>52,171</i>
Privately-owned forests	29,191
Ownership not yet determined	290,166
<i>Total, accessible forests</i>	<i>371,528</i>

(a) Date of inventory 30 June 1965. (b) Includes exotics, cypress, and other indigenous pines. (c) Includes broadleaved and mixed woods. (d) Areas enclosed or within or adjacent to forest land, but which are kept cleared of tree cover for management reasons or 'are temporarily free' of tree cover. (e) All lands dominated by trees which for ecological and botanical reasons are not now capable of producing economic forest products.

### Forest reserves

The distribution of forest reserves is shown by States in the following table. Detailed comparisons between States are not possible because of the lack of uniform definitions.

#### LEGALLY ESTABLISHED PERMANENT FOREST RESERVES: STATES AND TERRITORIES 31 MARCH 1967

(Source: Forestry and Timber Bureau)

('000 acres)

	N.S.W.	Vic.	Qld (a)	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
<b>Production reserves(b)—</b>									
Productive . . . . .	5,000	4,108	8,664	248	4,083	1,917	11	29	24,060
Unproductive . . . . .	3,020	1,382	..	23	..	1,389	..	..	5,814
Unstocked . . . . .	..	114	..	..	708	..	..	20	842
<i>Total, production reserves .</i>	<i>8,020</i>	<i>5,604</i>	<i>8,664</i>	<i>271</i>	<i>4,791</i>	<i>3,306</i>	<i>11</i>	<i>49</i>	<i>30,716</i>
<b>Protection reserves(c)—</b>									
Productive . . . . .	..	500	(d)2,268	17	33	233	..	13	279
Unproductive . . . . .	1,870	..	..	..	..	..	..	97	4,752
Unstocked . . . . .	..	..	..	..	28	1	..	..	29
<i>Total, protection reserves .</i>	<i>1,870</i>	<i>500</i>	<i>2,268</i>	<i>17</i>	<i>61</i>	<i>234</i>	<i>..</i>	<i>110</i>	<i>5,060</i>
<b>All other reserves—</b>									
Productive . . . . .	..	151	..	..	..	..	2,394	..	2,545
Unproductive and unstocked . . . . .	..	..	..	..	..	..	..	..	..
<i>Total, all other reserves .</i>	<i>..</i>	<i>151</i>	<i>..</i>	<i>..</i>	<i>..</i>	<i>..</i>	<i>2,394</i>	<i>..</i>	<i>2,545</i>
<b>Total area, all reserves .</b>	<b>9,890</b>	<b>6,255</b>	<b>(e)10,932</b>	<b>288</b>	<b>4,852</b>	<b>3,540</b>	<b>2,405</b>	<b>159</b>	<b>38,321</b>

(a) 30 June 1967. (b) Forest lands reserved by law for the production of logs, pulpwood, pit props, poles, posts, and fuelwood for commercial purposes. (c) Reserved lands, the management of which is principally aimed at the protection of natural resources, of fauna and flora, or at other purposes not directly related to the production of wood (e.g. parks, watersheds, soil conservation, etc.). Industrial cutting may or may not be allowed in these protection reserves. (d) National Parks. (e) Excludes scenic areas of 39,000 acres.

A considerable proportion of the permanently reserved areas is in inaccessible mountainous country, and many of the forests contain a mixture of species, only some of which are at present of commercial value. Much of the area consists of inferior forest, and a large proportion of the whole has been seriously degraded by recurrent fires.

### Plantations

The indigenous forest of Australia does not contain adequate supplies of coniferous timber, and Australia's requirements have had to be met largely by imports. As a result of the planned policy of the forest services and of several private commercial organisations, the area of coniferous plantations, mainly of exotic species, is steadily increasing. It was natural that this aspect of forestry should receive earliest attention in South Australia, as this is the State most poorly endowed with natural forest. South Australia now has a larger area of planted conifers than any other State in Australia, and for some years has been exploiting considerable quantities of timber from these plantations. Production is also increasing in the other States, and the thinnings from their plantations are already supplying a significant volume of timber.

The total production of roundwood from Australia's coniferous plantations is now more than 70 million cubic feet per annum and is expected to increase substantially during the next decade.

A special article prepared by the Forestry and Timber Bureau giving a detailed account of the history and development of coniferous plantations and of the characteristics of individual species is included in Year Book No. 44, page 975.

Broadleaved plantations (mainly *Eucalyptus spp.*) comprise a much smaller area, and the total acreage at 31 March 1967 was about 35,000 acres, about two-thirds of which was mallet. Plantations of this species have been established in Western Australia for tan bark production.

## AREA OF CONIFEROUS PLANTATIONS: STATES AND TERRITORIES, 31 MARCH 1967

(Source: Forestry and Timber Bureau)

(Acres)

State or Territory	Government			Private			Grand total
	<i>Pinus radiata</i>	<i>Other species</i>	Total	<i>Pinus radiata</i>	<i>Other species</i>	Total	
New South Wales . . .	100,264	21,239	121,503	6,505	15,610	22,115	143,618
Victoria . . .	61,079	9,667	70,746	87,846	2,717	90,563	161,309
Queensland . . .	3,103	120,777	123,880	840	21,860	22,700	146,580
South Australia . . .	131,432	12,822	144,254	38,598	..	38,598	182,852
Western Australia(a) . .	19,949	27,750	47,699	1,781	175	1,956	49,655
Tasmania . . .	26,464	414	26,878	11,483	3	11,486	38,364
Northern Territory . .	..	1,368	1,368	..	50	50	1,418
Australian Capital Territory . . .	26,306	2,527	28,833	..	..	..	28,833
<b>Australia . . .</b>	<b>368,597</b>	<b>196,564</b>	<b>565,161</b>	<b>147,053</b>	<b>40,415</b>	<b>187,468</b>	<b>752,629</b>

(a) South-west zone only.

## Forest administration and research

*Commonwealth Forestry and Timber Bureau.* The functions of the Commonwealth Forestry and Timber Bureau are laid down in the *Forestry and Timber Bureau Act 1930-1953* and include forestry research and education, the study of timber supply, and advice to the Government on forestry matters. The administering department is the Department of National Development.

In 1961 the Commonwealth Government decided to expand its activities in forestry research in Australia. The existing Forestry and Timber Bureau Divisions of Silvicultural Research and Forest Management Research were combined to form the Forest Research Institute as a separate branch of the Bureau. The purpose of the Institute is to provide complete coverage in forestry research, ensuring that all problems of primary importance to the practice and development of forestry in Australia are investigated. In developing a programme with this objective, the Institute takes account of the research activities and potential of the State forest services and other organisations. The research work carried out by the existing sections of the Forest Research Institute covers a wide range of studies, including the following: factors affecting tree growth, tree breeding, introduction of exotic species, forest nutrition, forest botany, forest entomology and pathology, fire protection, watershed management, forest mensuration, forest management and management economics, aerial inventory, biometrics, and tree seed. The Forest Research Institute maintains six regional establishments in the Commonwealth, two of which have an outstation in addition to the regional headquarters. These regional stations are run on a co-operative basis with State forest services and private forest companies or other government instrumentalities.

The Forestry and Timber Bureau also maintains a Timber Supply Economics Branch concerned with the compilation and analysis of statistics of production, consumption and trade in timber and other forest products. This Branch also carries out studies in forest economics and research into logging methods and machines. Advice on timber supply matters is currently made available to government departments and private enterprise. Research is also undertaken on matters associated with the marketing of timber products.

*Commonwealth Scientific and Industrial Research Organization, Division of Forest Products.* The Division of Forest Products was formed in 1928 to carry out investigations into Australian forest products, assist in the effective use of such products, reduce waste, reduce losses from decay and insect attack, and conduct research into the fundamental chemical, physical and mechanical properties of Australian timbers.

The research work of the Division is carried out by eight separate sections: wood and fibre structure, wood chemistry, timber physics, timber mechanics, timber preservation, timber seasoning, plywood and glueing, and timber utilisation. In addition, the Division provides assistance to individuals and local industry, administers courses of instruction on timber properties and usage, and maintains co-operative projects with several overseas authorities operating in the same field.

*Forestry in the Territories.* Forestry activities in the Territory of Papua and New Guinea are controlled by the Administration through its Department of Forests. The management of forests in the Australian Capital Territory is the responsibility of the Forestry Section of the Department of the Interior.

The Forestry and Timber Bureau advises the Administrations of the Australian external Territories on the management of the forests in those Territories. Forests in the Northern Territory are under the control of the Territory Branch of the Northern Territory Administration.

*Forestry activities of the States.* Forestry on State-owned lands in the various States is the responsibility of the respective State Governments, but they do not exercise any control over forestry activities on private property. The powers and functions of State forest authorities are laid down under forest Acts and Regulations. In each State there is a department or commission to control and manage State forests. Its functions include the introduction of proper measures for the control and management of forest land; the protection of forest land; the conversion, marketing and economic utilisation of forest products; the securing of an adequate and permanent reservation of State forests; and the establishment and maintenance of coniferous forests to remedy the existing deficiency of conifers in Australia. All State forest services are actively engaged on research programmes. Annual reports are issued by each State forest authority.

In addition to developing permanent forest reserves in each State, foresters are surveying all forested Crown lands with a view to obtaining dedications of new State forests to add to the permanent forest estate or to release for other uses areas unsuitable for forestry. State forest authorities control over 10 million acres of timber reserves, national parks, etc. They also usually control all timber on unoccupied Crown lands.

*Private forestry.* Privately owned lands contribute considerably to the total production from Australian forests. The most important areas of managed native forest in private ownership are the forests owned by pulp and paper companies. Schemes of financial assistance to individual land owners—designed primarily to encourage establishment and management of coniferous plantations—have been recently introduced by the Governments of New South Wales and Victoria.

The area of privately owned coniferous plantations is rapidly increasing, and here again the pulp and paper companies are very active. In step with the increase in afforestation programmes, the number of professional foresters employed in private forestry enterprise is increasing, while several are engaged on research.

An estimate of the area of coniferous plantations established by private companies and individuals is included in the table on page 1001.

### Forestry education

The functions of the Australian Forestry School at Canberra, previously a division of the Forestry and Timber Bureau, were taken over by the Australian National University at the beginning of the 1965 academic year. The school was absorbed into the University's School of General Studies as the Department of Forestry. This department provides a full four-year training leading to the degree of B.Sc. in forestry. The University of Melbourne also maintains a School of Forestry which gives training leading to a B.Sc. degree in forestry. The Universities in all States provide facilities for post-graduate studies in forestry leading to higher degrees.

The Victorian Forests Commission maintains a Forestry School at Creswick where recruits are trained, mainly for employment in the Commission.

### The Australian Forestry Council

Following extensive discussions the Commonwealth Government and the Governments of the six Australian States agreed in 1964 to establish an Australian Forestry Council, comprising the Ministers responsible for forestry in the seven Governments and the Commonwealth Minister for Territories.

The Council is intended to provide the means for the mutual exchange between the State and Commonwealth Governments of information and views on forestry. It will co-ordinate research into problems affecting the establishment, development, management, and fire protection of all forests, and the utilisation of forest products. It will assist in co-ordinating the work of State and Commonwealth Governments and also private enterprise in the development of Australian forestry.

The Council is supported by a Standing Committee, consisting of the Director-General of the Forestry and Timber Bureau, the heads of each of the six State Forest Services, the Chief of the Division of Forest Products, C.S.I.R.O., and the Secretary of the Department of External Territories.

### Fire protection

The provision of adequate fire protection is one of the main problems facing forest and rural authorities. The commercial forest area is estimated at 63 million acres, and of this area the forest services maintain a high degree of protection over a relatively accessible area of about 23 million acres, about 17 million acres in the more inaccessible area receive a lesser degree of protection, and about 8 million acres are at present not protected. The remaining area of 15 million acres is mainly privately owned or leased, and under some degree of fire protection from the rural volunteer fire-fighting organisations or Government-financed fire protection associations.

Very intensive fire protection is afforded the coniferous plantation area of Australia. During the severe 1964-65 season 3,130 acres of coniferous plantations were burnt. This represents 0.56 per cent of total plantation area, which was 556,000 acres at that date. This was the largest area of coniferous plantations burnt since 1952. The area burnt in 1966-67 was 461 acres, or 0.07 per cent of the total plantation area, which was then 660,835 acres.

Protection of private property outside urban areas is undertaken by volunteer bush fire brigade organisations which are co-ordinated in each State by a committee or board carrying out functions of an advisory or educational nature and fostering the growth and organisation of the bush fire brigade movement. Throughout the main agricultural and forest areas of Australia there are over 5,000 registered volunteer bush fire brigades with a membership approaching 250,000. Although forest and rural fire organisations are entirely separate entities, a high degree of co-operation and liaison is maintained.

In addition to the forest service and rural organisations, various private and semi-governmental bodies in each State maintain fire protection organisations, which are generally concerned with the protection of private forestry operations and hydro-electric and water catchment areas.

Over the five-year period 1962 to 1966 the annual cost of protecting from fire the 40 million acres of forest land for which State forest services, semi-governmental bodies and private companies provide protection is estimated at \$5,000,000, or about twelve cents an acre. The cost of fire protection during the severe 1964-65 fire season was \$5,500,000. The cost of rural fire control as a whole cannot be estimated with any degree of accuracy, because by far the greatest contribution comes from the personal efforts of volunteer brigade members.

The Australian fire season is very variable, especially in the eastern and southern States. On the average, damaging fires can occur over a period of four months in all climatic zones. Occasionally this occurrence can extend one month either side of the main fire period. Individual fire seasons are generally of much shorter duration than four months, and the severity of a season is judged more on the number of 'blow-up' days than on its length. On the average, four years in ten are classified as of average severity and two years in ten as severe, the remaining four years being of below-average severity. During severe seasons in the past as much as 15 per cent of the forest area has been burnt. However, with improving fire control services, it can be expected that the area burnt in severe fire seasons will in future be significantly reduced. The number of forest fires and the forest area burnt during recent years is shown in the following table.

NUMBER OF FIRES AND FOREST AREAS BURNT  
AUSTRALIA, 1962-63 TO 1966-67  
(Source: Forestry and Timber Bureau)

Year	Number of fires	Forest areas burnt	Burnt areas as a proportion of area receiving protection (a)
	No.	'000 acres	per cent
1962-63 . . . .	1,299	275	0.7
1963-64 . . . .	1,494	549	1.5
1964-65 . . . .	2,307	1,626	4.1
1965-66 . . . .	1,865	465	1.2
1966-67 . . . .	1,422	388	1.0

(a) For this table the area receiving protection has been taken as the 40 million acres for which State forest services provide protection.



Intensive research work is being undertaken on fire problems, and several government groups are working on such projects as the study of fire behaviour and associated fuel and meteorological conditions, the use of chemical aids in fire suppression, the development of protective clothing and devices to aid fire-fighters, and the development of more efficient fire-fighting equipment, including aerial methods of attacking fire and infra-red scanning devices.

Since fire prevention is one of the most important aspects of the problem, intensive campaigns are being conducted to reduce the incidence of man-caused fires. A study of fire causes in recent years reveals that human agencies account for about 90 per cent of all fires, and of this figure at least 80 per cent are preventable. It is estimated that 'burning-off' (much of which is started illegally) accounts for 30 per cent of all fires. Lightning accounts for a little over 10 per cent of all fires in Australia, although the incidence of fires caused by lightning is much higher in certain areas, especially the southern highlands regions in New South Wales and Victoria. Although lightning is a relatively small numerical cause of fire, the percentage area burnt from this cause is estimated at about 20 per cent. This higher figure is due to the occurrence of multiple fire outbreaks which cause fire fighting difficulties and to the inaccessibility of the areas in which such fires generally occur.

An increasing number of fires are starting from roadsides, and smoking materials account for a high proportion of these fires. The fire proofing of roadsides by chemical and mechanical means should reduce this incidence, which has accounted for over 25 per cent of all fires in some regions.

The damage resulting from bushfires in Australia is difficult to estimate. Eucalypts, which comprise the main forest species, are seldom killed by fire, and damage estimates frequently involve the complicated question of loss of increment and degradation of timber quality. It may be conservatively estimated that damage to forest values lies between \$2 and \$4 per acre burnt per year and that over the last ten years the average value of forest fire damage is of the order of \$4 million a year. In very severe fire seasons such as 1925-26, 1938-39 and 1951-52, which affected large areas of the continent, fire loss may have been as high as \$200 million.

#### **Commonwealth loans to expand softwood plantations**

In February 1965 the Australian Forestry Council recommended that the rate of expansion of softwood timber planting in Australia should be increased from their existing level of about 40,000 acres a year to 75,000 acres a year for the next thirty-five years. The recommendation envisaged a phased increase in the rate of Government plantings by the various State Governments up to a level of some 65,000 acres per annum, and an average of at least 10,000 acres per annum by private forest owners. This programme would make a major contribution towards meeting Australia's future requirements for softwood products.

In February 1966 the Commonwealth Government endorsed this recommendation and agreed, as a first step towards achieving the proposed annual target of 75,000 acres, to provide financial assistance to each State, over a five-year period commencing 1 July 1966, to enable them to accelerate their rate of softwood plantings. The assistance, which will be provided to the States under section 96 of the Constitution, will take the form of long-term loans repayable over twenty-five years with repayments of principal and the payment of interest to commence ten years after the date of each advance. The *Softwood Forestry Agreements Act 1967* authorised the Commonwealth to enter into agreements with each of the States to provide financial assistance by way of loans during the financial years 1966-67 to 1970-71 inclusive. Payments under the Act by the Commonwealth to all States in 1966-67 amounted to \$291,000, and in 1967-68 to \$3,456,000. It is estimated that \$3,882,000 will be provided in 1968-69.

### **Employment in forestry**

#### **Persons engaged in forestry activities, 1966 census**

The number of persons whose industry statements were classified to 'forestry' (excluding sawmilling) at the 1966 population census was 13,492 out of a total of 512,994 in all primary industries and 4,856,455 in the total work force. For further information see the chapter Employment and Unemployment, also 1966 Census Bulletin No. 9.6, *Population: by Industry and Occupational Status, Australia*.

#### **Employment by Forestry Departments**

In the table following details are shown of the number of persons employed by State forestry departments and by the Forestry and Timber Bureau in the Australian Capital Territory and the Northern Territory at 30 June 1967.

**PERSONS EMPLOYED BY FORESTRY DEPARTMENTS  
STATES AND TERRITORIES, 30 JUNE 1967**

<i>Occupational group</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
Professional staff . . . . .	292	230	150	67	67	41	5	10	862
Non-professional field staff . . . . .	273	209	96	9	216	120	17	2	942
Clerical staff . . . . .	284	281	214	114	59	88	10	6	1,056
Extraction of timber . . . . .	1,391	832	114	587	39	6	20	..	6,073
Milling of timber . . . . .			47	..	..	..	..		
Labour (forest workers, etc.) . . . . .			254	554	360	122	70		
Total . . . . .	2,240	1,552	2,251	1,031	982	615	174	88	8,933

**Employment in milling operations**

Details of the average number of persons employed, including working proprietors, in sawmills during the year 1966-67 are shown in the next table. Further details regarding the operations of sawmills in 1966-67 are shown in the chapter Manufacturing Industry.

**NUMBER OF SAWMILLS AND NUMBER OF PERSONS EMPLOYED  
STATES AND TERRITORIES, 1966-67**

	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
Number of sawmills . . . . .	721	445	481	89	192	279	1	7	2,215
Average number of persons employed during year—									
Males . . . . .	7,834	5,666	5,232	2,172	3,199	2,834	(a)	(a)	27,006
Females . . . . .	398	286	293	198	173	58			1,412
<b>Persons . . . . .</b>	<b>8,232</b>	<b>5,952</b>	<b>5,525</b>	<b>2,370</b>	<b>3,372</b>	<b>2,892</b>			<b>28,418</b>

(a) Not available for publication; included in Australian total.

## Forest production

**Forest products**

**FOREST PRODUCTION(a): STATES AND TERRITORIES, 1966-67**

<i>Product</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
<b>Logs for sawing, peeling, slicing, or pulping—</b>									
Forest broadleaved . . . . . '000 cu ft	53,087	68,880	21,644	420	48,373	57,529	10	42	249,985
Brushwoods and scrubwoods . . . . . " "	3,876	..	8,254	..	..	..	1	..	12,131
<b>Coniferous—</b>									
Indigenous forest 'pines'—									
Cypress . . . . . " "	6,059	..	5,222	..	..	..	121	..	11,402
Other . . . . . " "	522	..	2,717	..	..	328	..	..	3,568
Plantation grown 'pines' . . . . . " "	8,971	15,325	4,405	27,843	2,057	1,968	..	1,423	61,992
<b>Total logs . . . . .</b>	<b>72,515</b>	<b>84,205</b>	<b>42,241</b>	<b>28,263</b>	<b>50,431</b>	<b>59,826</b>	<b>132</b>	<b>1,465</b>	<b>339,078</b>
<b>Value of logs . . . . . \$'000</b>	<b>21,768</b>	<b>23,798</b>	<b>14,230</b>	<b>5,967</b>	<b>8,919</b>	<b>13,109</b>	<b>274</b>	<b>340</b>	<b>88,405</b>
<b>Hewn and other timber (not included above)—</b>									
Firewood(b) (weight) . . . . . '000 tons	235	671	92	444	552	444	1	..	2,440
Other(c) (value) . . . . . \$'000	1,324	6,836	513	2,514	(d)2,525	2,557	8	2	16,280
Value of hewn and other timber . . . . . " "	9,583	9,353	2,657	2,856	(d)3,748	3,494	29	11	31,731
<b>Other forest products(e) (total value)</b>	<b>280</b>	<b>168</b>	<b>312</b>	<b>27</b>	<b>(f)9</b>	<b>25</b>	<b>..</b>	<b>..</b>	<b>820</b>
<b>Total value of forest products</b>	<b>31,632</b>	<b>33,319</b>	<b>17,199</b>	<b>8,888</b>	<b>(g)13,300</b>	<b>16,627</b>	<b>303</b>	<b>351(g)</b>	<b>121,620</b>

(a) Excludes some production from private land thought to be relatively small, details of which are not available. (b) Includes mill waste used as firewood. (c) Includes sleepers, transoms, girders, bridge timbers, mining timber, poles, piles, etc. (d) Excludes timber used for tannin extract, details of which are not available for publication. (e) Includes charcoal (forest production only), tanning bark, essential oils, eucalyptus leaves, crude rutin, etc. (f) Excludes value of sandalwood and substitutes, details of which are not available for publication. (g) Includes timber used for tannin extract and sandalwood and substitutes.

## FOREST PRODUCTION(a): AUSTRALIA, 1962-63 TO 1966-67

Product		1962-63	1963-64	1964-65	1965-66	1966-67
Logs for sawing, peeling, slicing, or pulping—						
Forest broadleaved . . . . .	'000 cu ft	230,401	245,674	251,753	252,587	249,985
Brushwoods and scrubwoods . . . . .	" "	12,657	12,741	13,549	14,027	12,131
Coniferous—						
Indigenous forest 'pines'—						
Cypress . . . . .	" "	12,489	13,070	13,795	12,487	11,402
Other . . . . .	" "	3,799	3,950	3,766	3,706	3,568
Plantation grown 'pines' . . . . .	" "	49,569	50,883	56,255	59,894	61,992
Total logs . . . . .	" "	308,915	326,318	339,117	342,701	339,078
Value of logs . . . . .	\$'000	74,954	79,576	86,494	87,804	88,405
Hewn and other timber (not included above)—						
Firewood (b) (weight) . . . . .	'000 tons	2,702	2,720	2,690	2,668	2,440
Other (c) (value) . . . . .	\$'000	13,604	13,900	15,256	17,290	16,280
Value of hewn and other timber(d) . . . . .	"	28,944	31,872	32,998	35,632	31,731
Other forest products(e) (total value) . . . . .	"	588	618	739	782	820
Total value of forest products(f) . . . . .	"	104,820	112,416	120,801	125,044	121,620

(a) Excludes some production from private land, thought to be relatively small, details of which are not available.  
 (b) See footnote (b) to previous table. (c) See footnotes (c) and (d) to previous table. (d) Incomplete; see footnote (d) to previous table. (e) See footnotes (e) and (f) to previous table. (f) Includes timber used for tannin extract and sandalwood and substitutes in Western Australia.

## Value of production

While statistics of both the gross value (at principal markets) and local value (at place of production) of the forestry industry are available, particulars of the value of materials used in the process of production are not available for all States. For this reason values cannot be stated on a net basis, as has been done with most other industries. A more detailed reference to the value of production of forestry and other industries in Australia, as well as a brief explanation of the terms used, will be found in the chapter Miscellaneous.

GROSS AND LOCAL VALUE OF FORESTRY PRODUCTION  
 STATES AND TERRITORIES, 1966-67  
 (\$'000)

State or Territory	Gross value(a)	Marketing costs	Local value(b)
New South Wales . . . . .	31,632	665	30,967
Victoria . . . . .	33,319	1,337	31,982
Queensland . . . . .	17,199	4,569	12,631
South Australia . . . . .	8,888	35	8,853
Western Australia . . . . .	13,300	827	12,473
Tasmania . . . . .	16,627	2,295	14,332
Northern Territory . . . . .	303	n.a.	303
Australian Capital Territory . . . . .	351	n.a.	351
Australia . . . . .	121,620	9,728	111,892

(a) Gross production valued at principal markets. (b) Gross production valued at place of production.

**LOCAL VALUE OF FORESTRY PRODUCTION: STATES AND TERRITORIES  
1962-63 TO 1966-67**

<i>Year</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
<b>LOCAL VALUE (\$'000)</b>									
1962-63 . .	27,976	26,200	11,976	8,116	10,162	11,314	100	258	96,102
1963-64 . .	29,618	28,920	12,980	8,168	10,734	11,638	268	298	102,624
1964-65 . .	31,586	32,076	13,482	8,801	11,334	13,270	276	314	111,139
1965-66 . .	32,342	32,434	13,590	9,693	11,965	13,837	358	384	114,603
1966-67 . .	30,967	31,982	12,631	8,853	12,473	14,332	303	351	111,892
<b>LOCAL VALUE PER HEAD OF POPULATION (\$)</b>									
1962-63 . .	6.96	8.70	7.66	8.13	13.07	31.59	2.13	3.71	8.86
1963-64 . .	7.26	9.41	8.14	7.98	13.44	32.08	5.36	3.87	9.28
1964-65 . .	7.62	10.23	8.29	8.37	13.87	36.22	5.23	3.72	9.85
1965-66 . .	7.68	10.15	8.19	8.96	14.29	37.44	6.46	4.15	9.96
1966-67 . .	7.25	9.84	7.48	8.02	14.47	38.33	5.22	3.51	9.56

### Timber and timber products

#### Mill production of timber

Particulars of logs treated and the production of sawn, peeled and sliced timber by sawmills and other woodworking establishments are shown in the following table. These figures have been compiled from annual factory collections, which cover virtually all sawmills. The only omissions are some small portable mills operated by itinerants, e.g. sleeper cutters.

**OUTPUT OF AUSTRALIAN-GROWN TIMBER: ALL MILLS  
STATES AND TERRITORIES, 1966-67**  
(<sup>000</sup> super ft)

	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>Total(a)</i>
<b>Logs treated (gross hoppus)(b)—</b>							
Broadleaved . .	679,095	503,637	322,825	6,543	455,125	346,031	2,313,256
Coniferous . .	121,423	80,136	113,453	213,918	16,900	9,007	554,838
<i>Total, logs treated .</i>	<i>800,519</i>	<i>583,774</i>	<i>436,278</i>	<i>220,460</i>	<i>472,025</i>	<i>355,038</i>	<i>2,868,093</i>
<b>Sawn, peeled or sliced timber produced from logs above—</b>							
Broadleaved . .	347,558	282,080	152,588	3,882	195,185	170,077	1,151,369
Coniferous . .	69,606	40,219	64,174	130,236	8,993	4,363	317,591
<i>Total, timber produced .</i>	<i>417,164</i>	<i>322,299</i>	<i>216,762</i>	<i>134,118</i>	<i>204,178</i>	<i>174,440</i>	<i>1,468,960</i>

(a) Excludes Australian Capital Territory and Northern Territory.  
78.5 per cent of the true volume.

(b) Gross hoppus measure is approximately

**OUTPUT OF AUSTRALIAN-GROWN TIMBER, ALL MILLS: AUSTRALIA(a)**  
**1962-63 TO 1966-67**  
('000 super ft)

	1962-63	1963-64	1964-65	1965-66	1966-67
Logs treated—					
Broadleaved . . . . .	2,552,553	2,681,691	2,767,843	(b)2,371,263	(b)2,313,256
Coniferous . . . . .	771,318	696,831	728,691	(b)569,521	(b)554,838
<i>Total, logs treated</i> . . . . .	<i>3,323,871</i>	<i>3,378,522</i>	<i>3,496,535</i>	<i>(b)2,940,784</i>	<i>(b)2,868,093</i>
Sawn, peeled or sliced timber produced from logs above—					
Broadleaved . . . . .	1,092,143	1,157,175	1,203,705	1,185,831	1,151,369
Coniferous . . . . .	323,743	330,014	329,508	331,709	317,591
<i>Total, timber produced</i> . . . . .	<i>1,415,886</i>	<i>1,487,189</i>	<i>1,533,213</i>	<i>1,517,540</i>	<i>1,468,960</i>

(a) Excludes Australian Capital Territory and Northern Territory. (b) Gross hoppus basis: not necessarily comparable with details for previous years, which are generally on a true volume basis.

In addition to the mill production of timber shown in the preceding tables, a large quantity of hewn and round timber, e.g. sleepers, piles, poles, fencing timber, timber used in mining and fuel, is obtained directly from forest and other areas. Complete information in respect of the volume of this output is not available.

**Veneers, plywood, etc.**

Cutting of timber for the manufacture of veneers, plywood, etc., has been carried out in most States for a number of years. In recent years this has been considerably extended, since plywood manufacture has allowed the use of some species unsuitable for sawing. Special attention has been paid to ensure that logs suitable for peeling are diverted to ply factories.

**PLYWOOD PRODUCED: STATES, 1962-63 TO 1966-67**  
('000 square feet:  $\frac{3}{8}$ -in basis)

State	1962-63	1963-64	1964-65	1965-66	1966-67
New South Wales . . . . .	56,766	58,880	59,045	54,201	58,791
Queensland . . . . .	85,746	97,252	94,766	80,761	81,313
Other States . . . . .	52,751	60,150	63,249	52,296	60,348
<i>Australia</i> . . . . .	<i>195,263</i>	<i>216,282</i>	<i>217,059</i>	<i>187,258</i>	<i>200,451</i>

Of the total plywood produced in 1966-67, 119,765,565 square feet ( $\frac{3}{8}$ -in basis) were classed as 'Commercial', 55,752,370 as 'Waterproof', 2,897,484 as 'Case', and 22,036,069 as 'Sliced fancy'.

During 1966-67, 749.2 million square feet ( $\frac{3}{8}$ -in basis) of veneers were produced by the rotary process for the manufacture of plywood, including 227.9 million square feet ( $\frac{3}{8}$ -in basis) sold or added to stock, the bulk of which would eventually be used in the production of plywood. In addition, 51.7 million square feet of sliced veneers were produced.

**Manufactured boards**

Particle board, resin or cement bonded of acoustic and other composition, amounted to 92,134,853 square feet surface measurement during 1966-67.

**Wood pulp and paper**

*Wood pulp.* During 1966-67 wood pulp production was 357,665 tons of chemical, mechanical and other pulp. During the previous year production was 330,625 tons.

Detailed information relating to the types and methods of production of wood pulp in the various States was published in Year Book No. 50, 1964, page 1110.

*Paper and paper board.* Paper and paper board are manufactured in all States, but the greater part of the industry is in New South Wales, Victoria and Tasmania. During 1966-67 twenty-three paper mills were operating, ten in Victoria, four in New South Wales, four in Tasmania, two each in Queensland and South Australia, and one in Western Australia. A wide variety of paper and paper board is produced in Australian mills. The table below gives details of the production of some of the principal items.

**PRODUCTION OF PAPER PRODUCTS: AUSTRALIA, 1964-65 TO 1966-67**

<i>Type of paper</i>	<i>Quantity (tons)</i>			<i>Value (\$'000)</i>		
	1964-65	1965-66	1966-67	1964-65	1965-66	1966-67
Newsprint . . . .	93,142	93,211	97,255	12,948	12,106	13,365
Blotting . . . .	488	601	508	124	161	149
Duplicating . . . .	7,386	9,721	8,291	2,618	3,758	3,467
Printing and writing . . . .	101,222	120,540	114,992	28,948	35,818	35,704
Wrapping—						
Kraft . . . .	160,807	149,331	184,561	37,403	34,568	40,637
Other . . . .	16,158	11,114	13,942	5,269	3,850	4,960
Paper felts . . . .	1,868	1,700	1,905	407	366	415
Paper boards . . . .	296,387	317,553	329,496	47,670	51,465	53,726

**Overseas trade in forest products, timber and timber products****Imports****IMPORTS OF FOREST PRODUCTS, TIMBER AND TIMBER PRODUCTS  
AUSTRALIA, 1965-66 AND 1966-67**

	<i>Quantity</i>		<i>Value (\$'000 f.o.b.)</i>	
	1965-66	1966-67	1965-66	1966-67
Wood in the rough or roughly squared . . . '000 sup ft	34,371	44,763	2,163	2,896
Wood shaped or simply worked—				
Timber sawn lengthwise, sliced or peeled, but not further prepared, of a thickness exceeding 5 mm—				
Conifer—				
Douglas fir . . . .	177,453	177,183	16,860	16,366
Hemlock and balsam . . . .	13,629	15,395	882	1,003
Radiata pine . . . .	25,945	26,531	1,955	2,004
Redwood and western cedar . . . .	16,597	22,414	2,015	2,728
Non-conifer . . . .	..	..	7,780	6,981
Tanning extracts of vegetable origin . . . cwt	67,688	79,601	490	550
Wood and cork manufactures (except furniture)—				
Veneers, plywood boards, 'improved' or reconstituted wood and other wood, worked, n.e.s. . . .	..	..	5,617	6,357
Wood, worked, n.e.s. . . .	..	..	2,683	2,725
Cork manufactures . . . .	..	..	1,200	1,188

Owing to the adoption of the new Australian Import Commodity Classification from July 1965 (see page 339) completely comparable figures for years prior to 1965-66 are not available.

Imports of coniferous timbers, shaped or simply worked, came mainly from Canada and the United States of America in 1966-67. Malaysia was the source of by far the greater proportion

of non-coniferous timber imports. Papua and New Guinea and the United Kingdom supplied most of Australia's imports of veneers, while plywood imports came mainly from Japan and Papua and New Guinea.

### Exports

#### EXPORTS OF AUSTRALIAN FOREST PRODUCTS, TIMBER AND TIMBER PRODUCTS(a): AUSTRALIA, 1966-67

	Quantity	Value (\$'000 f.o.b.)
Wood in the rough or roughly squared . . . '000 sup ft	..	666
Wood, shaped or simply worked—		
Railway or tramway sleepers . . . . .	26,023	3,279
Timber sawn lengthwise exceeding 5 mm—		
Conifer . . . . .	393	95
Non-conifer . . . . .	11,541	1,790
Timber, planed or tongued—		
Conifer . . . . .	830	232
Non-conifer . . . . .	468	114
Cork, raw and waste . . . . . cwt	131	13
Plants used in dying and tanning . . . . .	2,590	8
Natural gums, resins, etc. . . . .	9,180	63
Eucalyptus oil . . . . . '000 lb	308	221
Veneer wood . . . . . '000 sq ft	3,207	133
Plywood, blockboards, etc. . . . .	3,611	444
Improved wood . . . . .	..	24
Reconstituted wood . . . . . '000 sq ft	1,153	151
Wooden beadings and mouldings . . . . .	..	120
Wood simply shaped or worked, n.e.i. . . . .	..	33
Wood manufactures, n.e.i. . . . .	..	894
Cork manufactures . . . . .	..	31

(a) Excludes re-exports.

Owing to the adoption of the new Australian Export Commodity Classification from July 1966 (see page 339) completely comparable figures for years prior to 1966-67 are not available.

## CHAPTER 24

### FISHERIES

Further information on subjects dealt with in this chapter is contained in the annual printed bulletin *Non-Rural Primary Industries* and in the annual mimeographed statistical bulletin *Fisheries*, particularly as regards types of fish, etc. caught.

#### **Fisheries resources and their commercial exploitation**

##### **Fish**

It has been estimated that there are approximately 2,000 species of fish (including freshwater species) in Australia and the waters surrounding it. Fishing is carried out continually in estuarine, coastal and offshore Australian waters in the east and south from Port Douglas in Queensland to Ceduna in South Australia, and in Western Australia from Esperance to Exmouth Gulf, and sporadically in the Onslow, Broome, Darwin, and Karumba areas in the north. Most fishing is done in waters over the continental shelf, which varies greatly in width around the continent, but tuna is sometimes fished beyond the shelf. As in other countries, fisheries in Australia may be divided into estuarine fisheries, located in the tidal waters of rivers and coastal lakes; pelagic fisheries, which exploit species inhabiting the surface layers of the open ocean; and demersal fisheries, which fish the bottom layers of the sea. The estuarine fisheries produce considerable quantities of the table varieties, such as mullets (*Mugil cephalus* and associated species) and breams (*Acanthopagrus spp.*). In addition to these there is a small freshwater commercial fishery, principally in New South Wales and South Australia, exploiting Murray cod (*Maccullochella macquariensis*) and golden perch (*Plectroplites ambiguus*). The pelagic fisheries produce species exploited during their seasonal migration, such as Australian 'salmon' (*Arripis trutta*), which is a member of the order Perciformes, or perch-like fishes, tunas (*Fam. Thynnidae, Katsuwonidae, Sardidae*), snoek (*Leionura atun*), and mackerels (*Cybium spp.*). These fisheries, with the exception of some tuna, mackerel and reef fisheries, are concentrated in the temperate waters around the southern half of the continent. The offshore demersal fisheries include those carried out on reefs which may be found virtually right around the continent, and which yield such species as snapper (*Chrysophrys auratus*), the so-called 'cods' (*Epinephelus, Choerodon, Callyodon spp.*) and associated species; the trawl fisheries which produce species such as flathead (*Neoplatycephalus, Trudis spp.*), morwong (*Nemadactylus spp.*), John Dory (*Zeus faber*), etc.; and the important fishery for school shark (*Galeorhinus australis*) and gummy shark (*Mustelus antarcticus*) in south-eastern Australia.

##### **Crustaceans**

Crustaceans taken in Australia include crayfish, prawns, crabs, and freshwater lobsters. Crayfish (southern, *Jasus lalandei*; western, *Panulirus cygnus*; and eastern, *Jasus verreauxi*) constitute the most important crustacean exploited in Australia, and various species occur on the reefs of the continental shelf in all States. The commercial fishery has not extended to the tropical species (*P. ornatus*), etc., for technical reasons, but is concentrated on species found around the southern half of Australia. Prawns (*Penaeus* and *Metapenaeus spp.*) are taken in the estuarine coastal and offshore waters of New South Wales and Queensland, in the Shark Bay and Exmouth Gulf region of Western Australia, and in the Gulf of Carpentaria in Northern Territory. Crabs (*Scylla* and *Portunus spp.*) are taken mainly in Queensland and Western Australia, but small quantities are also taken in the other States. Freshwater lobsters (*Euastacus serratus*) are caught in inland streams in New South Wales, and one species, marron (*Cherax tenuimanus*) forms the basis of an amateur fishery in the south-west of Western Australia.

##### **Molluscs**

Edible molluscs produced in Australia include oysters (mainly *Crassostrea commercialis*), scallops, mussels, squid, octopus and cuttlefish. Naturally-grown oysters are produced in all States except South Australia. In New South Wales, and to a lesser extent in Queensland, edible oysters are cultured commercially. The scallops (*Pecten meridionalis* and *Equichlamys bifrons*) are taken in



Tasmania, the saucer scallop (*Amusium balloti*) is harvested in Queensland, but the major fishery is that in Port Phillip Bay, which is based on *Pecten alba*. Mussels (*Mytilus planulatus*) are gathered mainly in Victoria. Small quantities of cephalopods, mainly squid (*Loligo spp.*), are produced in many localities. The fishery for abalone (mainly *Notohalotis ruber*), which has developed very rapidly in recent years, now extends from southern New South Wales to South Australia, with Tasmania and Victoria providing the bulk of the catches.

#### Pearl-shell and trochus-shell

The shell of the Australian species of pearl oyster (*Pinctada maxima*) is taken in the tropical waters of Australia from Exmouth Gulf in Western Australia to Cairns in Queensland for the manufacture of buttons, knife handles, etc. Live pearl-shell is used for pearl culture, *Pinctada maxima* being capable of producing pearls which are the largest in the world and which command top market prices. Trochus-shell is found mainly on coral reefs off the Queensland coast, although small quantities occur in Western Australia.

#### Whales

The Australian whaling industry formerly exploited the humpback whales (*Megaptera novaeangliae*) during their winter migrations along the east and west coasts of Australia. However, owing to the total prohibition placed on their capture by the International Whaling Commission in 1963, Australian whaling is now confined to the sperm whale (*Physeter catodon*) which has been taken in the southern waters of Western Australia since 1955.

#### Marine flora

Seaweeds of possible commercial value occur in the coastal waters of New South Wales, Tasmania, South Australia, and Western Australia. At Louisville, Tasmania, a factory is processing seaweed (*Macrocystis pyrifera*) for its alginate content.

### History of the development of fisheries industries in Australia

#### Fishing

At the beginning of this century Australian fisheries were principally estuarine and onshore, and the deeper offshore resources were comparatively unknown. Vessels were generally sail-powered, and catching and preservation methods were primitive.

From 1909 to 1914 a Commonwealth vessel was engaged in research into fisheries resources around Australia. As a result of this exploration, otter trawling in the south-eastern waters began in 1915. There have been several years of high production from this fishery, but in each case the peak year was followed by a period of low production. Danish seine trawlers entered this fishery in 1936. In 1958-59 the steam otter trawlers used in this area were taken out of service. This fishery is at present stabilised at a relatively low level of production.

The tuna fishery began with the establishment in 1937 of a cannery at Narooma in New South Wales to exploit the occurrences, mainly of southern bluefin tuna (*Thunnus thynnus maccoyii*), which had been revealed by aerial surveys in 1936. However, landings were insignificant for over a decade. In 1950 the Commonwealth Government sponsored an American-owned clipper and trained crew to instruct fishermen in the pole-and-live-bait method of catching tuna. Development of the South Australian tuna fishery followed the visit of two American tuna experts in 1954. Attempts have been made to use gill netting, long lining, and the purse seine techniques, but these have not become established in the tuna fisheries.

#### Crustaceans

The crayfishery, which is undertaken off south-eastern Australia and off the west coast of Western Australia, was for many decades small. It was not until 1944 that the major sector, the western crayfishery, began to develop into what is now Australia's most productive single fishery. Between 1944 and 1947 production from the shallow areas of Houtman Abrolhos was used for canning for the armed forces. From 1948 to 1953 mechanisation of the fleet was introduced progressively and deeper waters were worked. The United States market for frozen craytails was established during this period. The period 1954 to 1962 saw the introduction of larger and more powerful vessels, of conservation measures designed to maximise the sustainable yield, and of increased processing facilities. The number of boats operating in this fishery is now carefully controlled. In the southern crayfishery development has followed similar lines, but production is lower because of the smaller crayfish population.

The prawn fishery was pursued for many decades on a small scale, but it was not until the discovery that prawns spawn in oceanic waters that interest developed in catching them during this phase of their life cycle. The discovery in 1947 of stocks of prawns in Stockton Bight and off Evans Head (both in New South Wales) initiated the development of deep-sea prawning in Australia. Since that time the prawn fishery has expanded to the eastern offshore grounds. Commercial prawn fisheries in Western Australia commenced at Shark Bay in 1962 and at Exmouth Gulf in 1964.

### **Molluscs**

Natural oyster-beds were being harvested soon after the first settlement, but by 1870 rapid depletion of the stocks had resulted in restrictive legislation being passed in New South Wales. By the end of the nineteenth century, however, farms had been established in New South Wales and oyster cultivation was a notable industry. This cultivation has been almost entirely confined to the river estuaries of New South Wales. Very few oysters are exported and importation of oysters is necessary to cope with home demand. During 1964 an important scallop fishery was established in Port Phillip Bay, and a commercial fishery for abalone was developed in the waters of New South Wales, Tasmania, and Victoria.

### **Whaling**

Whaling has been undertaken from time to time in Australia since the early days of settlement. Humpback whaling was carried out from stations on the west coast of Australia from 1949 and on the east coast from 1952. However, depleted stocks of the species resulted in the closing down of the eastern stations by 1962, and in 1963, following a severe decline in world stocks of humpback whales, the International Whaling Commission, of which Australia is a member, prohibited the capture of the species south of the equator for an indefinite period. Australian whaling is now carried out from Albany only, and the catch is confined to sperm whales.

### **Pearling**

Since the middle of the nineteenth century, when pearling by Europeans first began in Australia, the collection of natural pearls has been incidental to the production of mother-of-pearl shell. Although attempts to establish pearl culture in Australia had been partially successful as early as the end of the last century, it was not until 1956 that the modern technique, as developed by the Japanese, was introduced into Australia at Kuri Bay in Western Australia. The joint venture between Australian and Japanese interests proved successful, and others entered the industry. There are now eighteen pearl culture farms in Western Australia, the Northern Territory, Queensland and Papua. Fifteen of the farms are operated as joint ventures by Australian and Japanese interests, while three are wholly Australian enterprises. The technique of pearl culture is still a closely-guarded trade secret.

## **Fisheries administration and research**

### **Government administration**

The fisheries within territorial waters are administered by State departments and Territory administrations. The Fisheries Branch of the Department of Primary Industry develops and administers fisheries in extra-territorial waters and co-ordinates fisheries administration. In 1968 the Commonwealth Government established an exclusive fishing zone around Australia from three to twelve miles. This does not involve any change in territorial waters.

The fisheries laws of each State and Territory and of the Commonwealth provide for the licensing of boats used in commercial fishing operations and of commercial fishermen. The provisions are broadly similar in each State, the general requirement being that any person who takes fish for sale, and any boat used in such fishing operations, must be licensed in the State or Territory concerned. Some States extend the licensing requirements to amateur or part-time fishermen. Australian nationals who fish commercially outside the territorial waters of a State or Territory, but within Australian waters as proclaimed under the *Fisheries Act* 1952-1966, are required to take out licences and to register their boats under that Act.

Fish stocks inhabiting Australian waters are a common property resource. With the exception of the Western Australian and Tasmanian crayfisheries and the Shark Bay and Exmouth Gulf prawn fisheries, there are no restrictions on recruitment of men and vessels to any fishery. It has, therefore, been necessary for governmental action to be taken to control operations in certain fisheries which are sensitive to over-exploitation. The policy basic to the management of these fisheries is

the greatest sustainable yield consistent with economic operations. Where a fishery, for economic reasons, is not producing its maximum yield, efforts to discover new methods of utilisation of the catch are made.

The *Pearl Fisheries Act 1952-1966* provides for the management of the pearl-shell resources in accordance with Australia's proclamation of sovereign rights over the natural resources of the sea bed and subsoil to the 100 fathom line. It requires that all pearlers, vessels, etc. must be licensed, and prohibits the removal of live shell from Australian waters except with the written permission of the Minister for Primary Industry.

Under the *Whaling Act 1960-1966* the Commonwealth controls whaling from Australian stations in accordance with conditions laid down by the International Whaling Commission. This Commission was established by the International Convention for the Regulation of Whaling, 1946, to organise world-wide conservation measures.

### Research

The main aim of fisheries research in Australia is to achieve the greatest sustainable yield of fish and to assist in the development of an efficient industry. To this end much of the biological research already undertaken has been directed at formulating recommendations for management of various fisheries. Research work is also carried out which is expected to lead to the development of new fisheries, the expansion of under-exploited fisheries, more economical operations, and the use of more efficient equipment.

The organisations in Australia at present engaged in research into fisheries matters are:

- (i) Division of Fisheries and Oceanography, C.S.I.R.O. (fisheries science and oceanography);
- (ii) Division of Food Preservation, C.S.I.R.O. (research into handling, storage, processing, and transportation of fish);
- (iii) the several State fisheries departments (general biological research);
- (iv) Fisheries Branch, Department of Primary Industry (economic and management research, gear technology, extension work to the industry).

## Collection and presentation of fisheries statistics

### Source and basis of statistics

Statistics presented in this chapter have been collected by a number of authorities. The various State fisheries authorities have supplied, through the Deputy Commonwealth Statisticians in the States, the details of employment, boats, equipment, and production of the general fisheries and the pearl and shell fisheries. The Fisheries Branch of the Department of Primary Industry has supplied particulars of the whaling industry. Statistics of the processing of general fisheries products and of overseas trade in the products of fishing and whaling have been compiled in the Commonwealth Bureau of Census and Statistics.

The statistics refer, in general, to financial years. However, pearl and shell fishing data refer to the season ended in the financial year shown. Whaling statistics are shown by calendar years, and refer to the season in the calendar year. All overseas trade information refers to financial years.

In the preparation of Australian fisheries production statistics the quantities of individual products are generally in terms of the form in which they are taken from the water. For example, the statistics of fish production published in this chapter are in terms of 'estimated live weights' which are calculated from landed weights by using conversion factors for each species in each State. These conversion factors allow for the fact that the quantities of fish reported are frequently in a gutted, headed and gutted, or otherwise reduced condition. Crustaceans are reported on a 'whole weight' basis and molluscs (edible) on a 'gross (in-shell) weight' basis. The figures of pearl-shell and trochus-shell refer to the actual quantities of dry shell for sale and exclude the weight of the fish.

In Australia the basic source of statistical information on commercial fishing operations is the fishermen. In four of the six States monthly returns of catch by species have been obtained from fishermen for a number of years. In the other two States (Queensland and South Australia) there have been no statistical collections from fishermen, and catch statistics have been derived from other sources such as markets and receiving depots. In general it is recognised that catch statistics in Australia have been somewhat incomplete in past years. For example, details of production given in this chapter refer in most cases only to the recorded commercial production. In view of the importance of amateur fishermen in certain types of fishing, details shown cannot be taken as representing the total catch. In addition, it is likely that the figures shown understate the full commercial catch because no information is available on fish taken for sale by persons not licensed as professional fishermen.

Two weaknesses of fisheries statistical collections in Australia to date have been the lack of uniformity, which makes it difficult to compile statistics on an Australia-wide basis, and the lack of data on the effort involved in taking fish (time spent fishing, gear used, etc.). Recognising these weaknesses, the Commonwealth-States Fisheries Conference in 1960 appointed a Statistics Committee 'to examine all aspects of fisheries statistics and fully document a proposed system for submission to the States and Commonwealth for approval'.

#### **Model system of catch and effort statistics, 1962**

The model system of catch and effort statistics designed by the Committee was adopted by the Commonwealth-States Fisheries Conference in 1962. The new system was introduced in Tasmania in 1963 and in Victoria and Western Australia in 1964. The system was introduced in Queensland for the otter trawl fishery early in 1965, but there are no definite plans at present to extend it to other fisheries. The system is now being introduced into South Australia in respect of major fisheries, and arrangements are proceeding for its introduction into New South Wales.

Under the new system fishermen are asked to report monthly the various fishing methods used, catch of each species taken and the locality where the greatest proportion of the catch is taken. Fishermen record catch in terms of landed weight, and appropriate conversion factors are used to obtain live weight where this is required. A grid system of 1° rectangles (relating to latitude and longitude) is used for recording location of catches at sea, and estuaries and inland waters are recorded where appropriate. Other data obtained include details of fishing effort, ports at which catch is landed, and employment details.

The eventual implementation of this system in all States is expected to ensure the availability of statistical information of a much higher standard. In addition to the new system of catch and effort statistics, a uniform boat registration system has been introduced by all States. This new system will provide details of various characteristics of the commercial fishing fleet on a uniform basis for all States.

### **Boats and equipment used in fisheries**

#### **Fish, crustaceans and molluscs (edible)**

The boats used for the estuarine fisheries are mostly small vessels, propelled by diesel or petrol engines of low power. The offshore vessels range in length from 30 feet to 120 feet and are almost invariably powered by diesel engines. Many of them have insulated holds to carry fish in ice, and some of the crayfish boats are fitted with wells in which the catch is kept alive. Some vessels have dry refrigeration and others, including some of the tuna live-bait pole-fishing vessels, are equipped with brine refrigeration.

A recent survey showed that about 50 per cent of Australia's commercial fishing fleet, including tenders, consists of vessels up to twenty feet in length, about 25 per cent are in the 20-29 feet category, and the remainder are greater in length. Only a very small number are greater than fifty feet in length. More precise information on this aspect of the fishing fleet will be available in the future when results from the uniform boat registration system become available. A great variety of fishing equipment is used, and the following are the types of equipment most commonly used for the main types of fish, crustaceans, and molluscs: mullet, beach seine, gill net; shark (edible), long-lines, gill net; Australian salmon, beach seine; snoek, trolling lines; flathead, Danish seine, otter trawl; snapper, long-lines, traps, gill net, hand-line; morwong, Danish seine, otter trawl, traps; whiting, handlines, Danish seine, beach seine; garfish, gill net, beach seine; mackerel, trolling lines; tuna, pole and live-bait, trolling lines (lampara nets and purse seines are used for taking live bait for tuna); prawns, otter trawl, beam trawl, seine net; crayfish, pots, traps; scallops, dredge, otter trawl.

#### **Pearls, pearl-shell and trochus-shell, whaling**

Ketch-rigged luggers about fifty-five feet long which carry crews of eight to fourteen members are used for pearl and pearl-fishing around Australia.

The whaling industry is highly mechanised. Standard equipment includes aircraft to locate whales, diesel-powered catchers of about 100 to 125 feet in length, and tow boats.

**Boats and equipment employed by industry**

The following two tables show details of boats and equipment employed in the taking of fish, crustaceans and edible molluscs, pearl-shell and trochus-shell, and the number of chasers and stations engaged in whaling operations. The reservations mentioned below regarding the use of employment information are also applicable to these tables. Boats employed in more than one industry are classified to their main activity.

**FISHERIES: BOATS AND EQUIPMENT EMPLOYED AND WHALING STATIONS  
OPERATING, STATES AND NORTHERN TERRITORY, 1966-67**

		N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	Aust.
<b>General fisheries—</b>									
Boats employed . . . . .	no.	2,469	1,108	1,223	2,038	1,475	618	60	8,991
Value of boats and equipment . . . . .	\$'000	8,642	6,983	7,620	7,192	9,707	5,757	201	46,102
<b>Edible oyster fisheries—</b>									
Boats employed . . . . .	no.	1,479	..	70	..	..	..	..	1,549
Value of boats and equipment . . . . .	\$'000	1,088	..	39	..	..	..	..	1,127
<b>Pearl-shell and trochus-shell(a)—</b>									
Boats employed . . . . .	no.	..	..	26	..	13	..	3	42
Value of boats and equipment . . . . .	\$'000	..	..	n.a.	..	106	..	n.a.	n.a.
<b>Whaling(a)—</b>									
Chasers . . . . .	no.	..	..	..	..	3	..	..	3
Stations operating . . . . .	..	..	..	..	..	1	..	..	1

(a) Source: Department of Primary Industry.

**FISHERIES: BOATS AND EQUIPMENT EMPLOYED AND WHALING STATIONS  
OPERATING, AUSTRALIA, 1962-63 TO 1966-67**

		1962-63	1963-64	1964-65	1965-66	1966-67
<b>General fisheries—</b>						
Boats employed . . . . .	no.	8,574	8,473	9,426	8,983	8,991
Value of boats and equipment . . . . .	\$'000	28,298	31,794	36,401	40,602	46,102
<b>Edible oyster fisheries—</b>						
Boats employed . . . . .	no.	1,294	1,424	1,419	1,415	1,549
Value of boats and equipment . . . . .	\$'000	923	976	1,125	1,161	1,127
<b>Pearl-shell and trochus-shell(a)—</b>						
Boats employed . . . . .	no.	60	53	40	42	42
Value of boats and equipment . . . . .	\$'000	550	480	n.a.	n.a.	n.a.
<b>Whaling(a)—</b>						
Chasers . . . . .	no.	8	3	3	3	3
Stations operating . . . . .	..	2	1	1	1	1

(a) Source: Department of Primary Industry.

**Employment in fisheries****Persons engaged in fishing activities, 1966 census**

The number of persons whose industry statements were classified to 'fishing' at the 1966 census was 8,021 out of a total of 512,994 in all primary industries and 4,856,455 in the total work force. The census classification 'fishing' includes such activities as fishing, whaling, pearl-shell fishing, oyster-farming, etc. For further information see the chapter Employment and Unemployment, also 1966 Census Bulletin No. 9.6, *Population: By Industry and Occupational Status, Australia*.

**Classification of registered commercial fishermen by industry**

The following two tables are derived mainly from the licensing records of the various State fisheries authorities. Because the definitions and licensing procedures used by these authorities are not uniform the statistics should not be used to compare the relative productivities of fishing industries in the several States. Persons engaged in more than one industry are classified according to their main activity, and so may be classified differently from one year to the next.

REGISTERED COMMERCIAL FISHERMEN: STATES AND NORTHERN TERRITORY  
1966-67

Industry	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	Aust.
General fisheries . . .	3,546	2,057	2,154	(a)2,200	2,350	1,200	133	13,640
Edible oyster fisheries . .	1,062	..	179	..	8	..	..	1,249
Pearl-shell and trochus-shell(b) . . .	..	..	412	..	123	..	36	571
Whaling(b)—								
At sea . . . . .	..	..	..	..	45	..	..	45
Ashore . . . . .	..	..	..	..	43	..	..	43

(a) Estimated. (b) Source: Department of Primary Industry.

## REGISTERED COMMERCIAL FISHERMEN: AUSTRALIA, 1962-63 TO 1966-67

Industry	1962-63	1963-64	1964-65	1965-66	1966-67
General fisheries . . . . .	11,544	11,862	11,414	12,256	13,640
Edible oyster fisheries . . . . .	1,154	1,467	997	1,072	1,249
Pearl-shell and trochus-shell(a) . . . . .	727	640	533	544	571
Whaling(a)—					
At sea . . . . .	85	42	45	44	45
Ashore . . . . .	90	40	38	42	43

(a) Source: Department of Primary Industry

## Production, processing and domestic marketing of fisheries products

The tables on pages 1017-20 show details of the production of the main types of fish, crustaceans, and molluscs caught in each State and the Northern Territory in 1966-67 and throughout Australia for the years 1962-63 to 1966-67.

## Fish

FISH: PRODUCTION, BY TYPE, STATES AND NORTHERN TERRITORY, 1966-67  
(<sup>0</sup>000 lb estimated live weight)

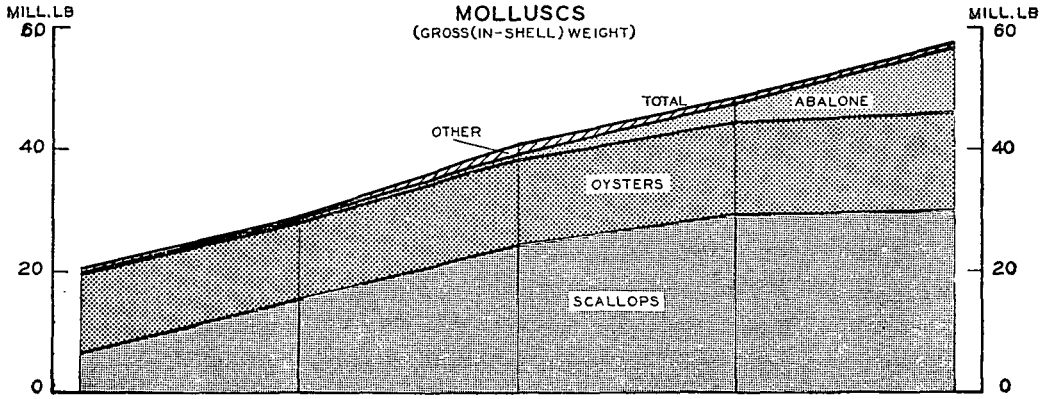
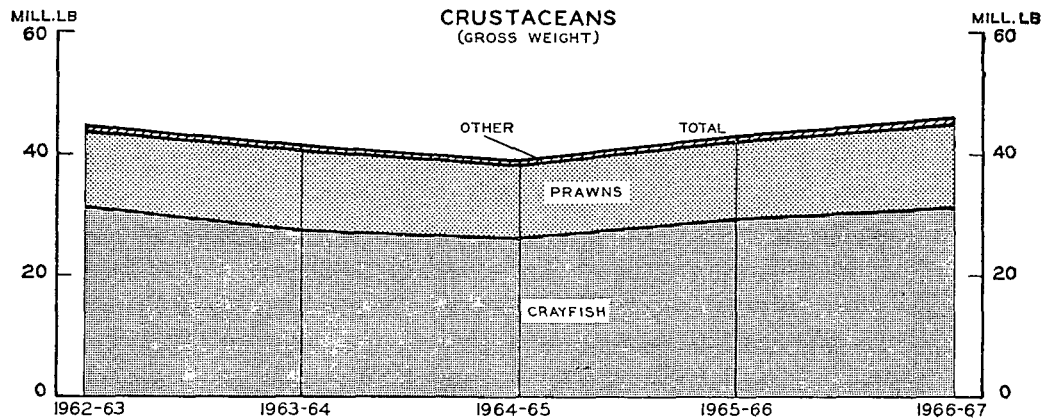
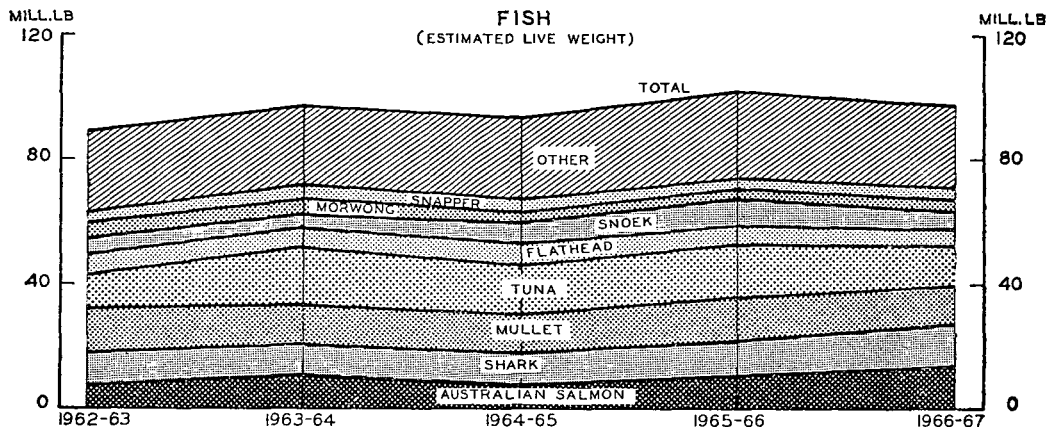
Type	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	Aust.
Marine types—								
Australian salmon . . . . .	1,089	1,252	..	2,370	9,245	942	..	14,898
Shark . . . . .	1,999	5,694	..	3,770	838	1,003	23	13,326
Mullet . . . . .	5,304	629	4,186	545	1,762	32	3	12,461
Tuna . . . . .	4,725	49	21	7,521	106	32	..	12,455
Flathead . . . . .	3,947	1,603	159	..	19	119	..	5,848
Snoek . . . . .	70	2,790	..	..	..	2,286	..	5,146
Morwong . . . . .	3,456	294	..	..	8	12	2	3,772
Snapper . . . . .	1,708	349	102	937	573	..	..	3,668
Whiting . . . . .	453	481	491	1,680	515	..	..	3,619
Mackerel . . . . .	208	..	1,812	..	120	1	12	2,153
Garfish . . . . .	230	371	98	1,015	51	13	2	1,780
Bream (including Tarwhine) . . . . .	616	490	472	35	74	..	5	1,692
Ruff . . . . .	..	90	..	835	710	..	..	1,636
Luderick . . . . .	1,189	110	155	..	..	..	..	1,455
Leatherjacket . . . . .	920	37	..	..	29	..	..	986
Tailor . . . . .	163	46	454	..	136	..	..	799
Other . . . . .	4,256	1,343	2,195	1,229	1,776	315	555	11,666
Total, marine . . . . .	30,333	15,627	10,146	19,937	15,960	4,755	601	97,360
Freshwater types . . . . .	302	420	n.a.	390	..	71	..	(a)1,184
Grand total . . . . .	30,636	16,048	(a)10,146	20,327	15,960	4,826	601	(a)98,544

(a) Excludes freshwater fish caught in Queensland, particulars of which are not available.

PRODUCTION OF FISH, CRUSTACEANS AND MOLLUSCS: AUSTRALIA

(BY TYPE)

1962-63 to 1966-67



## FISH: PRODUCTION, BY TYPE, AUSTRALIA, 1962-63 TO 1966-67

('000 lb estimated live weight)

Type	1962-63	1963-64	1964-65	1965-66	1966-67
<b>Marine types—</b>					
Australian salmon . . . . .	7,794	11,260	8,291	11,184	14,898
Shark . . . . .	10,524	10,463	10,470	11,597	13,326
Mullet . . . . .	13,736	12,496	12,146	14,152	12,461
Tuna . . . . .	11,006	17,932	15,838	17,755	12,455
Flathead . . . . .	6,828	6,151	6,836	5,824	5,848
Snoek . . . . .	4,842	4,331	6,514	8,539	5,146
Morwong . . . . .	4,949	4,545	3,218	2,995	3,772
Snapper . . . . .	4,107	4,160	3,877	3,344	3,668
Whiting . . . . .	3,699	3,498	3,658	3,600	3,619
Mackerel . . . . .	2,192	2,215	2,316	2,298	2,153
Garfish . . . . .	1,644	1,740	1,422	1,471	1,780
Bream (including Tarwhine) . . . . .	1,531	1,233	1,293	1,508	1,692
Ruff . . . . .	1,360	1,093	1,507	1,442	1,636
Luderick . . . . .	1,311	1,293	1,356	1,698	1,455
Leatherjacket . . . . .	1,955	1,125	1,343	1,494	986
Tailor . . . . .	955	1,627	1,748	1,357	799
Other . . . . .	9,941	10,907	11,401	11,818	11,666
<i>Total, marine</i> . . . . .	<i>88,375</i>	<i>96,067</i>	<i>93,234</i>	<i>102,076</i>	<i>97,360</i>
Freshwater types(a) . . . . .	1,309	1,015	1,183	1,060	1,184
<b>Grand total(a)</b> . . . . .	<b>89,684</b>	<b>97,082</b>	<b>94,417</b>	<b>103,136</b>	<b>98,544</b>

(a) Excludes freshwater fish caught in Queensland, particulars of which are not available.

## Crustaceans

CRUSTACEANS: PRODUCTION, BY TYPE, STATES AND  
NORTHERN TERRITORY, 1966-67

('000 lb gross weight)

Type	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	Aust.
Crayfish(a) . . . . .	394	1,723	27	6,249	18,956	4,290	..	31,639
Prawns . . . . .	3,780	10	5,934	..	3,898	..	1	13,624
Crabs . . . . .	272	..	584	10	96	..	4	966
<b>Total</b> . . . . .	<b>4,446</b>	<b>1,734</b>	<b>6,544</b>	<b>6,259</b>	<b>22,950</b>	<b>4,290</b>	<b>5</b>	<b>46,228</b>

(a) Includes freshwater crayfish caught in New South Wales and shovelnosed lobster taken in Queensland.

## CRUSTACEANS: PRODUCTION, BY TYPE, AUSTRALIA, 1962-63 TO 1966-67

('000 lb gross weight)

Type	1962-63	1963-64	1964-65	1965-66	1966-67
Crayfish(a) . . . . .	31,400	27,633	26,386	29,908	31,639
Prawns . . . . .	12,615	13,369	12,076	12,547	13,624
Crabs . . . . .	842	708	832	815	966
<b>Total</b> . . . . .	<b>44,858</b>	<b>41,711</b>	<b>39,293</b>	<b>43,270</b>	<b>46,228</b>

(a) Includes freshwater crayfish caught in New South Wales and shovelnosed lobster taken in Queensland.



## Molluscs (edible)

**MOLLUSCS: PRODUCTION, BY TYPE, STATES, 1966-67**  
(<sup>0</sup>000 lb gross [in-shell] weight)

Type	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	Aust.
Scallops . . . .	..	28,726	444	..	..	753	..	(a)29,923
Oysters . . . .	15,768	33	286	..	26	..	2	16,115
Abalone . . . .	2,400	3,379	..	630	10	4,407	..	10,825
Squid . . . .	..	245	(b)73	(c)35	16	..	..	369
Mussels(a) . . . .	..	260	..	..	..	..	..	260
Octopus . . . .	..	31	..	..	3	..	..	(d) 34
Cuttlefish . . . .	..	..	..	..	..	..	..	(e)
<b>Total . . . .</b>	<b>18,168</b>	<b>32,674</b>	<b>803</b>	<b>665</b>	<b>55</b>	<b>5,160</b>	<b>2</b>	<b>57,527</b>

(a) Excludes particulars for Western Australia, which are not available for publication. (b) Includes octopus.  
(c) Includes cuttlefish and octopus. (d) Excludes production for Queensland and South Australia, which is included with squid. (e) Production for South Australia is included with squid.

**MOLLUSCS(a): PRODUCTION, BY TYPE, AUSTRALIA, 1962-63 TO 1966-67**  
(<sup>0</sup>000 lb gross [in-shell] weight)

Type	1962-63	1963-64	1964-65	1965-66	1966-67
Scallops(b) . . . .	6,497	15,373	24,739	29,524	29,923
Oysters . . . .	13,029	12,775	14,636	15,067	16,115
Abalone . . . .	..	192	966	2,975	10,825
Squid . . . .	292	303	217	233	(c)369
Mussels . . . .	683	410	334	425	(b)260
Octopus . . . .	18	16	13	34	(d)34
Cuttlefish . . . .	1	2	1	3	(e)
<b>Total(f) . . . .</b>	<b>20,521</b>	<b>29,073</b>	<b>40,907</b>	<b>48,262</b>	<b>57,527</b>

(a) Excludes pipis, particulars of which are not available for publication. No pipis were taken in 1966-67. (b) Excludes particulars for Western Australia which are not available for publication. (c) Includes octopus for Queensland and cuttlefish and octopus for South Australia. (d) Excludes production for Queensland and South Australia, which is included with squid. (e) Production for South Australia is included with squid. (f) Incomplete; see footnote (b).

## Pearls, pearl-shell and trochus-shell

**PEARL CULTURE OPERATIONS: AUSTRALIA, 1962 TO 1966**

(Source: Fisheries Branch, Department of Primary Industry)

		1962	1963	1964	1965	1966
Purchases of shell . .	no. of shells	337,653	503,100	590,729	635,003	697,443
	tons	158.1	241.0	288.3	311.6	345.5
Production of—						
Cultured pearls—						
Round and baroque pearls	no.	11,041	30,512	58,839	65,735	105,121
	momme(a)	8,025	18,279	35,892	40,098	63,073
Half pearls . . . .	no.	97,324	147,764	232,887	278,637	264,012
Manufacturing shell . .	tons	37.0	61.4	107.9	155.4	160.1

(a) A momme is a pearl weight measurement equivalent to 0.13 oz (avoirdupois).

**PEARL-SHELL AND TROCHUS-SHELL: PRODUCTION  
STATES AND NORTHERN TERRITORY, 1962 TO 1966**

(Tons)

	1962	1963	1964	1965	1966
Pearl-shell(a)—					
Queensland . . . . .	339.8	221.5	215.4	193.3	179.6
Western Australia . . . . .	330.1	217.8	79.9	97.4	103.2
Northern Territory . . . . .	51.2	4.9	5.4	8.9	16.6
<i>Australia</i> . . . . .	721.2	444.2	300.7	299.6	299.4
Trochus-shell—					
Queensland . . . . .	159.4	63.6	30.6	10.8	2.6

(a) Excludes manufacturing shell produced from pearl culture operations.

**Whales**

Only sperm whales were caught during 1967 season and no quotas were imposed on the catch. Quotas previously set by the Department of Primary Industry were for the baleen species.

**WHALES TAKEN: AUSTRALIA, 1963 TO 1967**

(Source: Fisheries Branch, Department of Primary Industry)

(Number)

	1963	1964	1965	1966	1967
Baleen whales taken—					
Type—					
Humpback . . . . .	87	..	..	..	..
Blue . . . . .	1	..	..	..	..
Sex—					
Male . . . . .	37	..	..	..	..
Female . . . . .	51	..	..	..	..
<i>Total baleen whales taken</i> . . . . .	88	..	..	..	..
Humpback equivalent(a) . . . . .	89	..	..	..	..
Quota of humpback whales(a) . . . . .	550	..	..	..	..
Sperm whales taken—					
Male . . . . .	587	695	636	595	560
Female . . . . .	11	15	32	11	27
<i>Total sperm whales taken</i> . . . . .	598	710	668	606	587
<i>Total whales taken</i> . . . . .	686	710	668	606	587

(a) The quota set in 1963 by the Department of Primary Industry was in terms of humpback whales, and for this purpose 1 blue whale was taken to be equivalent of 2 fin, 2½ humpback, 6 sei, or 6 bryde whales.

**Processing of fish**

Quick-freezing is used at sea and ashore to preserve fish before delivery to consumers. The main technique employed in Australia is brine-freezing, as used extensively in the tuna and salmon fisheries.

Fish canning in Australia on a modern scale dates from 1937, before which fish canning was carried out on an occasional basis only by factories handling other foodstuffs. The main canneries handle tuna (Eden, New South Wales; Melbourne, Victoria; Port Lincoln, South Australia); Australian salmon (Eden, New South Wales; Melbourne, Victoria; Port Lincoln and Adelaide, South Australia; Albany, Western Australia; Margate, Tasmania); snoek (Melbourne, Victoria; Margate, Tasmania); scallops and abalone (Melbourne, Victoria).

Other methods of fish processing include smoking and bottling, but these are undertaken on a minor scale only. Among the few fish by-products produced are small quantities of fish meal.

## FISH PROCESSING (EXCEPT FREEZING): AUSTRALIA, 1962-63 TO 1966-67

	1962-63	1963-64	1964-65	1965-66	1966-67
Fish used(a)—	'000 lb	'000 lb	'000 lb	'000 lb	'000 lb
Whole . . . . .	15,447	17,506	16,464	16,778	18,190
Headed and or gutted . . . . .	4,972	5,148	5,491	5,835	7,575
<i>Estimated live weight equivalent, fish used . . . . .</i>	<i>21,300</i>	<i>23,600</i>	<i>22,900</i>	<i>23,600</i>	<i>27,100</i>
Production(b)—					
Canned fish(c)—					
Australian salmon . . . . .	3,976	5,335	3,875	4,664	6,370
Tuna . . . . .	4,201	4,647	5,482	4,839	5,639
Other . . . . .	2,150	1,167	1,557	2,350	1,770
<i>Total, canned fish . . . . .</i>	<i>10,327</i>	<i>11,149</i>	<i>10,914</i>	<i>11,853</i>	<i>13,780</i>
Smoked fish . . . . .	286	274	222	258	241
Fish paste . . . . .	1,053	1,212	944	1,018	1,146
Fish meal(d) . . . . .	2,076	2,222	2,373	1,778	1,813

(a) Fish used for canning (including fish loaf), smoking and the manufacture of fish paste, but excluding the weight of oysters, other shellfish and crustaceans used for canning. (b) Excludes canned crayfish, lobsters, prawns, oysters, and clams, details of which are not available for publication. (c) Includes fish loaf, fish cakes, etc. (d) Excludes whale meat.

## Processed crustaceans and molluscs

The chief technique employed to preserve crayfish and scallops is blast freezing, although plate contact freezing is also being used. Crayfish for the domestic market are usually cooked whole and then frozen, as are some exported crayfish. However, the bulk of crayfish exports consists of frozen raw craytails. Most prawns for domestic consumption are sold in a whole cooked condition. Some are also exported in this form, after freezing. As a rule, however, the majority of prawn exports consist of green headless prawns, sometimes de-veined, sometimes split in 'butterfly' style, but in all cases frozen into five pound blocks. Scallops are normally frozen in cello-wrapped five pound blocks, although packaging of individually frozen scallops is growing in popularity. Small quantities of frozen abalone are now being exported to the United States of America and Asia. Canned abalone is also packed for the Asian market, and small quantities of abalone soup are being prepared for the domestic and overseas markets.

## Whale processing

Oil from sperm whales is used in the manufacture of soap, plastics and watch lubricants, and in automatic transmission systems in motor cars.

## WHALE PROCESSING: AUSTRALIA, 1963 TO 1967

(Source: Fisheries Branch, Department of Primary Industry)

	1963	1964	1965	1966	1967
Quantity of whale oil produced—					
Baleen oil . . . . . barrels(a)	3,865	..	..	..	..
Sperm oil . . . . . "	23,860	27,534	25,002	24,252	22,428
Value of whale oil produced . . . \$'000	886	620	510	540	423
Value of by-products (meal, meat, solubles, etc.) . . . . . "	138	120	244	398	282
<i>Total value of products . . . . . "</i>	<i>1,024</i>	<i>740</i>	<i>754</i>	<i>938</i>	<i>705</i>

(a) 6 barrels = 1 ton.

## Domestic marketing of fisheries products

Although virtually the whole of the tuna and Australian salmon catches and a large proportion of the snoek catch are canned, the greater part of Australian fisheries production is marketed fresh or frozen.

Marketing arrangements for fresh fish vary. In New South Wales fish marketing is the responsibility of the New South Wales Fish Authority, which operates the Metropolitan and Wollongong Fish Markets. In other coastal centres of New South Wales fishermen's co-operatives may become registered as local fish markets. Fish for industrial use do not pass through any of these markets. The Queensland Fish Board sells all production on behalf of fishermen in that State, and has branches in eighteen centres, as well as depots at eight others. The Board also purchases fish on its own account to stabilise prices. In Victoria, Western Australia and Tasmania the marketing of fish is undertaken through agents. In South Australia the great majority of the fishermen are members of the South Australian Fishermen's Co-operative Ltd, which handles the whole of their production. Canned fish and frozen fish in the form of consumer packs are marketed mainly by the supermarket-type retail establishments. Oysters are usually sold live in the shell directly to restaurants, or are shelled and bottled before being sent to retailers.

#### Value of fisheries production

The following tables show details of the values of production of edible fisheries products, pearl-shell and trochus-shell for the years 1962-63 to 1966-67. See also the chapter Miscellaneous for an explanation of the value terms used.

#### SELECTED FISHERIES PRODUCTS: GROSS VALUE, STATES AND NORTHERN TERRITORY 1966-67 (\$'000)

Product	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	Aust.
Fish	4,360	1,959	(a) 1,876	2,852	(b) 1,013	514	73	12,646
Crustaceans	2,384	1,040	2,662	3,251	13,141	2,426	2	24,906
Molluscs (edible)	3,729	1,981	72	72	(c) 11	714	..	6,580
Pearl-shell(d)	..	..	122	..	108	..	7	(e) 307
Trochus-shell(d)	..	..	..	..	..	..	..	..

(a) Excludes freshwater fish caught in Queensland, particulars of which are not available. (b) Not comparable with previous years because of a change in method of valuation. (c) Excludes scallops, particulars of which are not available for publication. (d) Source: Department of Primary Industry. (e) Includes manufacturing shell produced from pearl culture operations; details classified by States are not available for publication.

#### SELECTED FISHERIES PRODUCTS: GROSS VALUE, AUSTRALIA, 1962-63 TO 1966-67 (\$'000)

Product	1962-63	1963-64	1964-65	1965-66	1966-67
Fish(a)	12,290	13,660	12,187	13,730	12,646
Crustaceans	16,030	15,629	22,386	24,008	24,906
Molluscs (edible)(b)	2,808	3,351	3,804	4,159	6,580
Pearl-shell(c)	662	352	271	291	307
Trochus-shell(c)	37	10	5	2	..

(a) Excludes freshwater fish caught in Queensland. (b) Excludes pipis in New South Wales (no pipis were taken in 1966-67) and scallops in Western Australia. (c) Source: Department of Primary Industry.

#### FISHERIES: GROSS AND LOCAL VALUE OF PRODUCTION STATES AND NORTHERN TERRITORY, 1966-67 (\$'000)

State or Territory	Gross value	Marketing costs	Local value
New South Wales	10,473	1,638	8,836
Victoria	4,980	673	4,307
Queensland	6,650	520	6,130
South Australia	6,175	755	5,420
Western Australia	16,524	56	16,468
Tasmania	3,653	630	3,024
Northern Territory	82	n.a.	82
<b>Australia</b>	<b>48,537</b>	<b>4,272</b>	<b>44,267</b>

In the following table the local value of fishing and whaling production and the local value per head of population are shown by States. Because the value of materials used in the course of production is not available for all States it is not possible to show a comparison of net values.

**FISHERIES: LOCAL VALUE OF PRODUCTION, STATES, 1962-63 TO 1966-67**

<i>Year</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>Aust.</i>
LOCAL VALUE (\$'000)								
1962-63 . . .	7,600	3,248	3,844	2,946	11,128	1,770	86	30,622
1963-64 . . .	7,856	4,202	4,324	3,436	10,088	1,726	52	31,684
1964-65 . . .	8,263	(a) 3,212	5,298	4,480	(a) 15,167	2,194	71	38,685
1965-66 . . .	8,555	(a) 3,797	5,588	5,294	(a) 15,683	2,747	61	41,725
1966-67 . . .	8,836	(a) 4,307	6,130	5,420	(a) 16,468	3,024	82	44,267

**LOCAL VALUE PER HEAD OF POPULATION**

(\$)											
1962-63	.	.	.	1.89	1.08	2.46	2.95	14.31	4.94	1.83	2.82
1963-64	.	.	.	1.93	1.37	2.71	3.36	12.63	4.76	1.04	2.86
1964-65	.	.	.	1.99	(a) 1.02	3.26	4.26	(a) 18.56	5.99	1.34	3.43
1965-66	.	.	.	2.03	(a) 1.19	3.37	4.89	(a) 18.73	7.43	1.10	3.63
1966-67	.	.	.	2.07	(a) 1.33	3.81	4.91	(a) 19.10	8.09	1.41	3.81

(a) Not comparable with years prior to 1963-64 because of a change in method of valuation.

**Consumption of edible fisheries products**

Particulars of the estimated supplies of fish, crustaceans and molluscs available for consumption per head of population, in terms of edible weight, are included in the table below. For the purpose of compiling this table, an allowance has been made for the non-commercial fish catch.

**FISHERIES PRODUCTS: ESTIMATED SUPPLIES AVAILABLE FOR CONSUMPTION  
AUSTRALIA, 1962-63 TO 1966-67  
(lb edible weight per head per annum)**

	1962-63	1963-64	1964-65	1965-66	1966-67
Fresh or frozen—					
Fish—					
Australian origin(a) . . .	3.2	3.3	3.2	3.3	3.1
Imported . . .	2.7	3.1	3.0	3.8	3.3
Crustaceans and molluscs . . .	1.3	1.2	1.5	1.5	1.9
Cured (including smoked and salted) . . .	0.9	1.0	0.7	0.9	0.6
Canned—					
Australian origin . . .	0.9	0.8	1.0	1.1	0.8
Imported . . .	1.9	2.3	2.3	2.4	2.5
Total . . .	11.1	11.7	11.8	13.0	12.2

(a) Includes an allowance for non-commercial catch of fish.

## Overseas trade in fisheries products

## Edible fisheries products

OVERSEAS TRADE IN EDIBLE FISHERIES PRODUCTS: AUSTRALIA  
1964-65 TO 1966-67

	Quantity ('000 lb)			Value (\$'000 f.o.b.)		
	1964-65	1965-66	1966-67	1964-65	1965-66	1966-67
IMPORTS						
Fresh and frozen(a)	39,965	50,666	45,597	10,671	13,972	12,456
Smoked, dried and salted	8,438	10,516	7,393	2,013	2,551	1,568
Potted and concentrated	200	194	323	159	206	198
Canned—						
Herrings	4,773	6,528	5,844	1,060	1,384	1,281
Salmon	11,912	11,145	12,785	6,228	6,522	7,705
Sardines and pilchards	6,341	6,759	5,318	2,003	2,228	1,919
Tuna	316	216	148	90	65	51
Other fish	1,581	1,973	2,870	461	579	747
Crustaceans and molluscs	1,026	1,527	1,432	756	1,096	1,071
Total, canned	25,949	28,148	28,397	10,598	11,874	12,774
Products not elsewhere included	1,643	1,599	2,542	581	811	1,693
Grand total	..	..	..	24,023	29,414	28,689
EXPORTS						
(Australian produce only; excludes re-exports)						
Fresh and frozen(b)—						
Fish	2,725	4,857	988	330	782	211
Crustaceans and molluscs—						
Crayfish tails	7,801	9,735	10,266	13,600	18,079	17,172
Prawns	942	1,822	2,078	840	1,616	2,192
Other	2,629	2,618	3,456	1,420	1,367	1,999
Boiled and frozen crustaceans and molluscs	1,953	2,194	1,727	1,556	1,964	1,536
Prepared and preserved—						
Fish	246	277	545	93	97	205
Crustaceans and molluscs	535	884	2,435	290	458	1,392
Products not elsewhere included	8	70	155	6	43	141
Grand total	..	..	..	18,133	24,406	24,848

(a) Excludes frozen smoked, which is included in item Smoked, dried etc.

(b) Excludes frozen smoked, which is included in item Products not elsewhere included.

## Pearls

Pearls valued at \$583,000 were imported into Australia in 1966-67 (\$554,000 from Japan), compared with imports valued at \$523,000 in 1965-66 (\$505,000 from Japan).

Cultured pearls exported from Australia in 1966-67 (excluding re-exports) were valued at \$1,888,000 compared with exports valued at \$1,521,000 in 1965-66, the bulk of the exports each year being shipped to Japan. The value of natural pearls exported from Australia in 1966-67 (excluding re-exports) was \$19,000 compared with \$39,000 in 1965-66, the major proportion again being shipped to Japan.

**Pearl, etc., shell and marine animal oils**

Of the pearl-shell exported in 1966-67, exports valued at \$190,000 were consigned to the United States of America, \$105,000 to the Federal Republic of Germany, and \$91,000 each to Japan and to Papua and New Guinea.

**OVERSEAS TRADE IN SHELLS: AUSTRALIA, 1964-65 TO 1966-67**

	Quantity ('000 lb)			Value (\$'000 f.o.b.)		
	1964-65	1965-66	1966-67	1964-65	1965-66	1966-67
<b>Imports—</b>						
<i>Total imports</i>	81	88	68	23	31	32
<b>Exports(a)—</b>						
Pearl-shell	1,121	1,141	1,326	425	427	540
Trochus-shell	202	24	84	19	2	32
Other	21	18		8	8	
<i>Total exports</i>	1,344	1,183	1,411	452	437	572

(a) Australian produce only; excludes re-exports.

Of the whale oil exported in 1966-67, about one-half was exported to the United Kingdom, the United States of America, the Federal Republic of Germany, and the Netherlands sharing the bulk of the remainder.

**OVERSEAS TRADE IN MARINE ANIMAL OILS: AUSTRALIA, 1964-65 TO 1966-67**

	Quantity ('000 gal)			Value (\$'000 f.o.b.)		
	1964-65	1965-66	1966-67	1964-65	1965-66	1966-67
<b>Imports—</b>						
Whale oil from—						
Japan	1,208	1,095	727	1,162	1,084	714
Norway	74	98	..	68	91	..
United Kingdom	47	54	104	74	84	135
Other countries	124	34	18	114	39	17
<i>Total whale oil</i>	1,453	1,281	849	1,418	1,298	866
Cod liver oil	81	108	93	79	97	84
Unrefined fish oils	125	82	61	119	76	54
Other	43	21	7	63	28	10
<i>Total imports</i>	1,702	1,492	1,010	1,679	1,499	1,014
<b>Exports(a)—</b>						
Whale oil	1,738	1,288	932	864	620	466
Other	..	2	2	..	1	3
<i>Total exports</i>	1,738	1,290	934	864	621	469

(a) Australian produce only; excludes re-exports.

## CHAPTER 25

# MINERAL INDUSTRY

Further detailed statistics and information on the subjects dealt with in this chapter are contained in the annual printed bulletins *Non-Rural Primary Industries* issued by this Bureau and in *The Australian Mineral Industry—Annual Review* and other publications issued by the Bureau of Mineral Resources, Geology and Geophysics, which also issues, in conjunction with this Bureau, a quarterly publication, *The Australian Mineral Industry*, comprising two parts—Part 1—Quarterly Review and Part 2—Quarterly Statistics. The annual mimeographed statistical bulletins *Mining and Quarrying*, *Minerals and Mineral Products*, *Mineral Exploration*, and *Overseas Participation in Australian Mining Industry* of this Bureau contain economic statistics of the industry prepared and published as soon as possible after the data have been compiled. Two monthly statistical bulletins *Minerals and Mineral Products* and *The Gold Mining Industry, Australia* are issued also, and other current statistics on mining or mine products are contained in the *Quarterly Summary of Australian Statistics*, the *Monthly Review of Business Statistics*, the *Digest of Current Economic Statistics*, and the *Monthly Bulletin of Production Statistics*.

## GENERAL

### Geology

#### General geology

The greatest part of the area of outcropping rock on the Australian continent is Precambrian in age. These basement rocks form the western and central core of the continent and are flanked by younger Palaeozoic rocks, which, along the eastern edge of the continent, form a belt several hundred miles wide extending from north Queensland to Tasmania. Mesozoic sediments overlies large areas of the continent and reach their greatest development in central Queensland. Cainozoic rocks occur mainly in the southern parts of Victoria and South Australia and as residual basalt cappings over an extensive area of the Palaeozoic rocks of eastern Australia.

#### Economic geology

Minerals of economic significance occur widely throughout the Precambrian and Palaeozoic rocks of the continent. Palaeozoic mineralisation is perhaps more varied, but the Palaeozoic deposits now being worked are in general smaller than those found in Precambrian rocks. Most of Australia's metallic mineral deposits occur within two broad regions, a region of Precambrian rocks in the west and central areas of the continent and a region of younger Palaeozoic rocks in the east. This situation is especially true in the case of the larger base metal deposits and also for smaller deposits of metallic minerals.

The major deposits of metallic minerals, including iron ore, lead, zinc, silver, copper, uranium, nickel, and gold, are contained in the Precambrian rocks of the Australian shield. Smaller deposits of tin, tungsten, tantalum, mica, beryllium, manganese, and cobalt are also contained in these rocks.

The mineralised Palaeozoic rocks contain major deposits of gold, now mostly worked out, and a few large copper and lead-zinc-silver occurrences. Smaller amounts of tin, tungsten, molybdenum, bismuth, and other metals also occur in these rocks.

Outside these two main categories, however, there are some metallic mineral deposits of considerable economic importance which were formed during the Tertiary Period. These include bauxite which occurs as a surface capping over various rocks, mostly of Mesozoic age. Extensive deposits of bauxite occur at Weipa on Cape York peninsula in north Queensland, at Gove on the north-eastern tip of the Northern Territory, in the Darling Range in Western Australia, and near Kalumburu in the north-west of Western Australia. These deposits are the result of a long period of weathering.

Mineral sands, another important exception, contain rutile, zircon, ilmenite, monazite, and other minerals, and are particularly well developed on the central and northern New South Wales coast, southern Queensland and south-western Western Australia. The deposits of the eastern States are considered to be derivatives of Mesozoic rocks. The Western Australian deposits are thought to be derivatives of the Precambrian granites of the Australian shield.



Occurrences of fuel minerals (coal, oil and natural gas) are characteristically located in former sedimentary basins. Large areas of Australia are covered by these basins, and more than twenty major sedimentary basins have been identified on the Australian mainland. In addition, sedimentary basins are known to exist in off-shore areas adjacent to the Australian coast. The individual basins range in area from 4,000 to 680,000 square miles and contain marine and continental sedimentary rocks ranging in maximum thickness from 1,000 to about 30,000 feet and including rocks of all ages from Proterozoic to Tertiary.

Deposits of black coal in Australia are mainly of Permian age and are located in sedimentary basins in the coastal areas of the eastern States. The majority of the New South Wales and Queensland black coal deposits are bituminous in type. The extensive brown coal deposits of Victoria were formed during the Tertiary Period.

Oil and natural gas have been found in a number of sedimentary basins, and at present there are proved commercial fields at Moonie, and Alton (oil) and Roma (gas), Queensland, in the Gippsland Basin (oil and gas) off-shore in Bass Strait, at Gidgealpa and Moomba (gas) in north-east South Australia, and at Barrow Island (oil) off the coast of north-west Western Australia. The Moonie deposit is found in rocks of lower Jurassic age. Oil and gas in the Gippsland Basin come from Cretaceous and Tertiary strata. The Barrow Island field, which began production in 1967, is mainly of Cretaceous age, but oil and gas have also been found in underlying Jurassic rocks. Other discoveries of potential commercial significance have been made at Gilmore and Palm Valley (gas) in Queensland; at Mereenie (oil and gas) in the Northern Territory; and at Yardarino, Gingin, and Dongara (gas) in the Perth Basin, Western Australia.

Of the non-metallic minerals, many, such as clay, sand and silica, etc., are not restricted to the rocks of any particular era and are often polycyclic in nature. However, Precambrian rocks do contain deposits of blue asbestos in Western Australia, limestone and dolomite in South Australia, and mica in the Northern Territory.

Opals are found in the flat-lying sedimentary beds of the Great Artesian Basin in Queensland, New South Wales and South Australia. These opal deposits were formed during the Tertiary Period.

A table showing most of the larger mineral deposits now being mined in Australia according to the age of the geological formation in which they are found is shown in Year Book No. 53, page 1062.

### Mineral resources

Australia is self-sufficient in most minerals of economic importance and much more than self-sufficient in some. The following table summarises, in a general way, known reserves and production of the principal metals and minerals in relation to Australian consumption of these commodities and present export availability. Many qualifications are necessary to a simple summary of this kind, and the table should be read in conjunction with the following detailed notes on principal minerals.

#### RESERVES OF MINERALS: AUSTRALIA

(Source: Bureau of Mineral Resources, Geology and Geophysics)

<i>Production</i>	<i>Reserves adequate</i>	<i>Reserves uncertain</i>	<i>Reserves negligible</i>
Production sufficient for domestic demand and exports	Barite Bauxite Cadmium Coal (black) Copper Gold Gypsum Iron ore Lead Manganese ore (metallurgical) Mineral sands(a) Nickel(b) Opal Salt Silver Tin Tungsten Zinc	Beryl Talc Tantalite	

For footnotes see next page.

RESERVES OF MINERALS: AUSTRALIA—*continued*

<i>Production</i>	<i>Reserves adequate</i>	<i>Reserves uncertain</i>	<i>Reserves negligible</i>
Production sufficient for domestic demand	Clays (except light grade china clay) Coal (brown) Dolomite Felspar Limestone	Glass sands Sillimanite	
Production not sufficient for domestic demand	Lithium minerals Phosphate rock Sulphides (as source of sulphur)	Abrasives Antimony Bentonite China clay Chromite Cobalt Diatomite Fluorite Magnesite Manganese ore (chemical) Mineral pigments Petroleum Platinum	Asbestos (chrysotile) Bismuth Mercury Molybdenum
Production nil	Magnesium Potassium salts (from alunite muds)	Arsenic Asbestos (crocidolite)(c) Diamonds Graphite Vanadium Vermiculite	Borates Mercury Nitrates Sulphur

(a) Ilmenite, monazite, rutile, zircon. during 1966.

(b) Mine production commenced mid-1967.

(c) Mine ceased operating

**Aluminium**

As a result of the recent discoveries at Weipa, Gove and the Darling Range, Australia's reserves of bauxite are known to be very large, perhaps the largest in the world. Total reserves in the Weipa region are in excess of 2,000 million tons, while the deposits at Gove are reported to contain up to 200 million tons of bauxite. The Darling Range deposit has nearly 80 million tons of proved reserves, and preliminary estimates by the company indicate that the base areas contain at least 500 million tons of economic bauxite. In addition, another significant deposit of up to 100 million tons has been identified in the Kimberley district of Western Australia.

**Coal**

Australia has coal resources adequate to provide for future domestic requirements and a substantial export surplus. These resources include coal of all types, except pure anthracite. Australia's coal reserves are concentrated mainly in the mainland eastern States. The bituminous coal is located mainly in New South Wales and Queensland; Victoria has very substantial brown coal reserves in the Latrobe Valley. A table showing Australian coal reserves is published in Year Book No. 53, page 1065.

**Copper**

The principal deposit of this metal is at Mt Isa, where ore reserves were estimated at 43.5 million tons in 1967. Recent discoveries have indicated very large additional reserves at Mt Isa, and further exploration and testing is proceeding. Other important deposits are situated at Cobar, New South Wales, Mt Morgan, Queensland, and Mt Lyell, Tasmania. Small deposits at Ravensthorpe, Western Australia, and Tennant Creek, Northern Territory, have also been developed.

**Crude oil**

Vigorous exploration activity continues to supply evidence that Australia may possess significant resources of crude oil. The Moonie-Alton fields in the Surat Basin in Queensland and the Barrow Island field in Western Australia are currently producing commercially, while the Marlin, Kingfish, and Halibut fields in off-shore Victoria are scheduled to begin commercial production in late 1969 and early 1970.

**Gold**

Australia's gold resources are heavily concentrated in Western Australia, mainly in the Kalgoorlie-Coolgardie area. However, small deposits of gold-bearing ore occur in all States. In addition, gold is commonly obtained as a by-product of other mining activities, particularly copper mining. Gold ore reserves at Kalgoorlie were estimated at more than 13.5 million tons in 1967, with a gold content of 5.64 dwt per ton.

**Iron ore**

In recent years very extensive deposits of iron ore have been discovered in Australia. These discoveries have established Australia as one of the most important iron ore provinces in the world. The largest deposits are located in the Hamersley and Ophthalmia Ranges of north-west Western Australia. Other commercially important deposits of iron ore are situated in the Savage River area of Tasmania, in the Middleback Ranges of South Australia, at Yampi Sound, Koolyanobbing, and Talling Peak in Western Australia, and at Mt Bunday and Frances Creek in the Northern Territory. These deposits are adequate to supply the estimated needs of the Australian iron and steel industry far into the future, as well as providing a large export availability. Total Australian reserves are estimated to be more than 16,000 million tons.

**Lead-zinc**

Since the discovery in 1883 and subsequent development of the ore body at Broken Hill, Australia has been a major producer of lead and zinc. Ore reserves in the Broken Hill area are stated to exceed 17 million tons, and further exploration is being undertaken to extend reserves. Mt Isa, with ore reserves of 32 million tons, is the major lead-zinc deposit in Queensland, and further reserves exist in adjacent leases. In Tasmania substantial lead-zinc deposits are situated at Read-Rosebery near the west coast. In the Northern Territory lead-zinc ore bodies have been located at Macarthur River and at Woodcutters near Rum Jungle. A small zinc silicate ore body is to be developed at Beltana, South Australia.

**Manganese**

Australia's known reserves of manganese, which is highly important for the iron and steel industry, are in excess of domestic requirements, and exports have increased sharply in recent years. The principal deposits currently being worked are in the Pilbara and Peak Hill areas of Western Australia and on Groote Eylandt in the Gulf of Carpentaria. Reserves on Groote Eylandt are substantial.

**Mineral sands**

Ores of titanium (rutile and ilmenite), zirconium (zircon) and thorium (monazite) occur in beach sands over extensive areas of the north and central coasts of New South Wales, the south and central coasts of Queensland, and the south-western corner of Western Australia. Resources are large and easily workable. Australia's reserves of rutile represent a large proportion of the world's reserves of this mineral.

**Natural gas**

Several significant discoveries of natural gas have been made throughout Australia, the most notable being the Barracouta and Marlin fields in off-shore Victoria, where reserves are estimated to be approximately 5 trillion cubic feet. Commercial production from these fields is scheduled to commence in the latter part of 1969.

In Queensland numerous gas fields have been discovered in the Roma area and to the north near Rolleston. The combined reserves estimate is approximately 4.5 billion cubic feet. Other fields at Gidgealpa and Moomba in South Australia, which are to supply Adelaide in the near future, have combined estimated reserves of 1.5 trillion cubic feet. Nearby, Daralingie Well No. 1 has recently been completed as a gas producer, but the reserves in this structure are as yet unknown. In Western Australia significant discoveries have been made at Yardarino, Gingin, and Dongara. In the Northern Territory the Mereenie and Palm Valley fields show evidence of considerable natural gas reserves, in association with some crude oil.

**Nickel**

Deposits of nickel have been discovered in Western Australia, central Australia, and Queensland. At Kambalda, near Kalgoorlie in Western Australia, there are reserves of more than 9 million tons of high grade nickel ore.

**Phosphate rock**

Accelerated search for phosphate rock commencing in late 1964 resulted in the discovery of major deposits in north-west Queensland in 1966. Detailed assessment and feasibility studies have yet to be completed.

**Tin**

The main deposits of tin now being exploited are in the Herberton field inland from Cairns, Queensland, in north, west, and central Tasmania, in the Pilbara region and in the south-west of Western Australia, and in the New England area, at Mt Tallebang, and Ardlethan in New South Wales. As the result of exploration and expansion of known deposits in recent years, Australia is now self-sufficient in tin.

**Tungsten**

The main deposits of tungsten ores are in northern Tasmania (wolfram) and on King Island (scheelite). Australia's own requirements are small, and production is principally for export.

**Uranium**

Australia's known reserves of uranium ore were heavily depleted during the years 1953 to 1963. During this period substantial quantities of uranium concentrate were exported to the United Kingdom and the United States. In May 1967 it was stated that reserves of 11,620 short tons of uranium oxide were reasonably assured and a further 3,130 short tons were possible but not proven.

### **Administration**

For all practical purposes all mineral rights in Australia are vested in the Crown. In the States, sovereign rights are held by the State Governments with respect to mineral resources within their boundaries. In the Territories of the Commonwealth these rights are vested in the Commonwealth Government. The Commonwealth Government is able also to influence overall development and production activity in the mineral industry by virtue of its statutory powers with respect to international trade, customs and excise, taxation, and loan raisings. Certain specially formed bodies such as the Joint Coal Board and the Australian Atomic Energy Commission have been given administrative responsibility in defined areas.

**Control of mining**

Each State or Territory in the Commonwealth has its own mining Acts or Ordinances and regulations governing the prospecting for and working of mineral deposits. These Acts, etc. are similar in principle, but differ in detail. They all make provision for the following tenures.

- (i) The holding of a miner's right gives the holder the right to prospect on Crown Land, and to use the timber and water necessary for his operations. The miner's right does not give the power to remove or sell any mineral.
- (ii) Small mining leases, having a maximum area of about 100 acres, necessitate the payment of rent and, in most cases, a royalty. There is usually no limit on the number of such leases which may be held by any one person, partnership, private or public company. In practice a restriction is imposed by the requirement that a lease must be continuously worked, or that work to a given value must be done annually, but exemption from the labour requirements may be obtained under certain circumstances. The exemption is given for limited periods only, and where the labour requirements are not met and exemption has not been granted any person may apply for forfeiture of the lease in his favour. If the rental is not paid the lease is forfeited.

Provision is also made in the various Acts and Ordinances for prospecting areas, claims, etc. Such areas, claims, etc. are all quite limited in size and from the practical viewpoint are cheap forms of mining lease which carry limited powers relating to the removal of minerals. A very large enterprise may take the course of acquiring mining titles by negotiation with the appropriate Minister for Mines and having the agreed terms and conditions embodied in an Act of the State Parliament. This method of acquisition has been used in several cases where the leasing company undertook an obligation (such as the erection of a large treatment works) in return for leases over large areas for a long period, and has become more common in recent years, particularly where very large-scale capital intensive projects are involved (e.g. iron ore in Western Australia, coal and bauxite in Queensland, bauxite in the Northern Territory).

The following table sets out particulars of the areas occupied under mining Acts and Ordinances in the several States and Territories for the period 1963 to 1967. Further details of the various types of mining lease and licence are given in Year Book No. 48, pages 94-5.

**AREAS OCCUPIED UNDER MINING ACTS AND ORDINANCES  
STATES AND NORTHERN TERRITORY, 1963 TO 1967**

('000 acres)

<i>Year</i>	<i>N.S.W. (a)</i>	<i>Vic.</i>	<i>Qld (b)</i>	<i>S.A. (a) (b)</i>	<i>W.A. (c)</i>	<i>Tas. (b)</i>	<i>N.T.</i>	<i>Total (d)</i>
1963 . .	425	46	2,185	5,753	201	44	62	8,716
1964 . .	956	50	2,097	7,894	221	42	61	11,321
1965 . .	1,015	60	2,494	6,621	263	41	61	10,555
1966 . .	1,083	84	2,591	29,638	343	45	36	33,820
1967 . .	1,177	74	2,304	15,508	372	54	37	19,526

(a) Year ended 30 June. (b) Excludes lands held under miners' rights and dredging claims. (c) Excludes holdings under miners' rights. (d) Excludes Australian Capital Territory.

### Control of exploration

Following the introduction of large-scale modern prospecting methods (particularly air-borne prospecting), small prospecting areas were found to be unsuitable, and steps have been taken in the States and Territories to ensure the availability of large areas for prospecting by interested persons. Large areas may be made available in either of the following ways:

- (i) by the Minister of Mines withdrawing an area from the provisions of the Mining Act and giving an informal agreement that the prospector would have preference in applying for titles to leases within the area; or
- (ii) by provision within the Mining Acts or Ordinances for the issue of authorities to prospect over an area defined by a written agreement which also sets out provisions as to the amount of money to be spent, methods of prospecting, tenure of the agreement, etc.

The tenure of such areas is limited, usually to one or two years only, and, if renewed for a further period, is only over an area selected from the larger area as a result of work done during the life of the initial agreement. Neither form of prospecting concession gives the holder any rights over, or authorities to prospect on, land already held under a mining title within the agreed area. Unless specifically stated in an agreement, the discovery of minerals, whether inside or outside an area covered by an authority to prospect, gives the discoverer no legal rights except the right to apply for a mining lease over the area in which the discovery was made. Suitable prospects are converted to mining tenements by making application for lease under the appropriate mining Act.

The above discussion refers in general to the exploration for all types of mineral deposits in Australia. Additional information relating to the search for petroleum is given below.

### Control of petroleum exploration

*On-shore.* In Australia, all petroleum on or below the land is, and shall be deemed always to have been, the property of the Crown. Consequently, full control of petroleum mining rights is vested in the Government or Administration of each State or Territory. Any company, syndicate, or individual proposing to join in the search for petroleum must first satisfy the Government concerned that the necessary financial resources are available to carry out exploration activity.

The names given to different types of exploration permits differ with variations in petroleum legislation from State to State, but there are essentially two basic forms of authorisation for exploration: (a) permit for surface survey; (b) licence for exploratory drilling (does not apply in the Northern Territory).

In most States the minimum permit area is 1,000 square miles and up to a maximum area of 10,000 square miles in the Northern Territory. There is no limit in most States on the number of permits that may be held by one company, syndicate or individual. The term of the initial permit varies between States from one year to five years, but in all cases there is provision for extensions with a maximum in most States of ten years and in the Northern Territory of fifteen years. A bond must be lodged, and in some States rent is payable. All permits contain obligations to carry out certain exploration work with a general provision that survey must be started within three to six months after a permit is granted.

In most States the maximum licence area is 200 square miles (in Papua-New Guinea it is 2,500 square miles) with no limit to the number of licences that may be held. The term of the initial licence varies from State to State and ranges from two to five years. Extensions are permissible with a maximum term ranging in most States from six to ten years. A bond is required in most States, and some States also charge a fee. All States charge a rental ranging from 10c to \$13 a square mile per annum. The obligations of a licence require a company, syndicate or individual to carry out more detailed survey work than at the permit stage and may also require a minimum drilling programme.

If exploration is successful, a lease would normally be granted which gives the right to produce petroleum. The maximum lease area is 100 square miles, except in the Northern Territory where the limit is 1,000 square miles and in Papua-New Guinea where it is 500 square miles. In most States there is no limit to the number of leases that may be held. When a lease is granted, the remaining portion of the licence area in which a lease is situated must in most cases be surrendered to the Crown, but surrender clauses vary from State to State.

The initial term of a lease in most cases is twenty-one years, and the lease may be renewed for a similar period. Also, one of the general obligations of a lease is that drilling for production must be commenced within six months. In some States the appropriate Minister has jurisdiction over the processing and marketing of the oil.

Legislation in most States requires the payment of rent at the rate of \$20 (\$30 in the Northern Territory and Papua-New Guinea) a square mile per annum, but this is deductible from any royalties payable on commercial production. All States and Territories have provisions requiring the operating company to guard against wasteful and dangerous practices and make provision for field development in accordance with sound oilfield practice.

*Off-shore.* Federal and State Ministers and Attorneys-General began a series of conferences in 1963 to determine the extent of their respective jurisdictions over rights to prospect for petroleum in Australian off-shore areas. In 1965 it was announced that agreement had been reached between the Federal and State Governments on a system of joint legislation to control and safeguard the exploration for, and the exploitation of, the petroleum resources on the territorial sea-bed and on the outer continental shelf. The continental shelf is described as submerged land not exceeding 200 metres in depth or beyond that limit to where the depth of the superjacent waters admits of exploitation of the natural resources of the shelf. After further conferences, and consideration of representations made by the off-shore exploration companies, legislation was presented to the several Parliaments at the end of 1967.

The State Governments administer the legislation and collect all rents and fees. Granting of tenements is subject to approval by the Federal Government in so far as its constitutional responsibilities are concerned, e.g. external affairs, defence, customs, and navigation. Standard royalties (10 per cent of value of production at the well-head) are divided on a 40-60 basis between the Federal Government and the adjacent State. Over-ride royalties, if applicable, and all rents and other fees are retained by the adjacent State.

The off-shore legislation provides for a two-stage system of granting authorities to explore and produce. A permit covers all stages of exploration, including drilling. A licence (equivalent to a lease on land) for production is issued for twenty-one years, with the licensee having the right of extensions for a further twenty-one years. Further extensions may be granted. The standard royalty of 10 per cent (plus over-ride royalty, if applicable) is payable for the first twenty-one years. Royalty rate for the whole of the second twenty-one year period will be fixed by the Parliaments at or before the time of granting a renewal, and in the absence of Parliamentary action to fix a new rate the previous rate will continue to apply for the period of the licence.

A graticular system of block areas has been established for off-shore exploration. The size of each graticular block is five minutes of arc of latitude by five minutes of arc of longitude. This results in graticular blocks ranging in area from a little over thirty square miles in northern Australia to approximately twenty-five square miles in southern Australia. Reduction in size is due to the fact that minutes of latitude decrease in length between the Equator and the South Pole. The maximum permit area is 400 blocks (approximately 10,000 to 12,000 square miles). There is no statutory limitation on the number of permits which may be granted to any individual company. Permits will be issued for an initial period of six years with rights of renewal for further successive periods, each of five years, subject to satisfactory compliance with the conditions of the permit and to the permittee surrendering half of the effective permit area at the end of each period. Furthermore, the legislation includes discretionary powers for the Minister to modify the requirement for compulsory reduction if this would result in a permit area being reduced below sixteen blocks.

Following a discovery of petroleum within a permit area the permit holder will be asked to nominate a block which will then become the centre of a group of nine blocks, called a location.

The permit holder has the option of applying for a licence over five of the blocks on which a standard royalty of 10 per cent is payable, with the remaining four blocks reverting to the Crown, or of taking all or some of the additional four blocks on payment of an additional over-ride royalty on all blocks taken up at the location. In the latter event, separate licences are granted over the five and four (or less) blocks, respectively. The rate of over-ride royalty will be negotiable between the adjacent State or Territory and the licensee within a range of 1 per cent to 2½ per cent. Where locations consist of less than nine blocks they will be split evenly between the licensee and the Crown if the number of blocks within the location is even, and the odd block will be available to the licensee if the number is uneven. The permit holder has at least two years, which may be extended to four years, in which to make his selection. Graticular blocks not selected by the permit holder will be excised from the permit area and may be disposed of by the State or Territory by tender. Existing titles which have been previously issued by the States or Territories will be honoured wherever possible.

*Petroleum prospecting or exploring leases: areas occupied*

**AREAS OCCUPIED UNDER AUTHORITIES TO PROSPECT OR EXPLORE FOR  
PETROLEUM: STATES AND NORTHERN TERRITORY, 1963 TO 1967**

('000 acres)

Year	N.S.W. (a)	Vic.	Qld	S.A. (a)	W.A.	N.T.	Total
1963 . . .	175,026	53,345	464,567	197,745	441,795	160,498	1,492,976
1964 . . .	156,543	53,345	379,562	228,234	529,594	147,839	1,495,117
1965 . . .	105,853	31,201	324,205	221,060	491,670	120,130	1,294,119
1966 . . .	113,276	31,174	389,252	237,591	429,994	239,519	1,440,806
1967 . . .	83,893	33,155	252,213	240,791	425,979	221,666	1,257,697

(a) Year ended 30 June.

**Mineral royalties**

The collection by governments of royalties for the production of minerals within their area of authority is an internationally accepted practice. In Australia the responsibility for mineral royalties is largely a State concern, and all States except Tasmania currently collect some form of mineral royalty payments. In the past most States have relied on an established system of standard rates which were uniform for all producers of any particular mineral in the State concerned. These charges were either a fixed monetary amount per ton (e.g. 5c per ton on gypsum mined in New South Wales) or an *ad valorem* royalty (e.g. 1.5 per cent of gross value of gold produced in New South Wales).

In recent years there has been an important basic change in the system of establishing royalty commitments, and it is now quite common for State Governments to negotiate special royalty rates with companies which are seeking mineral leases for large scale developments. These royalty rates may vary, depending on whether production is for export or for domestic processing. The rates for a particular mineral may also vary between producers. Important examples of this type of royalty agreement are the iron ore development agreements in Western Australia and coal development agreements in Queensland. Mineral royalties received by State Governments in recent years are shown in the table below.

**MINERAL ROYALTY RECEIPTS: STATES(a) AND NORTHERN TERRITORY  
1962-63 TO 1966-67**

(\$)

State or Territory	1962-63	1963-64	1964-65	1965-66	1966-67
New South Wales . . . . .	1,633,640	5,090,622	19,946,772	24,317,168	16,326,973
Victoria . . . . .	(b)85,004	(b)94,072	39,996	71,072	70,964
Queensland . . . . .	486,938	642,560	1,201,264	1,183,046	2,241,575
South Australia . . . . .	727,207	860,371	926,984	985,560	1,091,582
Western Australia . . . . .	248,646	243,182	291,354	478,295	2,639,895
Northern Territory . . . . .	61,982	68,682	80,894	88,727	110,574

(a) No mineral royalties are collected in Tasmania.

(b) Includes, in addition to mineral royalties receipts, mine-

tailing licences and rents.

### Control of exports

The Commonwealth Government maintains export controls over certain minerals and metals. These controls are enforced by means of Customs (Prohibited Exports) Regulations as amended from time to time by Statutory Rules. The Commonwealth authorities having jurisdiction over mineral and metal exports, together with the relevant products, are listed below. A clearance to export is needed in each case.

*Department of National Development*—iron ores, beneficiated iron ores and iron concentrates; mineral sands in all forms (including concentrates) containing zircon, rutile or ilmenite; manganese ores; beryllium ores and concentrates.

*Department of Primary Industry*—phosphate rock, phosphate and superphosphate, and fertilisers containing phosphate or superphosphate.

*Australian Atomic Energy Commission*—uranium and thorium minerals including monazite; uranium, thorium, beryllium, hafnium, and lithium metals, compounds and alloys; hafnium-free zirconium metals, alloys and compounds; very pure calcium metal; nickel metal in certain forms; minerals, raw and treated (including residues and tailings), containing more than 0.05 per cent of uranium or thorium, singly or together.

In addition to these controls which are, in general, of fairly long standing, the Commonwealth Government has imposed export controls on copper and copper-bearing materials in recent years. These controls have been administered by the Department of National Development.

In November 1964, as a result of the closure of the copper smelter at Mount Isa, an emergency ban was imposed on the export of copper and copper scrap. The ban did not include copper concentrates or fabricated copper products. These restrictions were lifted as from 1 September 1965. On 20 December 1965, another ban on the exports of copper scrap and ingots, and copper alloy scrap and ingots, and exports controls on primary copper refinery shapes and copper rod were announced. As from 1 May 1966 the ban was extended to include the following materials from which copper may be obtained—residues, speiss, slag, dross, scale, sweepings, ash, sludge, slime, dust, and wastes. In addition, it was announced that export permits would not be issued for copper and copper alloy cakes, billets and similar shapes produced from scrap.

### Joint Coal Board

The Joint Coal Board was established in 1946 under joint legislation of the Commonwealth and of the State of New South Wales to carry out special administrative functions in regard to the New South Wales black coal mining industry. A summary of these functions is given below.

- (i) To ensure that coal is produced in the State of New South Wales in such quantities and with such regularity as will meet requirements throughout Australia and in trade with other countries;
- (ii) to ensure that the coal resources of the State are conserved, developed, worked, and used to the best advantage in the public interest;
- (iii) to ensure that coal produced in the State is distributed and used in such manner, quantities, classes and grades, and at such prices as are calculated best to serve the public interest and secure the economical use of coal and the maintenance of essential services and industrial activities; and
- (iv) to promote the welfare of workers engaged in the coal industry in the State.

### Australian Atomic Energy Commission

During 1953, Commonwealth legislation was enacted to set up an Atomic Energy Commission which is responsible, in an overall sense, for the production and utilisation of uranium in Australia. This Act, the *Atomic Energy Act 1953*, superseded the *Atomic Energy (Control of Materials) Act 1946*, but retains a provision of that Act which provides for the control of substances which could be used for production or use of atomic energy.

The functions of the Commission fall under two main headings. Firstly, it is responsible for undertaking and encouraging the search for and mining of uranium and is empowered to co-operate with the appropriate authorities of the States in connection with these and related matters. Secondly, it is authorised to develop the practical uses of atomic energy by constructing and operating plant for this purpose, carrying out research and generally fostering the advancement of atomic energy technology. The Commission functions under the direction of the Minister for National Development.



### Government assistance

The Commonwealth Government and the various State Governments provide assistance to the mineral industry in a variety of ways. The main forms of assistance are discussed below.

#### Commonwealth Government assistance

Assistance provided by the Commonwealth Government takes the form of income taxation concessions, subsidies, bounties, and technical assistance mainly through the work of the Bureau of Mineral Resources and the Commonwealth Scientific and Industrial Research Organization. A table showing direct Commonwealth Government payments to sectors of the mineral industry is included on page 1039.

*Income taxation concessions.* One-fifth of the net income derived from mining for prescribed minerals in Australia or the Territory of Papua and New Guinea is exempt from tax. The metals or minerals to which this concession applies are as follows: asbestos, bauxite, chromite, emery, fluorspar, graphite, ilmenite, kyanite, magnesite, manganese oxides, mica, monazite, pyrite, quartz crystals (piezo-electric quality), radio-active ores, rutile, sillimanite, vermiculite, and zircon; and ores of antimony, arsenic, beryllium, bismuth, cobalt, columbium, copper, lithium, mercury, molybdenum, nickel, osmiridium, platinum, selenium, strontium, tantalum, tellurium, tin, tungsten, and vanadium.

Income derived from mining principally for gold in Australia or the Territory of Papua and New Guinea is exempt from tax. The exemption is also available in respect of income derived from mining principally for gold and copper if the value of the gold obtained is not less than 40 per cent of the value of the total output.

Income attributable to uranium obtained from working a mining property in Australia or the Territory of Papua and New Guinea, or from the treatment of ore in Australia or the Territory of Papua and New Guinea, is exempt from tax for residents of Australia and the Territory of Papua and New Guinea. The exemption is, however, conditional upon the uranium recovered being owned by the Commonwealth or disposed of to a person approved by the Commonwealth.

Dividends paid wholly and exclusively out of mining income are also exempt from tax.

Valuable assistance has been given in the form of certain taxation concessions to encourage the search for petroleum. Resident investigators are permitted, for tax purposes, to deduct from their assessable income all sums paid for shares issued by petroleum exploration companies in respect of application, allotment, and call moneys. These deductions are allowable only if a petroleum exploration company elects to forgo an equivalent amount when, in the event of commercial production, capital expenditure is claimed as a deduction for tax purposes. Most Australian petroleum exploration companies have elected to pass on this benefit to their shareholders. Special deductions for capital expenditure incurred in the discovery and mining of petroleum are allowable to a company deriving income from the sale of petroleum, and products of that petroleum, mined by the company in Australia or the Territory of Papua and New Guinea. The general effect of the deductions is to free the proceeds from the sale of Australian or Territory petroleum and its products from tax until all allowable capital expenditure has been fully recouped. Dividends paid wholly and exclusively out of profits so freed from tax are exempt.

*Petroleum search subsidy.* In 1957 the Commonwealth Government introduced the *Petroleum Search Subsidy Act 1957* whereby stratigraphic drilling operations were subsidised to the extent of 50 per cent of cost. The *Petroleum Search Subsidy Act 1959* widened the scope of operations for which subsidy was offered to include all types of geophysical surveys and off-structure drilling operations. Another amendment in 1961 further widened the scope of the 1959 Act to provide subsidy for test drilling and detailed structure drilling operations. It also provided for the calculation of drilling subsidies on a footage basis as an alternative to the total cost basis. A sum of \$10 million was allocated to the petroleum search subsidy scheme for 1962-63 compared with an allocation of \$5.4 million in the previous year. Applications for subsidy increased to such an extent, however, that in spite of the increased allocation, the maximum rate of subsidy was reduced from 50 per cent of the allowable cost of approved operations to 30 per cent.

The *Petroleum Search Subsidy Act 1959-1964* was amended in June 1967 to extend Commonwealth subsidy for a further one year. The *Petroleum Search Subsidy Act 1959-1967* provides subsidy for approved geophysical surveys and test and stratigraphic drilling operations; bore-hole surveys and detailed structure drilling are no longer eligible. As in the previous Act, an applicant may elect to receive subsidy for both types of drilling operations on either a footage basis or a total cost basis. In addition, the production testing of any well approved for subsidy is also eligible for additional subsidy. Under the Act the Minister may vary the rates of subsidy for prescribed operations, but they may not exceed one-half the total cost. The present rates of subsidy for approved operations on a

cost basis are 30 per cent for test-drilling and 40 per cent for stratigraphic drilling. The rate for all types of geophysical operations is 30 per cent. The 1959-1967 Act also specifies that exploration for petroleum on the Australian continental shelf is eligible for subsidy retrospective to 1959. The Federal budget for 1967-68 contained an appropriation of \$13.6 million for subsidies under the Act. Payments under this Act in each of the years 1963 to 1967 are shown in the table on page 1039.

On 28 October 1964 the Minister announced that action was necessary to limit the burden of the Commonwealth subsidy scheme on the Australian taxpayer in view of the many recent encouraging discoveries of oil and gas which were now providing the incentive to further exploration. To this end the Minister announced that operations within certain defined areas around discovery wells and fields would not be approved for subsidy. For the present, projects in the following areas would not be eligible for subsidy: twenty miles from a gas well; thirty miles from an oil well; forty miles from a gas field; fifty miles from an oil field. Specified areas excluded from subsidy payments are periodically announced by the Minister.

*Pricing of Australian crude oil.* Early in 1965 the Tariff Board conducted a public inquiry to determine an appropriate price for Australian crude oil, having regard to the Commonwealth Government's desire to encourage the search for oil and the consequent need to offer sufficient incentive to exploration companies. At the same time the Government indicated that it was anxious to prevent or minimise increased costs of petroleum products to consumers and to ensure that refineries using Australian crude oil were not detrimentally affected in relation to other refineries. Evidence was heard from oil exploration, marketing and refining interests, government officials, coal and power interests, and major users of refined petroleum products. The Tariff Board subsequently recommended that Australian crude oil should be valued at \$US 2.48 a barrel at the nearest refining centre, plus a differential for the quality of the oil produced. The Board also recommended an additional margin of 25 cents a barrel to provide an incentive for increased exploration activity. The Government adopted the Tariff Board's recommendations, but raised the incentive margin to 75 cents. As a result, the price for Moonie crude is \$US 3.50 a barrel delivered Brisbane, made up as follows: crude oil value, \$US 2.48; incentive margin, \$US 0.75; quality differential, \$US 0.27. This pricing structure will operate for five years, but the Government will consider reviewing the valuation during this period if it considers that the incentive to exploration has proved inadequate.

In order to ensure that local crude oil is used in Australian refineries, the Government has also adopted the Tariff Board's recommendation to impose penal import duties of 0.8 cents a gallon on crude oil and 2.4 cents a gallon on motor spirit to be paid by those companies which do not take their share of local crude oil. The share of local crude to be taken will be based on the importer's share of total imports of refinery feedstock or refined products or both.

Any oil found in the Territory of Papua and New Guinea will be covered by these policies in the same way as oil found in Australia.

*Assistance to the gold-mining industry.* Assistance to the gold-mining industry by subsidy was introduced at a time of rising costs in the industry and fixed official world price for gold. Because many producers were faced with the likelihood of closing down, the Government decided to subsidise marginal producers in Australia and the Territories of Papua and New Guinea. Under the *Gold-Mining Industry Assistance Act* 1954 a producer, the value of whose gold output exceeded 50 per cent of the total value of his mine output, was eligible for assistance, subject to certain conditions, on the production of gold from 1 July 1954. The assistance scheme has been reviewed on a number of occasions since the Act was originally passed, and some liberalisations have been approved, including increases in the rates of subsidy payable authorised in amendments enacted on 22 October 1957, 22 May 1959 and 2 June 1965.

The rate of subsidy payable under the original Act was increased under amendments enacted on 22 October 1957 and 22 May 1959. The Act was again amended on 2 June 1965. Under the Act as it now stands the subsidy payable to small producers whose annual deliveries do not exceed 500 fine oz is \$6 per fine oz, irrespective of cost of production. For large producers, subject to certain provisions, the rate of subsidy payable is an amount equal to three-quarters of the excess of the average cost of production over \$27 per fine oz, with a maximum amount of subsidy of \$8 per fine oz. A producer whose deliveries during the year exceed 500 fine oz may elect to be treated as a small producer. In this case the subsidy rate payable per fine oz on total deliveries is \$6 reduced by 1c for each fine oz by which deliveries exceed 500 fine oz. The benefit under this provision terminates when deliveries in a year reach 1,100 fine oz. Where a producer receives an amount in excess of the official price of \$31.25 per fine oz as a result of sales on overseas premium markets or otherwise, the subsidy payable is reduced by the amount of the excess. Prior to 1 July 1965 subsidy payable to large producers was subject also to a limiting provision that the annual net profit of a producer was not, with the addition of the subsidy, to exceed 10 per cent of the capital used in the production and sale of gold. This limitation has now been removed. The latest amendments also provided for the removal of two other

restrictive provisions. A large producer's entitlement to subsidy is no longer subject to reduction if the amount of expenditure on development included in costs exceeds a certain amount, or if the grade of ore being mined falls below a certain level. On the other hand, the Act now provides that subsidy may be adjusted if it is considered that operations are not conducted in accordance with good mining practice. With effect from 1 July 1965 a large producer is able to include in his costs for subsidy purposes one-half of net costs incurred in approved exploratory diamond drilling elsewhere than on his mining property. Payments under the amended Act are to apply to production until 30 June 1970. Payments under the Act commenced in March 1955, and the amounts paid to gold producers in the various States and Territories of Australia in each of the years 1963 to 1967 are shown in the table on page 1039.

The purpose of the *Gold Mines Development Assistance Act* 1962 was to provide assistance to gold producers in Australia and the Territories of Papua and New Guinea not receiving subsidy under the *Gold-Mining Industry Assistance Act* 1954–1962, in order to increase the rate of their development work and so to add to their proved reserves of gold-bearing minerals. With the liberalisation of the Gold-Mining Industry Assistance Act from 1 July 1965, the Commonwealth Government decided not to extend the development assistance legislation, which, accordingly, lapsed on 30 June 1965.

*Assistance to the copper mining industry.* After a Tariff Board investigation, assistance was accorded to the industry in 1958, partly by import duty and partly by bounty. The assistance was continued until 31 December 1965. However, because of the unsettled conditions in the industry at this time, it was decided to defer a Tariff Board Inquiry and to continue the existing bounty assistance until 31 December 1966 unless an earlier date of cessation was proclaimed. Under the *Copper Bounty Act* 1958–1966 bounty was payable, subject to specified conditions, on refined copper sold for use in Australia. The rate of bounty was \$70 per ton when the overseas price, as determined by the Minister for Customs and Excise, was \$580 (£Stg232) or less. When the overseas price rose above \$580, the bounty fell by the same extent, so that no bounty was payable when the overseas price was \$650 (£Stg260) or more. The Act lapsed on 31 December 1966. Payments under the Act in each of the years 1963 to 1967 are shown on page 1039. The import duty continues in operation, and is imposed on imports of copper when the overseas price falls below \$580 a ton, to the extent of \$1 for each \$1 that the price falls below \$580. Including freight and other charges, the landed cost of imported copper is thus expected not to fall below \$610 a ton.

*Assistance to producers of sulphuric acid and iron pyrites.* Following recommendations of the Tariff Board, the *Sulphuric Acid Bounty Act* 1954 was extended for a period of five years from 1 July 1960. Arising from these same recommendations, the *Pyrites Bounty Act* 1960 was enacted on 15 December 1960 to be operative for a period of four and a half years from 1 January 1961. The Acts provide for bounties to be paid, subject to specified conditions, on sulphuric acid produced from prescribed materials of Australian origin and to producers of iron pyrites. In June 1965 it was announced that assistance under these Acts would continue until 31 December 1965. Both of these Acts have now been extended by legislation to 30 June 1969. Payments under the above Acts in each of the years 1963 to 1967 are shown in the table on page 1039.

*Payments to producers of phosphate fertilisers.* The *Phosphate Fertilizers Bounty Act* 1963–1966 provides for a bounty to be paid on superphosphate and ammoniated phosphate fertilisers manufactured and sold for use in Australia on and after 14 August 1963. The bounty is based on the fertiliser value of superphosphate as measured by its soluble content of phosphorus pentoxide. A standard grade of superphosphate containing 20 per cent, plus or minus 0.5 per cent, soluble content of phosphorus pentoxide qualifies for the full bounty of \$6 per ton. When the phosphorus pentoxide content of the superphosphate is less than 19.5 per cent or above 20.5 per cent, bounty is payable at the rate of \$30 for each ton of contained phosphorus pentoxide. Bounty in respect of ammonium phosphate is payable at the rate of \$30 for each ton of the phosphorus pentoxide content of the ammonium phosphate. In addition to standard grade superphosphate, 'double' and 'triple' superphosphate, containing 40 per cent and 50 per cent phosphorus pentoxide respectively, are produced in Australia, and bounty on these products is payable at the rate of \$12 a ton and \$15 a ton respectively. The intention of this Act is to assist consumers of superphosphate (primary producers). The Act is due to expire on 31 October 1969. Payments under the above Act in each of the years 1963 to 1967 are shown in the following table.

COMMONWEALTH GOVERNMENT PAYMENTS TO THE MINERAL INDUSTRY  
AUSTRALIA, 1963 TO 1967

(\$)

Year	Petroleum exploration (a)	Gold mining (b)	Copper mining (c)	Pyrites mining (d)	Sulphuric acid production (e)	Phosphate fertiliser production (f)
1963 . . . . .	10,519,208	1,614,600	1,297,704	960,334	2,590,248	1,908,252
1964 . . . . .	9,121,910	1,382,124	1,065,782	1,320,668	2,046,542	22,772,978
1965 . . . . .	10,412,842	1,984,966	5,262	1,113,964	2,138,914	22,604,562
1966 . . . . .	10,154,169	3,784,241	1,314	288,319	1,397,679	25,817,516
1967 . . . . .	10,326,587	3,858,763	..	45,714	1,382,485	25,543,785

(a) *Petroleum Search Subsidy Act 1959-1967.* (b) *Gold-Mining Industry Assistance Act 1954-1966 and Gold Mines Development Assistance Act 1962 (expired 30 June 1965).* (c) *Copper Bounty Act 1958-1966.* (d) *Pyrites Bounty Act 1960-1965.* (e) *Sulphuric Acid Bounty Act 1954-1966.* (f) *Phosphate Fertilizers Bounty Act 1963-1966.*

*Bureau of Mineral Resources, Geology and Geophysics.* The functions of the Bureau of Mineral Resources, Geology and Geophysics are to explore, investigate and encourage the development of mineral deposits; to survey and assess the mineral resources of the Commonwealth and its Territories and to initiate and investigate proposals for their development; to interpret the results of completed surveys and recommend ways of remedying or meeting mineral deficiencies and to advise on all aspects of the mineral economy of Australia, including the best utilisation of mineral resources in the national interest; to carry out geological and geophysical surveys and investigations and advise on all aspects of applied geology and geophysics.

The Bureau comprises five branches under the Director: Operations, Mineral Resources, Geological, Geophysical, and Petroleum Exploration. The Operations Branch consists of three sections, Planning and Co-ordination, Publications and Information, and Administrative. It carries out central office functions, including planning and control of programme, assessment of results, co-ordination of activities, liaison, and distribution of information. The Mineral Resources Branch comprises the sections Mineral Economics, Mining Engineering, and Petroleum Technology, and is concerned largely with those aspects of the Bureau's work which involve studies of the mineral industry as a whole, and the preparation of advice and reviews for the Government, industry and the public. The Geological and Geophysical Branches are responsible for the principal field activities of the Bureau, and the operation of observatories; while the Petroleum Exploration Branch is concerned with the administration of the *Petroleum Search Subsidy Act 1959-1967* and is also engaged in the assessment of sedimentary basins in Australia and its Territories. The establishment of the Bureau is 622 officers, of whom 308 are professional. The budget for the financial year 1967-68 was \$18.0 million, of which \$11.8 million was provided for payment under the *Petroleum Search Subsidy Act 1959-1967*.

The Bureau maintains laboratories in Canberra and Darwin which are engaged on geochemical, geochronological and petroleum technological studies and basic research into the design and testing of geophysical equipment. The Bureau also maintains a volcanological observatory at Rabaul and geophysical observatories at Melbourne, Toolangi, Mundaring, Darwin, Port Moresby, Mawson and Wilkes (Antarctica), and Macquarie Island. The geophysical observatories are engaged in magnetic, ionospheric, and seismic investigations and are base stations for field operations.

*Commonwealth Scientific and Industrial Research Organization.* The activities of this body with respect to the mineral industry are discussed on pages 1041-2 under Research.

#### State Government assistance

In addition to free assays and determinations of rocks and minerals carried out for prospectors by the Mines Departments of the States and Territories, technical officers of these departments provide advice to the mining and allied industries where required, carry out field examinations of mining prospects, advise on exploration and development, select sites for water supply, and in general give a free technical service to the mining industry.

*New South Wales.* State aid to assist metalliferous mining may consist of grants to assist the prospecting and or mining for gold and minerals, and for the purchase, removal and installation of mining plant or equipment. A quantity of mechanical equipment is also available in several localities for hire at reasonable rentals to prospectors and small mine operators, and district inspectors have geiger counters and scheelite detectors which are loaned to approved persons. In the year 1966-67 \$500,000 was made available for exploration work carried out by the Department and to give financial assistance to exploration groups and prospectors.

*Victoria.* Loans may be granted to assist prospecting and development or the purchase of machinery for gold mining. The Mines Department has stamp batteries in different parts of the State to crush ore for prospectors at nominal rates. Small mining companies may avail themselves of these facilities. Drilling with diamond, rotary and percussion drills is carried out by the Mines Department for mining companies and for general mineral exploration. A survey of the State's underground water resources is in progress, in conjunction with the development of town water supplies from underground sources.

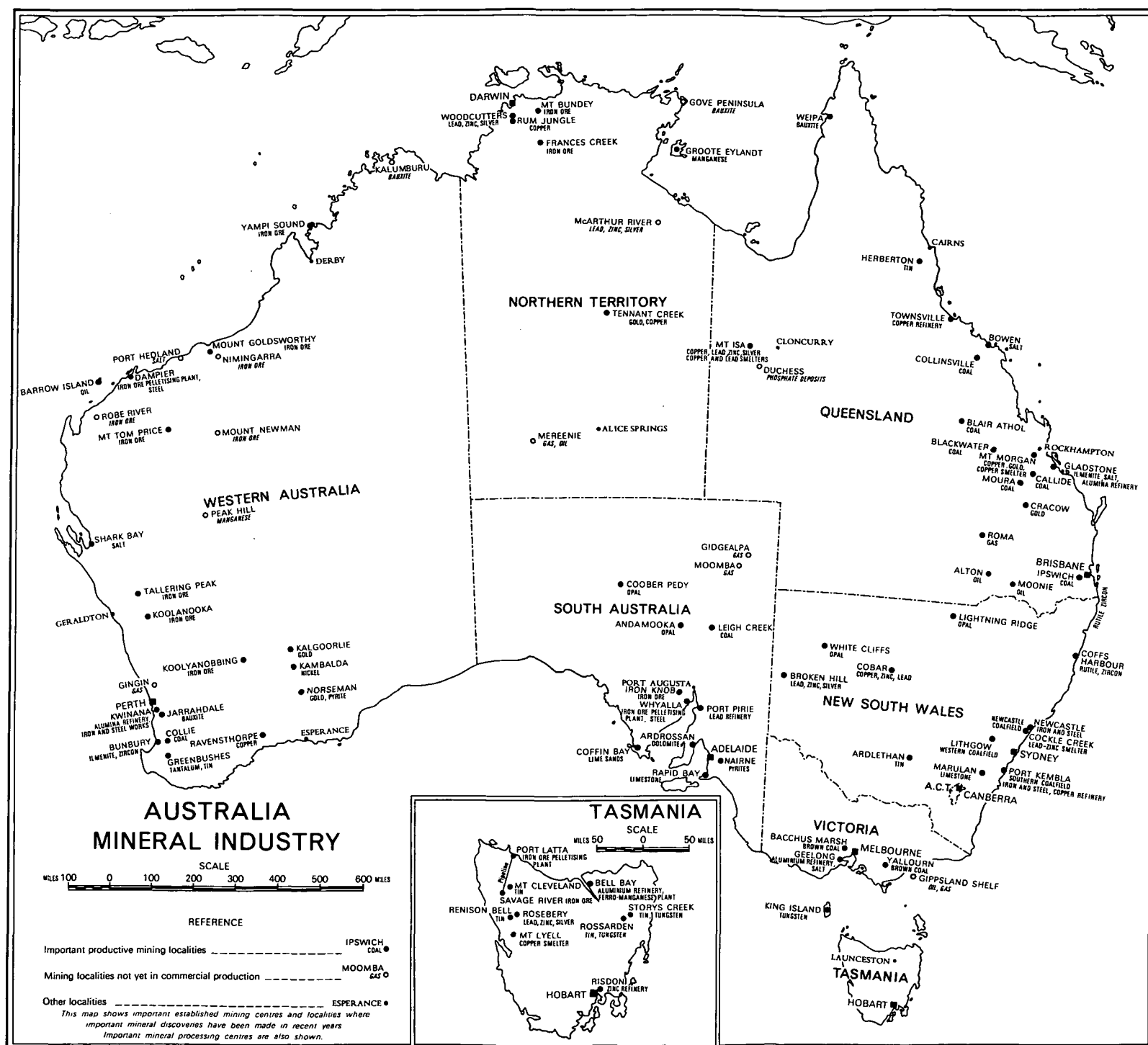
*Queensland.* Various forms of assistance to mining are made available by the Queensland Department of Mines. Grants are made from the Consolidated Revenue Fund for use on construction and maintenance of roads in mining areas. Advances are made from the Gold Mining Encouragement Fund for mining development work. This assistance is restricted to gold mines, and advances are repayable from proceeds of the mine, if any. From the Assistance to Metalliferous Mining Fund, plant such as jackhammers, compressors and pumps is purchased and maintained. Such plant is made available on hire, the rental payments being credited back to the fund. Prospecting assistance is made available in approved cases, the rates being \$5 a week for a single man and \$7 a week for a married man with dependants. This is not repayable. From the Advances to Mining Fund, assistance by way of subsidy is advanced for mine development. This is repayable from proceeds of the mine. The department also maintains a treatment works for tin ores, etc. at Irvinebank, an assay office at Cloncurry and diamond-drilling plants in several parts of the State. The Venus State battery at Charters Towers is available for the treatment of gold-bearing ores.

*South Australia.* The Department of Mines provides the following services and facilities to the mineral industry: (i) hire of boring plant and mining equipment, boring and testing of mineral deposits, financial loans in approved cases for prospecting and mining development, development of sub-surface water supplies for farming, pastoral, irrigation, and mining purposes; (ii) geological examination of mineral deposits, water supply, dam foundation and drainage problems, guidance on mining legislation, and publication and issue of geological bulletins and maps. It also provides, through the Australian Mineral Development Laboratories, chemical and metallurgical and analytical and assay investigation, testing and treatment of ores and minerals, and petrographic, mineralogical and radiometric determinations. Pilot scale metallurgical and chemical treatment plants are maintained and operated for the development of mineral extraction processes.

*Western Australia.* Prospectors receive assistance of either \$15 or \$17.50 a week according to the prospecting locality. North of the 26th parallel and within a defined area south of this lying largely outside the agricultural areas assistance is given to the extent of \$17.50 a week. In the remainder of the State prospectors receive \$15 a week. Provision is also made for the supply of some tools required for prospecting. There are twenty State batteries operating intermittently throughout the goldfields for the treatment of ore from prospectors and small mine-owners at a nominal charge. A cartage subsidy is also granted to such operators sending ore to State batteries for treatment. Provision is made for loans to mine-owners who require assistance to develop mines. The Government also has a drilling scheme, financing mine-owners on a \$1 for \$1 basis.

*Tasmania.* The Department of Mines provides financial assistance to mining lessees for the purchase of plant and machinery, for sinking, repairing or de-watering of shafts, for construction of dams and water races, for testing and proving a deposit of any mining product, for developmental work, and for diamond and other types of drilling. The Department has available for hire percussion and diamond drills for exploration, as well as a complete plant for small shaft sinking and tunnelling. Other assistance is rendered to the industry in the form of geological and engineering advice, through ore-dressing research into metallurgical recoveries, and the selection and design of treatment plant. In 1966-67 the Tasmanian Government, under the *Iron Ore (Savage River) Agreement Act 1965*, advanced \$1.5 million to the companies establishing an iron ore industry in the State (the total loan not to exceed \$4 million). The loan, repayable over twenty years, was specifically for the development of Port Latta on Brickmakers Bay as an outlet for pelletised iron ore. Concentrated ore in the form of a slurry is pumped by pipeline over fifty miles from the Savage River Mines to a pelletising plant at Port Latta.

*Northern Territory.* To encourage the development of the mining industry the Northern Territory Administration operates two batteries for the treatment of miners' ores. The batteries are at Tennant Creek and at Mount Wells near Burrundie. The Tennant Creek battery is currently cyaniding the gold in accumulated tailings while the Mount Wells battery is crushing parcels of tin ores and small quantities of gold, lead and copper ores. The crushing charges are subsidised by government grants. In addition, the Administration provides cartage subsidies and financial advances to encourage miners to carry out mining operations. Assistance is also given to the industry by drilling encouraging prospects. Roads and water supply services are provided and maintained for mines under active development throughout the Territory.



Prepared by the Commonwealth Bureau of Census and Statistics, Canberra



## Research

Research investigations into problems of mining, ore-search, ore-dressing and metallurgy are conducted by Governmental bodies, by universities, by private enterprise, and by combined efforts of these bodies. A summary of their functions follows.

### Australian Atomic Energy Commission

The Australian Atomic Energy Commission conducts research at its laboratories at Lucas Heights in Sydney on the development of nuclear power, including research on nuclear materials and on metals and ceramics used for nuclear power. Research conducted by the Commission is discussed in detail in the chapter Education, Cultural Activities and Research.

### Australian Mineral Development Laboratories

Research investigations into mineral problems are undertaken by the Australian Mineral Development Laboratories in Adelaide. This organisation is sponsored by the Commonwealth Government, the South Australian Government and the Australian Mineral Industries Research Association (*see* Research by private enterprise next page). These sponsors furnished work for the laboratories, or guarantee finance, in the proportions 25 : 50 : 25 respectively. The Laboratories have sections dealing with mineralogy, petrology, chemical analysis, ore-dressing, ceramic and extractive and physical metallurgy, industrial chemistry, and operations research.

### The Baas Becking Geobiological Research Laboratory

In 1965 the Baas Becking Geobiological Research Laboratory was established in the Bureau of Mineral Resources Building in Canberra, under the joint sponsorship of the Commonwealth Scientific and Industrial Research Organization, the Bureau of Mineral Resources, and the Australian Mineral Industries Research Association (*see* Research by private enterprise, page 1042). The broad objective of the research work is to investigate the biological and chemical processes associated with the formation of mineral deposits of the stratiform type.

Initial emphasis is being placed on investigations to establish the relationship of biological factors to the natural physico-chemical environment with particular reference to the possible role of these factors in the formation and transformation of sulphide minerals. Investigations will include the response of micro-organisms to heavy metals; biochemistry and physiology of oxidative and reductive sulphur transformations; role of organisms in the concentration of mineral elements; physico-chemistry of low-temperature mineral synthesis; mobility of sulphides under the influence of temperature and pressure and the interaction of mineral types; and biological leaching of low-grade sulphide minerals.

The laboratory is named after the late Dr L. G. M. Baas Becking, who was one of the first to recognise the possibility that biological, in particular microbial, activity may play an important part in the genesis of sulphide ores. Dr Baas Becking carried out research in this field while on loan to the Bureau of Mineral Resources from the C.S.I.R.O.

### Bureau of Mineral Resources, Geology and Geophysics

Mineral research by the Bureau of Mineral Resources is concerned with basic problems of mineral emplacement. Special studies are undertaken of: the sedimentary environment of potentially oil-bearing rocks; the genesis of continental and marine phosphate; the fundamental chemistry of metallic ore deposits; the structural, chemical, and stratigraphic contents of ore deposits; and geophysical interpretation by means of model testing.

For details for the functions of the Bureau of Mineral Resources, Geology and Geophysics, *see* page 1039.

### Commonwealth Scientific and Industrial Research Organization

Research for the mineral industry by the Commonwealth Scientific and Industrial Research Organization is undertaken mainly in the Divisions of Applied Mineralogy and Mineral Chemistry and in the Ore Dressing Laboratory. Work of a more specifically chemical engineering nature is undertaken in the Division of Chemical Engineering. All of these groups have laboratories in Melbourne. In addition, the Division of Applied Mineralogy has laboratories in Perth and Sydney, and the Division of Mineral Chemistry has a laboratory in Sydney.

The research programme of the Division of Applied Mineralogy is concerned mainly with the production and utilisation of natural and synthetic mineral products. Research is undertaken on cement and concrete, industrial refractories, engineering ceramics, clays, mineral-organic complexes, fillers, foundry materials, and the geochemistry of some economic minerals. The Mineralogical Investigations laboratory of the Division has become a general reference point in C.S.I.R.O.



for examination of minerals and for advice on problems concerning their nature and origin. The Division of Mineral Chemistry is undertaking research aimed at more complete evaluation of Australian minerals and their better utilisation through chemical, electrochemical and metallurgical processes. It includes studies on mineral exploration techniques, chemical upgrading of minerals, and the production of metals, and investigations on processes with possibilities for application in the exploitation of minerals. Work is continuing on the evaluation of coals from all the significant deposits in Australia, and on the technical problems of coal combustion in large power stations. In the Division of Chemical Engineering, projects of particular interest to the mineral industry include studies on the dynamics and automatic control of mineral processing operations such as grinding, classifying and flotation, fluidised-bed techniques, high-temperature extraction metallurgy and metal refining. The Ore Dressing Investigations laboratory undertakes research on mineral processing and has continued to serve industry on problems arising from the processing of particular Australian minerals. In addition, it is collaborating with interested firms in long-term studies on the chemistry of flotation pulps and the assessment of the resistance of ores to grinding.

All C.S.I.R.O. groups taking part in mineral research are in close contact with industry. Several projects are being developed by collaboration between C.S.I.R.O. and Australian firms and a significant proportion of the Organization's mineral research is now carried on with funds provided by industry. A committee set up by the Advisory Council of C.S.I.R.O. is continuing to examine and advise on research needs in the mining and processing industries in the changing environment.

#### **National Coal Research Advisory Committee**

The functions of the National Coal Research Advisory Committee, which began operating in January 1965, are to report on all coal utilisation research programmes in Australia, and advise the contributing Governments and industry as to the disposition of funds made available for such research. The Commonwealth matches additional funds made available by State Governments and by coal producing and consuming industries. In the first two years of operation, additional funds of \$520,000 have been made available in each year for increased coal utilisation research, bringing total expenditure on coal utilisation research in Australia to nearly \$2.5 million annually. In association with the setting up of the National Coal Research Advisory Committee, a new company, the Australian Coal Industry Research Laboratories Limited, was formed in late 1965 to take over all the current activities of the Australian Coal Association (Research) Limited, which was financed largely by the coal producing industry. This new company has available additional funds from the coal producing and consuming industries and from State and Commonwealth Governments to permit the expansion of the former work of the Australian Coal Association (Research) Limited in the particular direction of coal utilisation research. The constitution of the Advisory Committee and the establishment of the new laboratories unit have brought into effect the recommendations of the Coal Utilisation Research Advisory Committee which tabled its Report to Parliament in 1962.

#### **University Research**

The various universities in Australia carry out research into various aspects of the mineral industry such as geology, ore mineralogy and genesis, mining techniques, mineral processing, extractive metallurgy, and materials and metals technology.

#### **Research by private enterprise**

Most large mining and smelting companies have laboratories dealing with their own individual immediate problems. Private industry has formed the Australian Mineral Industries Research Association, which is composed of fifty members representing a large proportion of the mining, metallurgical and related companies operating in Australia at present. It was set up in 1959, chiefly to represent private industry in the management of the Australian Mineral Development Laboratories, but the Association now finances other research work into geology, mining and ore-dressing at Universities, C.S.I.R.O. and elsewhere. Expenditure for the year 1966-67 was \$76,928.

### **International relations**

Because Australia is a large supplier of certain minerals to the rest of the world and because the welfare of the domestic industry depends to a large extent on the maintenance of a high level of exports, international relations are of considerable importance to the industry, and the Commonwealth Government takes an active role in international consultations and discussions relating to minerals. The most important international commitments are discussed on the next page.

### International Tin Agreement

The First International Tin Agreement (of the post-war period) was in operation for five years from 1 July 1956 to 30 June 1961. This Agreement was subsequently replaced by the Second International Tin Agreement, which came into force provisionally on 1 July 1961 and definitively on 21 February 1962.

This Agreement was for a period of five years and had the following objectives:

- (a) to prevent or alleviate widespread unemployment or under-employment and other serious difficulties likely to arise from maladjustments between the supply and the demand for tin;
- (b) to prevent excessive fluctuations in the price of tin and to achieve a reasonable degree of stability of price;
- (c) to ensure adequate supplies of tin at prices which are fair to consumers and provide a reasonable return to producers; and
- (d) to provide a framework for the consideration of measures to promote the progressively more economic production of tin, while protecting deposits of tin from unnecessary waste or premature abandonment, thus facilitating expansion in world consumption of tin; and to keep under review the long-term need for the development of new deposits of tin.

The Third International Tin Agreement, which came into force provisionally on 1 July 1966 and definitively on 21 March 1967, contains several additional objectives:

- (a) to ensure conditions which will help achieve a dynamic and rising rate of production of tin on the basis of a remunerative return to producers, which will help secure an adequate supply at prices fair to consumers and which will help provide a long-term equilibrium between production and consumption;
- (b) in the event of a serious shortage of supplies of tin occurring or being expected to occur, to take steps to secure an increase in the production of tin and a fair distribution of tin metal at equitable prices.

Although the framework of the Third Agreement is basically that of the Second, objectives have been broadened in line with the principles of the United Nations Conference on Trade and Development (UNCTAD) and, as such, emphasise the need for expansion of export earnings in the developing countries. Thus the emphasis has been shifted from surplus production and export controls inherent in the Second Agreement to one of increased production in the new Agreement.

The Agreement is operated by the International Tin Council, which is made up of the following Governments: Australia, Austria, Belgium, Bolivia, Canada, Czechoslovakia, Democratic Republic of the Congo, Denmark, France, India, Indonesia, Italy, Japan, Korea, Malaysia, Mexico, Netherlands, Federation of Nigeria, Spain, Thailand, Turkey, United Kingdom. Member Governments participate as producing or consuming countries. The producing countries hold a total of 1,000 votes, distributed so that each country receives five initial votes and an additional number corresponding to its percentage as laid down by the Agreement. The consuming countries hold a total of 1,000 votes also distributed so that each country receives five initial votes and an additional number proportionate to tonnages. The allocation of votes in each category is periodically reviewed.

The International Tin Agreement establishes floor and ceiling prices for tin and, by the medium of a buffer stock and remedial trading on the London Metal Exchange, aims at confining the price within these limits. The buffer stock was established with contributions from producing countries, equivalent to 10,000 tons of metal, wholly made in cash at £stg1,000 a ton; a further £10 million remains on call from the producer members and a standby-credit facility of £10 million from a consortium of banks. The original buffer stock price range under the Third Agreement was: ceiling £1,400—must sell; £1,300 to £1,400—may sell; £1,200 to £1,300—no action; £1,100 to £1,200—may buy; floor £1,100—must buy. However, following devaluation of sterling, the buffer stock price range was adjusted to the following limits: £1,630—must sell; £1,515 to £1,630—may sell; £1,400 to £1,515—no action; £1,280 to £1,400—may buy; £1,280—must buy.

### International Lead-Zinc Study Group

With the cessation of stockpile buying of lead and zinc by the United States Government in 1958, world producers were faced with the prospect of a serious imbalance between world supply and demand for these metals. To meet this problem a series of meetings of interested governments was held, at which Australia was represented. These meetings culminated in the formation of the International Lead-Zinc Study Group which was established in January 1960. The Study Group comprises the following Governments: Algeria, Australia, Austria, Belgium, Bulgaria, Canada, Czechoslovakia, Denmark, Finland, France, the Federal Republic of Germany, India, Italy, Japan, Mexico, Morocco, the Netherlands, Norway, Peru, Poland, the Republic of South Africa, Spain, Sweden, Tunisia, the Union of Soviet Socialist Republics, the United Kingdom of Great Britain and Northern Ireland, the United States of America, Yugoslavia. The Group provides opportunities for inter-governmental consultations on international trade in lead and zinc and for studies of the world situation in lead and zinc having regard especially to the desirability of providing continuous accurate information regarding the supply and demand position and its probable development.

## MINERAL INDUSTRY STATISTICS

Statistics presented in this chapter refer mainly to mining and quarrying, mineral exploration, and overseas participation in Australian mining industry. Data relating to mineral processing and treatment activities are included where appropriate to present a more complete picture of the place of minerals in the Australian economy.

### Mining and quarrying

#### Definition

The mining and quarrying industry is defined for statistical purposes as including all mining and quarrying and the recovery of minerals from ore dumps, tailings, etc., and ore-dressing and elementary smelting of gold and miscellaneous treatment of non-metallic minerals where these operations are carried out in an associated plant at or near the mine. However, establishments primarily engaged in smelting and or refining (including the smelting and refining sections of the large plants operated at Mount Morgan and Mount Isa in Queensland and at Mount Lyell in Tasmania) are excluded from the statistical definition of the mining industry and are classified to the manufacturing industry.

#### Coverage

The statistical coverage of establishments engaged in mining is considered to be satisfactory. However, coverage of establishments engaged in the quarrying of construction materials is incomplete in most States. This deficiency is due primarily to the inherent difficulty of obtaining complete lists of quarries (including those operated by government authorities), many of which operate intermittently and in different locations. There is difficulty also in obtaining satisfactory returns from quarries operated in conjunction with some other activity, e.g. roadmaking, brick-works, etc., and quarries operated in conjunction with large construction projects, such as the Snowy Mountains Scheme, are excluded from these statistics. In some States there have been deficiencies also in the collection of data for certain non-metal (excluding fuel) mining industries, mainly because these are outside the fields normally under the administrative control of Mines Departments. Products chiefly affected are clays, loam and silica.

#### Sources of statistics

Mining industry data (such as employment, costs, value of output, etc.) have been obtained annually since 1952 from the Mining and Quarrying Census. This Census is carried out in collaboration with the several Mines Departments and involves the uniform collection of particulars from all establishments employing on the average four or more persons during the period worked by the mine. A representative specimen collection form is included in the bulletin *Non-Rural Primary Industries*, No. 3, 1964-65. For smaller mines either simplified census returns covering number of persons employed and value of output are collected, or these particulars are compiled from data made available by the Mines Departments. Oil search operations are excluded from the annual census, but the Bureau of Mineral Resources conducts an annual survey of these activities.

Mineral production statistics contained in this chapter consist, in the main, of data from the annual census and official statistics of the Mines Departments of the several States and of the Northern Territory Mines Branch. The particulars shown have been compiled as far as practicable on the standardised basis which has been used in Australia since 1950, and this presentation has involved some re-arrangement of official statistics published by the Mines Departments in some States. These statistics have been supplemented, as necessary, by data obtained from the Statisticians of the several States, the Bureau of Mineral Resources, Geology and Geophysics, the Joint Coal Board, and from several other sources.

#### Classification of mining and quarrying industry

The mining and quarrying industry is classified into four major groups, namely metal mining, fuel mining, non-metal mining (excluding fuel), and construction material quarrying. Mining and quarrying establishments are classified to these groups and to sub-divisions of these groups on the basis of the product or products of the establishments. This method of classification is straightforward for those establishments which produce only one product, but for mines and quarries which produce more than one product classification is not as simple a matter. Such establishments are classified according to the most important mineral produced in terms of value. Thus a mine producing, say, both tin and tungsten minerals would be classified as a tin mine if tin were the more important product by value, and as a tungsten mine if tungsten were the dominant product. There is, however, one important exception to this rule in that the mining establishment at Mount Isa is classified to the silver-lead-zinc sector rather than to the copper-gold sector.

For mines and quarries which produce more than one product it is not possible to apportion particulars of operations (such as employment, salaries and wages paid, costs) to the minerals produced. In practice, then, these data are recorded only as a total for each mine, and the mine is classified to an industry sector as outlined on page 1044.

Statistics relating to the structure of the industry, employment, production costs, value of additions and replacements to fixed assets, and value of output and production are given below and in the following pages.

### Number of mines and quarries

The following tables show the number of mines and quarries which operated in each State and Territory in 1966 and in Australia for the years 1962 to 1966.

NUMBER OF MINES AND QUARRIES: STATES AND TERRITORIES, 1966

Industry	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
<b>Metal mining—</b>									
Gold . . . . .	21	10	23	..	114	..	11	..	179
Silver-lead-zinc . . . . .	12	..	4	3	8	1	2	..	30
Copper-gold . . . . .	15	2	81	3	12	1	10	..	124
Tin . . . . .	54	3	240	..	25	29	12	..	363
Mineral sands . . . . .	13	..	6	..	4	..	..	..	23
Other metal . . . . .	20	1	12	2	21	3	4	..	63
<i>Total, metal mining</i> . . . . .	135	16	366	8	184	34	39	..	782
<b>Fuel mining—</b>									
Black coal—									
Underground . . . . .	86	2	52	..	2	3	..	..	145
Opencut . . . . .	6	..	4	1	1	1	..	..	13
<i>Total, black coal</i> . . . . .	92	2	56	1	3	4	..	..	158
Brown coal . . . . .	..	5	..	..	..	..	..	..	5
Other fuel . . . . .	..	..	3	..	1	..	..	..	4
<i>Total, fuel mining</i> . . . . .	92	7	59	1	4	4	..	..	167
<b>Non-metal (excluding fuel) mining(a)</b> . . . . .	600	61	115	111	59	27	..	..	973
<i>Total, all mining</i> . . . . .	827	84	540	120	247	65	39	..	1,922
<b>Construction material quarrying(a)</b> . . . . .	377	378	56	238	58	117	41	11	1,276
<i>Total, all mining and quarrying</i> . . . . .	1,204	462	596	358	305	182	80	11	3,198

(a) Incomplete, owing to difficulties of coverage. See Coverage, page 1044.

NUMBER OF MINES AND QUARRIES: AUSTRALIA, 1962 TO 1966

Industry	1962	1963	1964	1965	1966
<b>Metal mining—</b>					
Gold . . . . .	286	257	246	193	179
Silver-lead-zinc . . . . .	22	13	20	32	30
Copper-gold . . . . .	107	98	86	75	124
Tin . . . . .	344	300	371	391	363
Mineral sands . . . . .	20	18	20	21	23
Other metal . . . . .	87	62	56	53	63
<i>Total, metal mining</i> . . . . .	866	748	799	765	782
<b>Fuel mining—</b>					
Black coal . . . . .	198	185	179	168	158
Brown coal . . . . .	6	6	7	6	5
Other fuel . . . . .	..	2	3	3	4
<i>Total, fuel mining</i> . . . . .	204	193	189	177	167
<b>Non-metal (excluding fuel) mining(a)</b> . . . . .	731	792	756	802	973
<i>Total, all mining</i> . . . . .	1,801	1,733	1,744	1,744	1,922
<b>Construction material quarrying(a)</b> . . . . .	1,107	1,044	1,148	1,234	1,276
<i>Total, all mining and quarrying</i> . . . . .	2,908	2,777	2,892	2,978	3,198

(a) Incomplete. See Coverage, page 1044.

**Employment in mining and quarrying**

*Persons engaged.* Statistics of persons employed in the mining and quarrying industry are derived mainly from the annual census of that industry. Data on the work force employed in the industry are also obtained from the population censuses of Australia. The population census figure for mining and quarrying includes a number of persons excluded from the mining and quarrying census employment figure, e.g. persons engaged in exploration activities, prospectors, head office employees, etc. The number of persons whose industry statements were classified to 'mining and quarrying' at the population census of 30 June 1966 was 56,343 out of a total of 512,994 for all primary industries and 4,856,455 in the total work force. For further information see the chapter Employment and Unemployment and 1966 Census Bulletin No. 9.6, *Population, By Industry and Occupational Status, Australia*.

The following two tables are derived from mining census data and show the average numbers engaged in the various mining industries in each State or Territory in 1966 and in Australia for the years 1962 to 1966. The figures show the average number of persons employed during the whole year, including working proprietors.

**MINING AND QUARRYING: EMPLOYMENT(a)  
STATES AND TERRITORIES, 1966**

<i>Industry</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
Metal mining—									
Gold . . . . .	11	123	(b)	..	4,056	..	(b)	..	4,447
Silver-lead-zinc . . . . .	4,632	..	4,177	3	(b)	(b)	76	..	8,681
Copper-gold . . . . .	309	6	2	(b)	(b)	360	..	..	2,554
Tin . . . . .	248	6	530	..	222	517	27	..	1,550
Mineral sands . . . . .	1,518	..	579	..	337	..	..	..	2,434
Other metal . . . . .	42	1	(b)	417	1,168	(b)	(b)	..	2,295
<i>Total, metal mining</i> . . . . .	<i>6,760</i>	<i>136</i>	<i>5,630</i>	<i>422</i>	<i>5,930</i>	<i>2,339</i>	<i>744</i>	<i>..</i>	<i>21,961</i>
Fuel mining—									
Black coal—									
Underground . . . . .	11,345	129	(b)	..	(b)	57	..	..	(c)14,178
Opencut . . . . .	200	..	(b)	280	(b)	..	..	..	991
<i>Total, black coal</i> . . . . .	<i>11,545</i>	<i>129</i>	<i>(c)2,345</i>	<i>280</i>	<i>(c)813</i>	<i>57</i>	<i>..</i>	<i>..</i>	<i>(c)15,169</i>
Brown coal . . . . .	..	1,760	..	..	..	..	..	..	1,760
<i>Total, fuel mining</i> . . . . .	<i>11,545</i>	<i>1,889</i>	<i>2,345</i>	<i>280</i>	<i>813</i>	<i>57</i>	<i>..</i>	<i>..</i>	<i>16,929</i>
Non-metal (excluding fuel) mining(d) . . . . .	1,304	253	336	426	521	90	..	..	2,930
<i>Total, all mining</i> . . . . .	<i>19,609</i>	<i>2,278</i>	<i>8,311</i>	<i>1,128</i>	<i>7,264</i>	<i>2,486</i>	<i>744</i>	<i>..</i>	<i>41,820</i>
Construction material quarrying(d) . . . . .	1,913	2,001	369	860	331	330	70	83	5,957
<i>Total, all mining and quarrying</i> . . . . .	<i>21,522</i>	<i>4,279</i>	<i>8,680</i>	<i>1,988</i>	<i>7,595</i>	<i>2,816</i>	<i>814</i>	<i>83</i>	<i>47,777</i>

(a) Average employment during whole year, including working proprietors. (b) Not available for publication.  
(c) Includes other fuel mining. (d) Incomplete, owing to difficulties of coverage. See Coverage, page 1044.

## MINING AND QUARRYING: EMPLOYMENT, AUSTRALIA, 1962 TO 1966

Industry	1962	1963	1964	1965	1966
<b>Metal mining—</b>					
Gold . . . . .	5,290	5,287	4,753	4,525	4,447
Silver-lead-zinc . . . . .	7,958	7,946	7,811	7,269	8,681
Copper-gold . . . . .	2,242	2,288	2,341	2,312	2,554
Tin . . . . .	1,157	1,116	1,191	1,402	1,550
Mineral sands . . . . .	1,408	1,565	1,734	2,000	2,434
Other metal . . . . .	968	1,168	1,348	2,251	2,295
<i>Total, metal mining</i> . . . . .	<i>19,023</i>	<i>19,370</i>	<i>19,178</i>	<i>19,759</i>	<i>21,961</i>
<b>Fuel mining—</b>					
Black coal . . . . .	16,312	(a)15,636	(a)15,364	(a)15,391	(a)15,169
Brown coal . . . . .	1,453	1,613	1,673	1,710	1,760
<i>Total, fuel mining</i> . . . . .	<i>17,765</i>	<i>17,249</i>	<i>17,037</i>	<i>17,101</i>	<i>16,929</i>
Non-metal (excluding fuel) mining(b) . . . . .	2,838	2,823	2,783	2,795	2,930
<i>Total, all mining</i> . . . . .	<i>39,626</i>	<i>39,442</i>	<i>38,998</i>	<i>39,655</i>	<i>41,820</i>
Construction material quarrying(b) . . . . .	5,599	5,406	5,814	6,217	5,957
<b>Total, all mining and quarrying</b> . . . . .	<b>45,225</b>	<b>44,848</b>	<b>44,812</b>	<b>45,872</b>	<b>47,777</b>

(a) Includes other fuel mining. (b) Incomplete, see Coverage, page 1044.

*Size classification of mines and quarries.* The following table shows the distribution of the total number of mines into various size groups according to the average number of persons employed during the period worked by each mine in 1966.

## NUMBER OF MINES AND QUARRIES AND PERSONS EMPLOYED, BY AVERAGE NUMBER EMPLOYED: STATES AND TERRITORIES, 1966

Mines and quarries employing on the average(a)—	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T. and A.C.T.	Aust.
<b>Less than 4 persons—</b>								
Establishments . . . . .	923	280	441	252	201	131	70	2,298
Persons . . . . .	1,677	490	694	431	709	240	184	4,425
<b>From 4 to 20 persons—</b>								
Establishments . . . . .	166	156	97	91	64	36	15	625
Persons . . . . .	1,334	1,278	906	730	483	238	150	5,119
<b>From 21 to 200 persons—</b>								
Establishments . . . . .	87	25	56	13	30	12	5	228
Persons . . . . .	6,753	1,137	3,437	627	2,110	784	363	15,211
<b>More than 200 persons—</b>								
Establishments . . . . .	28	1	2	2	10	3	1	47
Persons . . . . .	13,069	1,652	4,089	604	4,653	1,809	347	26,223
<b>Total—</b>								
Establishments . . . . .	1,204	462	596	358	305	182	91	3,198
Persons . . . . .	22,833	4,557	9,126	2,392	7,955	3,071	1,044	50,978

(a) Average during period worked. Includes working proprietors.

*Accidents in mining.* Particulars of numbers of persons killed and injured in accidents in mines and associated treatment plants are recorded by State Mines Departments. Numbers injured are not reported on a uniform basis in all States, as varying criteria are used in determining what constitutes injury. In 1966, 52 persons were recorded as killed and 1,229 as injured in mining (excluding quarrying) accidents. Recorded deaths and injuries in that year in black coal mines were 21 and 453, respectively, silver-lead-zinc mines 15 and 272, gold mines 6 and 242, and mineral sands mining 1 and 42. Persons killed and injured in the construction material quarrying industry numbered 13 and 137 respectively in 1966.

### Salaries and wages paid

Salaries and wages paid in the mining and quarrying industries in Australia during each year 1962 to 1966 are shown in the following table. Information regarding rates of wages paid in the mining industry is shown in the chapter Labour, Wages and Prices (page 281) and also in the *Labour Report*.

**MINING AND QUARRYING: SALARIES AND WAGES PAID(a), AUSTRALIA**  
1962 TO 1966  
(\$'000)

Industry	1962	1963	1964	1965	1966
<b>Metal mining—</b>					
Gold . . . . .	13,068	13,072	11,812	11,974	12,409
Silver-lead-zinc . . . . .	24,454	25,678	29,948	34,397	44,651
Copper-gold . . . . .	5,702	6,200	6,834	7,415	8,205
Tin . . . . .	2,100	2,502	2,648	3,313	4,156
Mineral sands . . . . .	3,478	4,156	4,706	5,837	7,673
Other metal . . . . .	2,376	3,184	4,038	7,241	8,601
<i>Total, metal mining . . . . .</i>	<i>51,178</i>	<i>54,792</i>	<i>59,986</i>	<i>70,177</i>	<i>85,696</i>
<b>Fuel mining—</b>					
Black coal . . . . .	49,698	(b)49,230	(b)52,204	(b)55,942	(b)60,191
Brown coal . . . . .	3,942	4,634	5,144	5,503	5,672
<i>Total, fuel mining . . . . .</i>	<i>53,640</i>	<i>53,864</i>	<i>57,348</i>	<i>61,445</i>	<i>65,863</i>
Non-metal (excluding fuel) mining(c) . . . . .	5,796	5,764	6,248	6,388	6,821
<i>Total, all mining . . . . .</i>	<i>110,614</i>	<i>114,420</i>	<i>123,582</i>	<i>138,010</i>	<i>158,380</i>
Construction material quarrying(c) . . . . .	8,762	8,684	9,364	10,751	11,256
<i>Total, all mining and quarrying . . . . .</i>	<i>119,376</i>	<i>123,104</i>	<i>132,946</i>	<i>148,761</i>	<i>169,636</i>

(a) Excludes mines and quarries employing less than four persons, and drawings by working proprietors; the amounts are net after deducting value of explosives sold to employees. (b) Includes other fuel mining. (c) Incomplete. See Coverage, page 1044.

## Power, fuel, light, and materials, etc. used

**MINING AND QUARRYING: VALUE OF POWER, FUEL, LIGHT, AND  
OTHER MATERIALS AND STORES USED, AUSTRALIA, 1962 TO 1966**  
(\$'000)

<i>Industry</i>	<i>1962</i>	<i>1963</i>	<i>1964</i>	<i>1965</i>	<i>1966</i>
<b>Metal mining—</b>					
Gold . . . . .	9,894	9,758	8,334	8,433	8,207
Silver-lead-zinc . . . . .	17,342	21,590	22,688	21,009	22,265
Copper-gold . . . . .	6,768	7,232	7,698	8,365	9,535
Tin . . . . .	1,274	1,508	1,854	2,115	3,095
Mineral sands . . . . .	3,676	5,052	5,496	6,138	7,569
Other metal . . . . .	2,484	2,850	3,162	4,366	6,084
<i>Total, metal mining . . . . .</i>	<i>41,438</i>	<i>47,990</i>	<i>49,234</i>	<i>50,427</i>	<i>56,756</i>
<b>Fuel mining—</b>					
Black coal . . . . .	26,692	(a)27,002	(a)29,114	(a)31,718	(a)35,746
Brown coal . . . . .	1,344	1,478	1,532	2,108	2,082
<i>Total, fuel mining . . . . .</i>	<i>28,036</i>	<i>28,480</i>	<i>30,648</i>	<i>33,827</i>	<i>37,828</i>
Non-metal (excluding fuel) mining(b) . . . . .	5,636	5,534	5,342	5,720	5,641
<i>Total, all mining . . . . .</i>	<i>75,110</i>	<i>82,004</i>	<i>85,226</i>	<i>89,974</i>	<i>100,224</i>
Construction material quarrying(b) . . . . .	9,000	9,060	9,728	11,067	12,072
<i>Total, all mining and quarrying . . . . .</i>	<i>84,110</i>	<i>91,064</i>	<i>94,952</i>	<i>101,041</i>	<i>112,297</i>

(a) Includes other fuel mining. (b) Incomplete. See Coverage, page 1044.

## Value of additions and replacements to fixed assets in mining and quarrying

**MINING AND QUARRYING: VALUE OF ADDITIONS AND REPLACEMENTS TO  
FIXED ASSETS(a), AUSTRALIA, 1962 TO 1966**  
(\$'000)

<i>Industry</i>	<i>1962</i>	<i>1963</i>	<i>1964</i>	<i>1965</i>	<i>1966</i>
<b>Metal mining—</b>					
Gold . . . . .	3,216	2,024	1,365	1,094	1,195
Silver-lead-zinc . . . . .	7,046	14,154	20,071	10,939	12,535
Copper-gold . . . . .	2,730	5,066	7,419	5,333	6,085
Tin . . . . .	540	1,548	4,459	6,583	9,798
Mineral sands . . . . .	3,752	2,436	3,592	6,729	11,103
Other metal . . . . .	5,154	4,476	5,556	33,328	47,753
<i>Total, metal mining . . . . .</i>	<i>22,438</i>	<i>29,702</i>	<i>42,462</i>	<i>64,006</i>	<i>88,469</i>
<b>Fuel mining—</b>					
Black coal . . . . .	26,096	(b)20,668	(b)19,952	(b)28,695	(b)45,442
Brown coal . . . . .	6,122	6,610	5,416	6,115	5,107
<i>Total, fuel mining . . . . .</i>	<i>32,218</i>	<i>27,278</i>	<i>25,368</i>	<i>34,810</i>	<i>50,548</i>
Non-metal (excluding fuel) mining(c) . . . . .	1,408	1,742	3,497	2,109	3,638
<i>Total, all mining . . . . .</i>	<i>56,064</i>	<i>58,722</i>	<i>71,327</i>	<i>100,925</i>	<i>142,654</i>
Construction material quarrying(c) . . . . .	3,902	3,898	5,867	7,303	5,273
<i>Total, all mining and quarrying . . . . .</i>	<i>59,966</i>	<i>62,620</i>	<i>77,194</i>	<i>108,228</i>	<i>147,927</i>

(a) Excludes mines and quarries employing less than four persons. (b) Includes other fuel mining. (c) Incomplete.  
See Coverage, page 1044.



**Value of output and production**

The following tables show particulars of value of output on an ex-mine basis (local value of production) and value of production (net value of production) for recent years. *These statistics are on an industry basis and not by product.* A more detailed reference to the value of production of mining and quarrying and other industries together with a brief explanation of terms used will be found in the chapter Miscellaneous.

*Local value of mining and quarrying production.* The following tables show particulars of the local value of production of mining and quarrying for 1966 and earlier years.

**MINING AND QUARRYING: LOCAL VALUE OF PRODUCTION(a)**  
**STATES AND TERRITORIES, 1966**  
 (\$'000)

Industry	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust..
<b>Metal mining—</b>									
Gold . . . . .	8	688	(b)	..	23,430	..	(b)	..	26,551 <sup>1</sup>
Silver-lead-zinc . . . . .	81,405	..	79,997 {	12	(b)	(b)	(b)	..	160,079 <sup>1</sup>
Copper-gold . . . . .	5,032	4	..	7	(b)	(b)	7,956	..	37,320 <sup>1</sup>
Tin . . . . .	3,941	55	4,884	..	2,052	3,565	69	..	14,566 <sup>1</sup>
Mineral sands . . . . .	19,141	..	6,909	..	5,166	..	..	..	31,216 <sup>1</sup>
Other metal . . . . .	329	6	(b)	13,404	34,016	(b)	(b)	..	59,875
<b>Total, metal mining</b> . . . . .	<b>109,857</b>	<b>752</b>	<b>97,889</b>	<b>13,423</b>	<b>65,368</b>	<b>30,187</b>	<b>12,132</b>	<b>..</b>	<b>329,607<sup>1</sup></b>
<b>Fuel mining—</b>									
Black coal . . . . .	117,626	497	25,221	3,228	4,448	362	..	..	151,383 <sup>1</sup>
Brown coal . . . . .	..	20,064	..	..	..	..	..	..	20,064 <sup>1</sup>
Other fuel . . . . .	..	..	9,230	..	..	..	..	..	9,230 <sup>1</sup>
<b>Total, fuel mining</b> . . . . .	<b>117,626</b>	<b>20,561</b>	<b>34,451</b>	<b>3,228</b>	<b>4,448</b>	<b>362</b>	<b>..</b>	<b>..</b>	<b>180,676<sup>1</sup></b>
<b>Non-metal (excluding fuel) mining—</b>									
Clays(c) . . . . .	2,978	3,090	264	693	388	114	..	..	7,528 <sup>1</sup>
Gypsum . . . . .	216	244	..	1,476	70	..	..	..	2,005
Limestone . . . . .	3,213	(b)	1,914	2,414	(b)	(b)	..	..	10,601 <sup>1</sup>
Salt . . . . .	..	(b)	(b)	2,078	(b)	..	..	..	2,627 <sup>1</sup>
Other non-metal mining(c) . . . . .	2,035	36	(b)	4,442	(b)	(b)	..	..	9,301
<b>Total, non-metal mining</b> . . . . .	<b>8,443</b>	<b>5,887</b>	<b>2,668</b>	<b>11,103</b>	<b>3,229</b>	<b>732</b>	<b>..</b>	<b>..</b>	<b>32,062<sup>1</sup></b>
<b>Total, all mining</b> . . . . .	<b>235,925</b>	<b>27,201</b>	<b>135,008</b>	<b>27,754</b>	<b>73,046</b>	<b>31,281</b>	<b>12,132</b>	<b>..</b>	<b>542,346<sup>1</sup></b>
<b>Construction material quarrying(c)</b> . . . . .	<b>27,826</b>	<b>25,905</b>	<b>3,475</b>	<b>14,200</b>	<b>6,462</b>	<b>3,280</b>	<b>1,151</b>	<b>1,074</b>	<b>83,372<sup>1</sup></b>
<b>Total, all mining and quarrying</b> . . . . .	<b>263,751</b>	<b>53,105</b>	<b>138,483</b>	<b>41,954</b>	<b>79,507</b>	<b>34,561</b>	<b>13,283</b>	<b>1,074</b>	<b>625,718</b>

(a) Value of output or selling value of products at the mine or quarry. (b) Not available for publication, included in total for Australia. (c) Incomplete. See Coverage, page 1044.

**MINING AND QUARRYING: LOCAL VALUE OF PRODUCTION(a)**  
**STATES AND TERRITORIES, 1962 TO 1966**  
 (\$'000)

Year	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T. and A.C.T.	Aust..
1962 . . . . .	159,928	40,016	74,198	30,774	46,490	17,806	5,926	375,138
1963 . . . . .	185,352	40,840	84,084	34,208	44,768	20,304	7,126	416,682 <sup>1</sup>
1964 . . . . .	233,298	44,892	97,286	38,938	45,366	25,048	7,972	492,800 <sup>1</sup>
1965 . . . . .	267,674	48,924	98,964	39,466	49,072	28,998	9,273	542,371 <sup>1</sup>
1966 . . . . .	263,751	53,105	138,483	41,954	79,507	34,561	14,357	625,718 <sup>1</sup>

(a) Value of output or selling value of products at the mine or quarry.

*Net value of mining and quarrying production*

The following tables show particulars of the net value of production of mining and quarrying for 1966 and earlier years.

**MINING AND QUARRYING: NET VALUE OF PRODUCTION(a)  
STATES AND TERRITORIES, 1966  
(\$'000)**

Industry	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Metal mining—									
Gold	4	495	(b)	..	15,874	..	(b)	..	18,344
Silver-lead-zinc	69,791	..	68,020	8	(b)	(b)	(b)	..	137,814
Copper-gold	4,599	1	..	5	(b)	(b)	6,437	..	27,785
Tin	3,502	51	3,678	..	1,555	2,650	35	..	11,471
Mineral sands	14,655	..	4,797	..	4,195	..	..	..	23,647
Other metal	304	5	(b)	11,415	31,187	(b)	(b)	..	53,790
<i>Total, metal mining</i>	<i>92,855</i>	<i>554</i>	<i>82,165</i>	<i>11,429</i>	<i>53,221</i>	<i>22,529</i>	<i>10,097</i>	<i>..</i>	<i>272,851</i>
Fuel mining—									
Black coal	89,230	388	(c)28,650	2,681	3,633	285	..	..	(c)124,866
Brown coal	..	17,983	..	..	..	..	..	..	17,983
<i>Total, fuel mining</i>	<i>89,230</i>	<i>18,370</i>	<i>28,650</i>	<i>2,681</i>	<i>3,633</i>	<i>285</i>	<i>..</i>	<i>..</i>	<i>142,849</i>
Non-metal (excluding fuel) mining—									
Clays(d)	2,623	3,020	233	608	257	104	..	..	6,845
Gypsum	169	199	..	1,280	56	..	..	..	1,704
Limestone	2,325	(b)	1,237	2,133	(b)	(b)	..	..	7,666
Salt	..	(b)	(b)	1,759	(b)	(b)	..	..	2,227
Other non-metal mining(d)	1,875	36	(b)	4,266	(b)	(b)	..	..	7,979
<i>Total, non-metal mining</i>	<i>6,993</i>	<i>4,878</i>	<i>1,910</i>	<i>10,046</i>	<i>2,069</i>	<i>526</i>	<i>..</i>	<i>..</i>	<i>26,422</i>
<i>Total, all mining</i>	<i>189,078</i>	<i>23,803</i>	<i>112,725</i>	<i>24,155</i>	<i>58,924</i>	<i>23,340</i>	<i>10,097</i>	<i>..</i>	<i>442,121</i>
Construction material quarrying(d)	27,826	19,585	2,646	12,095	4,887	2,488	973	800	71,300
<i>Total all mining and quarrying</i>	<i>216,904</i>	<i>43,388</i>	<i>115,370</i>	<i>36,250</i>	<i>63,811</i>	<i>25,828</i>	<i>11,070</i>	<i>800</i>	<i>513,421</i>

(a) Local value (i.e. value of output at mine or quarry) less cost of power, fuel, light and other materials and stores used; depreciation and maintenance costs have not been deducted. (b) Not available for publication, included in total for Australia. (c) Includes other fuel mining. (d) Incomplete. See Coverage, page 1044.

**MINING AND QUARRYING: NET VALUE OF PRODUCTION(a)  
STATES AND TERRITORIES, 1962 TO 1966**

Year	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T. and A.C.T.	Aust.
<b>NET VALUE OF PRODUCTION</b>								
<b>(\$'000)</b>								
1962	125,218	32,394	58,006	26,414	32,244	12,234	4,518	291,028
1963	149,710	33,652	61,948	29,614	30,698	14,466	5,530	325,618
1964	195,980	37,056	74,406	34,068	32,162	18,174	5,998	397,846
1965	225,771	39,957	79,742	33,979	35,192	20,309	6,378	441,328
1966	216,904	43,388	115,370	36,250	63,811	25,828	11,870	513,421

**NET VALUE OF PRODUCTION PER HEAD OF POPULATION**  
**(\$)**

Year	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T. and A.C.T.	Aust.
1962	31.14	10.76	37.10	26.45	41.48	34.16	38.77	26.83
1963	36.70	10.95	38.84	28.94	38.43	39.88	43.55	29.44
1964	47.31	11.82	45.73	32.38	39.36	49.61	43.72	35.27
1965	53.63	12.51	48.04	31.41	42.03	54.95	43.08	38.37
1966	50.77	13.35	68.34	32.84	74.02	69.07	75.12	43.85

(a) Local value (i.e. value of output at mine or quarry), less cost of power, fuel, light and other materials and stores used; depreciation and maintenance costs have not been deducted.

## Quantities of principal minerals produced

In the preparation of Australian mineral commodity production statistics the quantities and values of individual minerals produced are recorded in terms of the form in which they are dispatched from the locality of each mine. For example, in the case of metalliferous mines, the output is recorded as ore if no treatment is undertaken at the mine, or as a concentrate if ore-dressing operations are carried out in associated works in the locality of the mine. In addition to the basic quantity data, the contents of metallic minerals and contents or average grade of selected non-metallic minerals are recorded. Whenever practicable, contents (based on assay) of metallic minerals are shown for each metal which is a 'pay metal' or a 'refiners' prize' when present in the particular mineral. In general, other metallic contents which are not recovered are excluded. Individual mineral products are arranged in four groups corresponding to the major groups of the industry, namely metal mining, fuel mining, non-metal mining (excluding fuels), and construction material quarrying, referred to on page 1044. Particulars relating to uranium bearing minerals are excluded.

The following tables show particulars of the quantity of the principal minerals produced during 1966 and earlier years.

**QUANTITIES OF PRINCIPAL MINERALS PRODUCED  
STATES AND NORTHERN TERRITORY, 1966**

Mineral	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	Aust.
<b>METALLIC MINERALS</b>								
Antimony concentrate . . . . .	tons	150	..	..	..	..	..	150
Bauxite . . . . .	"	17,906	..	973,250	..	807,105	..	1,798,261
Beryllium ore . . . . .	"	39	..	..	..	13	..	52
Copper ore(a) . . . . .	"	117	..	40,665	141	962	11,112	53,463
Copper concentrate . . . . .	"	26,788	36	352,661	..	3,268	55,981	477,987
Copper precipitate . . . . .	"	145	..	1	..	..	66	723
Gold(b) . . . . .	oz	238	21,644	42,979	5	947,306	84	1,078,587
Ilmenite concentrate . . . . .	tons	11,710	..	3,453	..	497,848	..	513,011
Iron ore(c) . . . . .	'000 tons	..	..	4,787	..	6,766	..	11,553
Lead ore(d) . . . . .	tons	2,689	..	14,413	20	2,037	..	19,221
Lead concentrate . . . . .	"	365,812	..	134,628	..	644	14,462	515,573
Lead-copper concentrate . . . . .	"	..	..	..	..	12,083	..	12,083
Lead-zinc concentrate . . . . .	"	14,254	..	..	..	..	..	14,254
Leucoxene concentrate . . . . .	"	..	..	..	..	756	..	756
Manganese ore . . . . .	"	30	..	5,500	..	183,209	123,801	312,540
Monazite concentrate . . . . .	"	465	..	173	..	1,346	..	1,984
Pyrite concentrate . . . . .	"	..	..	7,815	101,041	76,136	61,006	245,998
Rutile concentrate . . . . .	"	172,531	..	70,751	..	576	..	243,858
Tantalite-columbite concentrate . . . . .	lb	..	..	..	10,550	..	..	10,550
Tin concentrate . . . . .	tons	2,625	26	2,417	..	973	1,510	7,604
Tungsten concentrates—								
Scheelite concentrate . . . . .	"	..	..	..	..	1	1,307	1,308
Wolfram concentrate . . . . .	"	..	..	1	..	..	497	498
Zinc concentrate . . . . .	"	490,481	..	64,518	..	..	83,761	638,788
Zircon concentrate . . . . .	"	153,795	..	56,695	..	25,159	..	235,649
<b>FUEL MINERALS</b>								
Coal, black—								
Semi-anthracite . . . . .	'000 tons	..	..	43	..	..	2	45
Bituminous . . . . .	"	25,470	36	4,460	..	..	80	30,045
Sub-bituminous . . . . .	"	..	..	161	2,021	1,061	..	3,243
Total coal, black . . . . .	"	25,470	36	4,664	2,021	1,061	83	33,334
Coal, brown (lignite) . . . . .	"	..	21,783	..	..	..	..	21,783
Natural gas . . . . .	'000 cu ft	..	..	142,978	..	..	..	142,978
Natural gas condensate . . . . .	barrels	..	..	121	..	..	..	121
Crude oil . . . . .	'000 barrels	..	..	3,389	..	..	..	3,389

For footnotes see next page.

**QUANTITIES OF PRINCIPAL MINERALS PRODUCED  
STATES AND NORTHERN TERRITORY, 1966—continued**

Mineral		N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	Aust.
<b>NON-METALLIC (EXCLUDING FUEL) MINERALS</b>									
Asbestos . . . . .	short tons	494	..	..	..	12,974	..	..	13,468
Barite . . . . .	tons	633	..	..	11,281	1,810	..	..	13,724
Clays—									
Brick clay and shale . . . . .	'000 tons	2,209	1,459	429	451	411	160	..	5,118
Other(e) . . . . .	"	478	253	82	102	166	40	..	1,121
Diatomite . . . . .	tons	1,718	969	(f)	..	(f)	..	..	7,148
Dolomite(g) . . . . .	"	5,042	..	10,075	238,280	5	2,606	..	256,008
Felspar . . . . .	"	4,237	..	..	1,740	1,282	..	..	7,259
Gypsum . . . . .	"	44,962	111,293	..	603,413	41,884	..	..	801,552
Limestone(g) . . . . .	'000 tons	2,695	1,807	(f)	1,455	(f)	(f)	..	7,730
Magnesite . . . . .	tons	18,915	..	..	506	135	..	..	19,556
Phosphate rock . . . . .	"	..	..	..	5,715	..	..	..	5,715
Salt, crude . . . . .	"	..	(f)	(f)	519,623	(f)	..	..	644,817
Silica (glass, chemical, etc.)(e) . . . . .	"	220,942	..	47,010	45,442	28,312	5,417	..	347,123
Talc . . . . .	"	1,665	..	..	6,507	9,155	..	..	17,327

**CONSTRUCTION MATERIALS(e)**

Sand . . . . .	'000 tons	4,179	4,287	n.a.	1,586	n.a.	228	(h)967	{	10,691
River gravel . . . . .	"	2,435	3,274	n.a.	857	n.a.	1,426			8,549
Dimension stone . . . . .	"	44	10	2	31	147	1	(h)505	{	241
Crushed and broken stone . . . . .	"	8,301	19,102	3,124	10,805	2,963	2,115			46,796
Other (decomposed rock, etc) . . . . .	"	19,028	2,359	414	n.a.	n.a.	303			22,216

(a) Includes cupreous ore for fertiliser. (b) Bullion, alluvial, retorted gold, etc. (c) Iron oxide for metal extraction. (d) Includes lead-silver-zinc ore. (e) Incomplete, see Coverage, page 1044. (f) Not available for publication. (g) Excludes quantities used directly as building or road material. (h) Includes Australian Capital Territory which is not available for publication by individual items.

**QUANTITIES OF PRINCIPAL MINERALS PRODUCED: AUSTRALIA  
1962 TO 1966**

Mineral		1962	1963	1964	1965	1966
<b>METALLIC MINERALS</b>						
Antimony ore and concentrate . . . . .	tons	100	115	414	55	150
Bauxite . . . . .	"	29,547	354,206	783,900	1,167,671	1,798,261
Beryllium ore . . . . .	"	223	110	111	38	52
Chromite . . . . .	"	369	160	72	23	..
Copper ore(a) . . . . .	"	110,777	82,035	59,686	41,325	53,463
Copper concentrate . . . . .	"	395,427	434,368	427,258	389,398	477,987
Copper precipitate . . . . .	"	216	504	264	299	723
Gold(b) . . . . .	'000 oz	(c)	1,231	1,150	1,119	1,079
Ilmenite concentrate . . . . .	tons	178,867	200,983	303,628	441,034	513,011
Iron ore(d) . . . . .	'000 tons	4,843	5,515	5,669	6,695	11,553
Lead ore(e) . . . . .	tons	13,197	16,249	25,174	24,906	19,221
Lead concentrate . . . . .	"	522,278	584,462	536,213	503,356	515,573
Lead-copper concentrate . . . . .	"	11,192	9,309	10,214	10,424	12,083
Lead-zinc concentrate . . . . .	"	..	..	..	..	14,254
Leucoxene concentrate . . . . .	"	627	547	656	380	756
Manganese ore . . . . .	"	71,646	36,061	61,109	100,369	312,540
Monazite concentrate . . . . .	"	814	1,992	1,981	2,305	1,984
Pyrite concentrate . . . . .	"	148,566	194,059	220,078	204,011	245,998
Rutile concentrate . . . . .	"	119,195	183,260	182,371	217,330	243,858
Tantalite-columbite concentrate . . . . .	lb	43,097	30,889	33,600	25,581	10,550
Tin concentrate . . . . .	tons	3,842	4,132	5,314	6,237	7,604
Tungsten concentrates—						
Scheelite concentrate . . . . .	"	995	958	1,020	1,150	1,308
Wolfram concentrate . . . . .	"	492	394	380	487	498
Zinc concentrate . . . . .	"	572,900	594,861	588,840	604,211	638,788
Zircon concentrate . . . . .	"	133,844	184,830	184,082	226,863	235,649

For footnotes see next page.

QUANTITIES OF PRINCIPAL MINERALS PRODUCED: AUSTRALIA  
1962 TO 1966—*continued*

<i>Minerals</i>		1962	1963	1964	1965	1966
FUEL MINERALS						
Coal, black—						
Semi-anthracite . . . . .	'000 tons	69	61	79	70	45
Bituminous . . . . .	"	22,006	22,268	24,477	28,228	30,045
Sub-bituminous . . . . .	"	2,394	2,528	2,845	3,140	3,243
<i>Total coal, black</i> . . . . .	"	24,470	24,856	27,401	31,439	33,334
Coal, brown (lignite) . . . . .	"	17,137	18,456	19,035	20,659	21,783
Natural gas . . . . .	'000 cu ft	56,361	95,725	106,490	143,402	142,978
Natural gas condensate . . . . .	barrels	63	123	245	122	121
Crude oil . . . . .	'000 barrels	..	..	1,491	2,621	3,389
NON-METALLIC (EXCLUDING FUEL) MINERALS						
Asbestos . . . . .	short tons	18,416	13,374	13,654	11,566	13,468
Barite . . . . .	tons	12,534	8,220	12,302	11,976	13,724
Clays—						
Brick clay and shale . . . . .	'000 tons	4,383	4,549	5,163	5,056	5,118
Other (f) . . . . .	"	913	984	1,039	1,008	1,121
Diatomite . . . . .	tons	7,312	5,133	8,732	6,958	7,148
Dolomite(g) . . . . .	"	180,697	214,339	236,068	258,661	256,008
Felspar . . . . .	"	8,513	8,842	9,021	8,726	7,259
Gypsum . . . . .	"	630,910	725,444	795,003	833,521	801,552
Limestone(g) . . . . .	'000 tons	6,415	6,721	7,223	7,516	7,730
Magnesite . . . . .	tons	62,191	56,946	31,250	26,362	19,556
Phosphate rock . . . . .	"	4,385	4,925	5,689	4,519	5,715
Salt, crude . . . . .	"	536,019	581,537	545,491	654,533	644,817
Silica (glass, chemical, etc.)(f) . . . . .	"	218,544	247,928	322,269	320,937	347,123
Talc . . . . .	"	14,060	13,106	15,695	19,719	17,327
CONSTRUCTION MATERIALS(f)						
Sand . . . . .	'000 tons	7,535	9,050	10,757	11,444	10,691
River gravel . . . . .	"	5,912	7,625	8,117	7,760	8,549
Dimension stone . . . . .	"	379	629	590	467	241
Crushed and broken stone . . . . .	"	27,944	29,768	34,175	39,733	46,796
Other (decomposed rock, etc.) . . . . .	"	17,310	20,830	23,460	21,363	22,216

(a) Includes cupreous ore for fertiliser. (b) Bullion, alluvial, retorted gold, etc. (c) Gross weight not available.  
(d) Iron oxide for metal extraction. (e) Includes lead-silver-zinc ore. (f) Incomplete, owing to difficulties of coverage.  
See Coverage, page 1044. (g) Excludes quantities used directly as building or road material.

NOTE. Particulars of production of uranium oxide (U<sub>3</sub>O<sub>8</sub>) are not available for publication.

## Contents of metallic minerals produced

The following tables show the contents of metallic minerals produced in 1966 and earlier years.

**CONTENTS OF METALLIC MINERALS PRODUCED  
STATES AND NORTHERN TERRITORY, 1966**

<i>Content of metallic minerals produced</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>Aust.</i>
Alumina (Al <sub>2</sub> O <sub>3</sub> ) . . . . .	tons 6,822	..	569,351	..	363,197	..	..	939,370
Antimony . . . . .	971	..	..	..	..	..	..	971
Beryllium oxide (BeO) . . . . .	units(a) 490	..	..	..	147	..	..	637
Bismuth . . . . .	lb 650	..	..	..	67	..	..	717
Cadmium . . . . .	tons 1,005	..	132	..	75	..	..	1,212
Cobalt . . . . .	84	..	..	..	..	..	..	84
Copper . . . . .	9,242	5	72,643	28	814	17,005	9,800	109,537
Gold . . . . .	fine oz 9,078	21,005	139,202	5	627,052	36,502	84,141	916,985
Iron(b) . . . . .	'000 tons 283,044	..	..	3,068	4,317	..	..	7,385
Lead . . . . .	tons 6,130	..	65,541	7	706	15,578	..	364,898
Manganese(c) . . . . .	22	..	..	..	86,885	254	58,132	151,401
Manganese dioxide (MnO <sub>2</sub> )(d) . . . . .	lb 5,549	..	3,663	..	50	..	356	4,091
Molybdenum disulphide (MoS <sub>2</sub> ) . . . . .	oz 395	..	162	..	1,279	..	..	5,549
Monazite . . . . .	13	..	..	..	..	..	..	1,836
Platinum . . . . .	10,544	..	..	..	237	1,833	81	18,888
Silver . . . . .	'000 fine oz 210,312	..	6,192	..	..	..	..	371,567
Sulphur(e) . . . . .	tons 210,312	..	24,491	40,770	33,198	62,796	..	..
Tantalite-columbite (Ta <sub>2</sub> O <sub>5</sub> + Nb <sub>2</sub> O <sub>5</sub> ) . . . . .	lb 1,367	..	..	..	5,698	..	..	5,698
Tin . . . . .	tons 171,364	18	1,692	..	667	1,031	32	4,807
Titanium dioxide (TiO <sub>2</sub> ) . . . . .	..	..	70,182	..	275,199	..	..	516,745
Tungstic oxide (WO <sub>3</sub> ) . . . . .	..	..	..	..	1,307	..	..	1,307
Zinc . . . . .	275,191	..	43,588	55	644	49,851	12	369,341
Zircon . . . . .	152,257	..	56,128	..	24,518	..	..	232,903

(a) 1 unit = 22.4 lb. (b) Excludes iron content of iron oxide not intended for metal extraction. (c) Content of metallurgical grade manganese ore and zinc concentrate. (d) Content of manganese ore of other than metallurgical grade. (e) Sulphur content of pyrite and other minerals from which sulphur is extracted.

NOTE. Particulars of production of uranium oxide (U<sub>3</sub>O<sub>8</sub>) are not available for publication.

**CONTENTS OF METALLIC MINERALS PRODUCED: AUSTRALIA, 1962 TO 1966**

<i>Content of metallic minerals produced</i>	<i>1962</i>	<i>1963</i>	<i>1964</i>	<i>1965</i>	<i>1966</i>
Alumina (Al <sub>2</sub> O <sub>3</sub> ) . . . . .	tons 13,250	154,499	396,329	613,337	939,370
Antimony . . . . .	874	1,007	1,116	944	971
Beryllium oxide (BeO) . . . . .	units(a) 2,586	1,278	1,279	457	637
Bismuth . . . . .	lb 97	..	..	..	717
Cadmium . . . . .	tons 992	1,109	1,050	1,155	1,212
Chromic oxide (Cr <sub>2</sub> O <sub>3</sub> ) . . . . .	185	72	32	10	..
Cobalt . . . . .	78	86	73	90	84
Copper . . . . .	106,972	112,967	104,050	90,388	109,537
Gold . . . . .	fine oz 1,068,837	1,023,970	963,834	877,643	916,985
Iron(b) . . . . .	'000 tons 3,119	3,558	3,655	4,297	7,385
Lead . . . . .	tons 370,110	410,291	374,856	362,137	364,898
Manganese(c) . . . . .	39,413	23,951	36,564	55,280	151,401
Manganese dioxide (MnO <sub>2</sub> )(d) . . . . .	1,512	1,228	1,033	1,652	4,091
Molybdenum disulphide (MoS <sub>2</sub> ) . . . . .	lb 2,332	21,645	..	41,911	5,549
Monazite . . . . .	tons 772	1,875	1,848	2,165	1,836
Platinum . . . . .	oz 2	4	..	..	13
Silver . . . . .	'000 fine oz 17,554	19,642	18,427	17,281	18,888
Sulphur(e) . . . . .	tons 312,803	345,636	346,502	345,554	371,567
Tantalite-columbite (Ta <sub>2</sub> O <sub>5</sub> + Nb <sub>2</sub> O <sub>5</sub> ) . . . . .	lb 18,879	12,935	12,499	10,281	5,698
Tin . . . . .	tons 2,715	2,860	3,642	3,849	4,807
Titanium dioxide (TiO <sub>2</sub> ) . . . . .	215,494	288,050	342,646	448,318	516,745
Tungstic oxide (WO <sub>3</sub> ) . . . . .	1,042	960	996	1,176	1,307
Zinc . . . . .	337,532	351,470	344,600	349,231	369,341
Zircon . . . . .	132,109	182,112	182,174	224,654	232,903

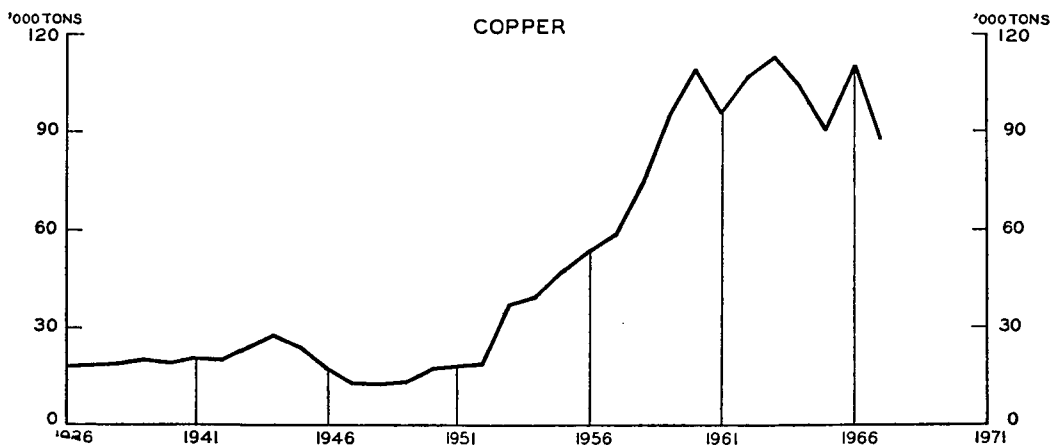
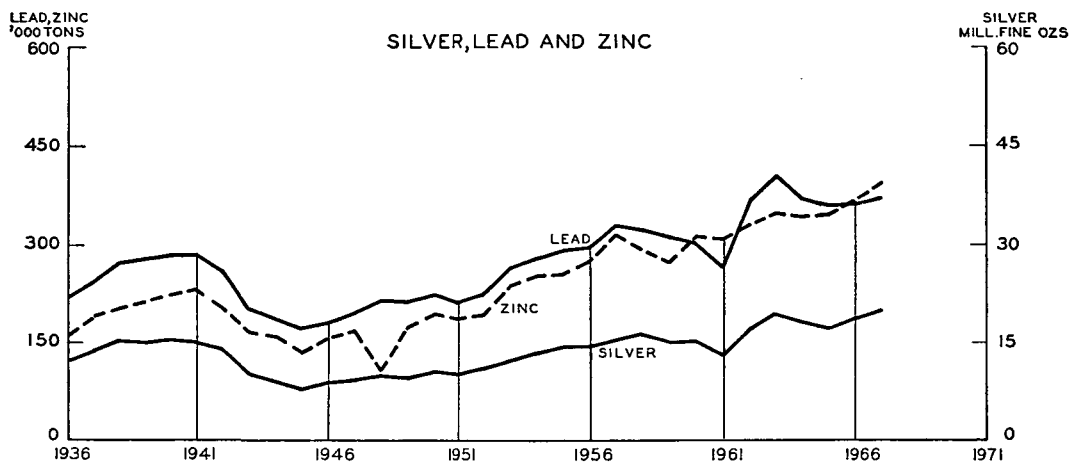
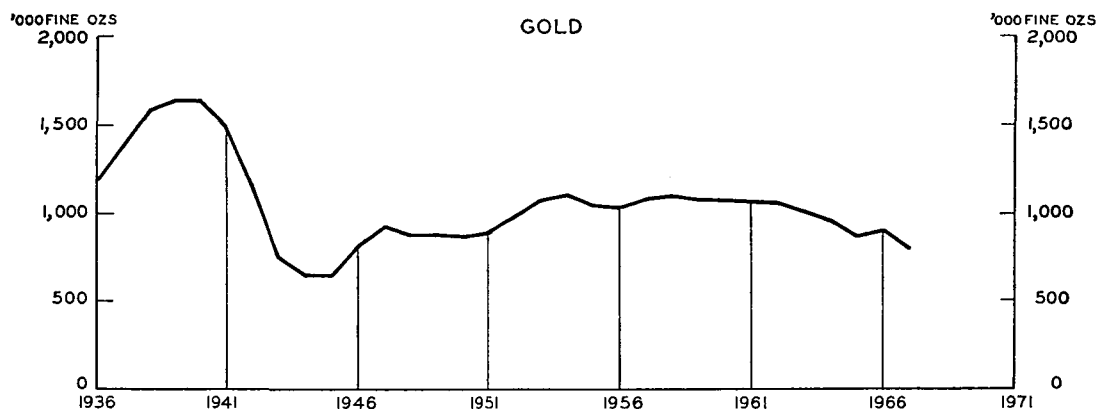
(a) 1 unit = 22.4 lb. (b) Iron oxide for metal extraction. (c) Content of metallurgical grade manganese ore and zinc concentrate. (d) Content of manganese ore of other than metallurgical grade. (e) Sulphur content of pyrite and other minerals from which sulphur is extracted.

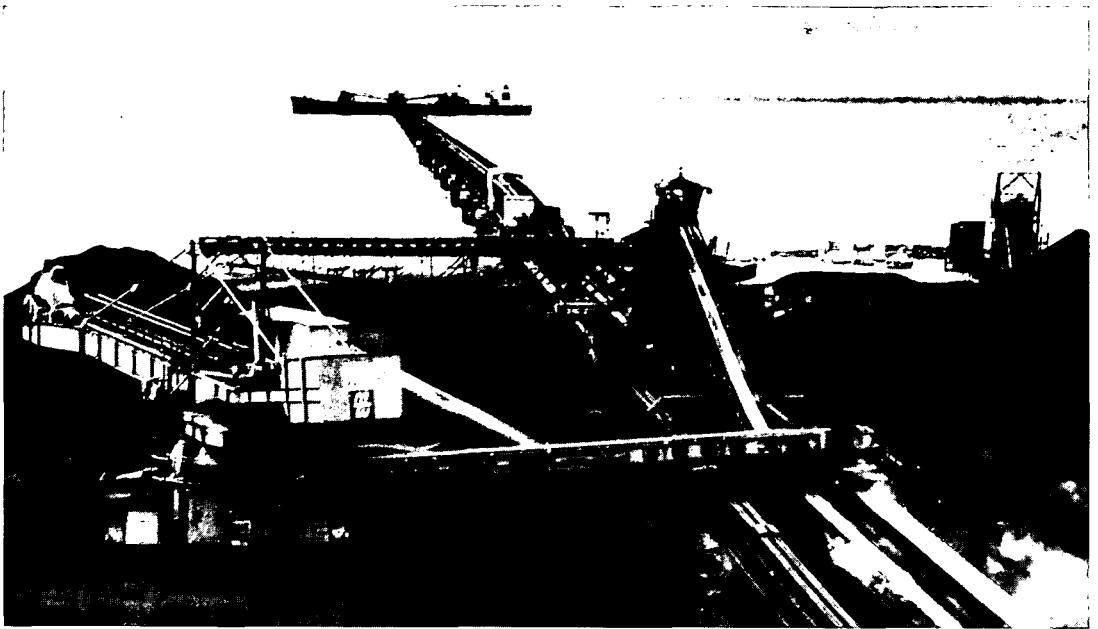
NOTE. Particulars of production of uranium oxide (U<sub>3</sub>O<sub>8</sub>) are not available for publication.

# MINE PRODUCTION OF PRINCIPAL METALS: AUSTRALIA

(METALLIC CONTENT OF MINERALS)

1936 TO 1967





*Above and below: Iron ore pellet ship loading facilities, Port Latta, Tasmania*

*Right: Iron ore pellets*

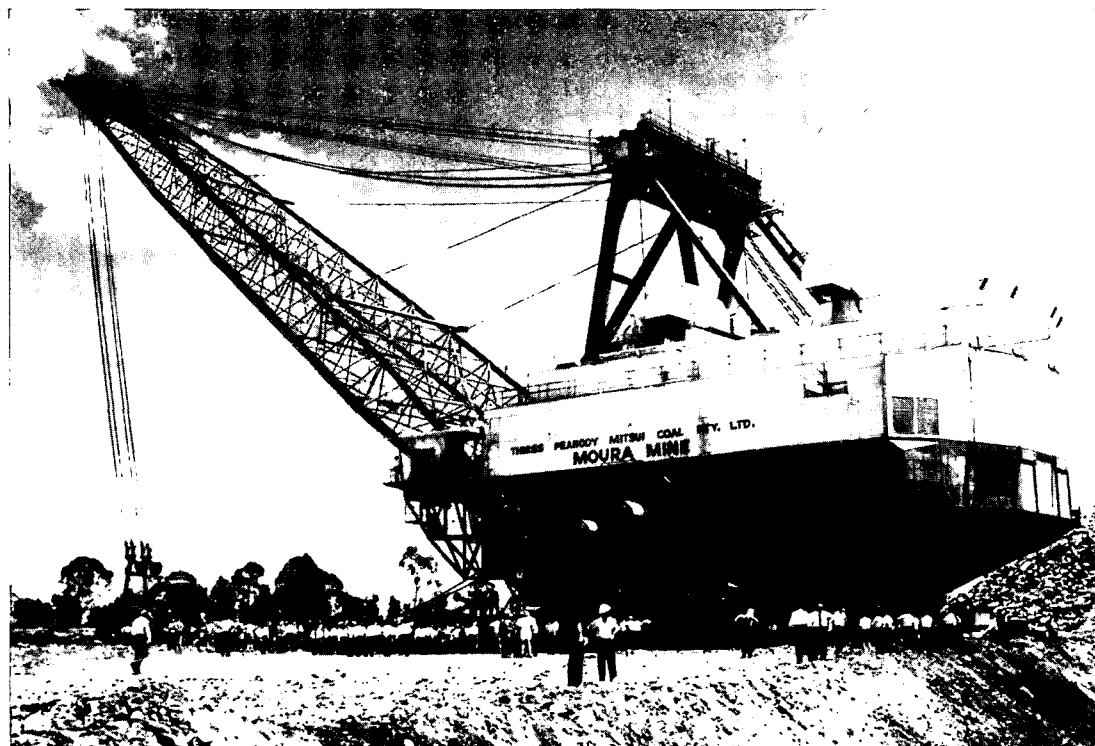


*Photographs for plates 63 and 64  
by courtesy of Australian News and Information  
Bureau.*





*Above: Opencut coalfield, Moura, Queensland*  
*Below: World's largest walking dragline,*  
*Moura, Queensland*



# MINE PRODUCTION OF PRINCIPAL METALS AND PRODUCTION OF COAL

(METALLIC CONTENT OF MINERALS)

AUSTRALIA, 1936 to 1967

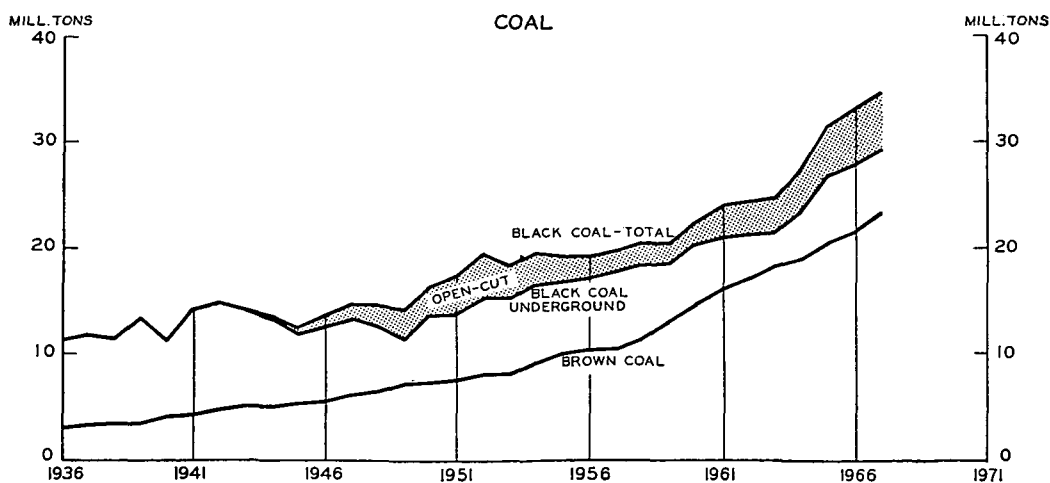
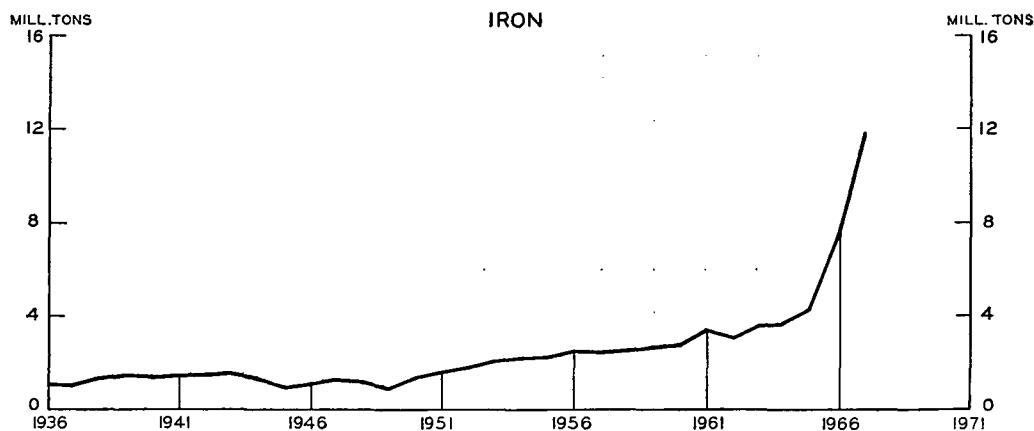
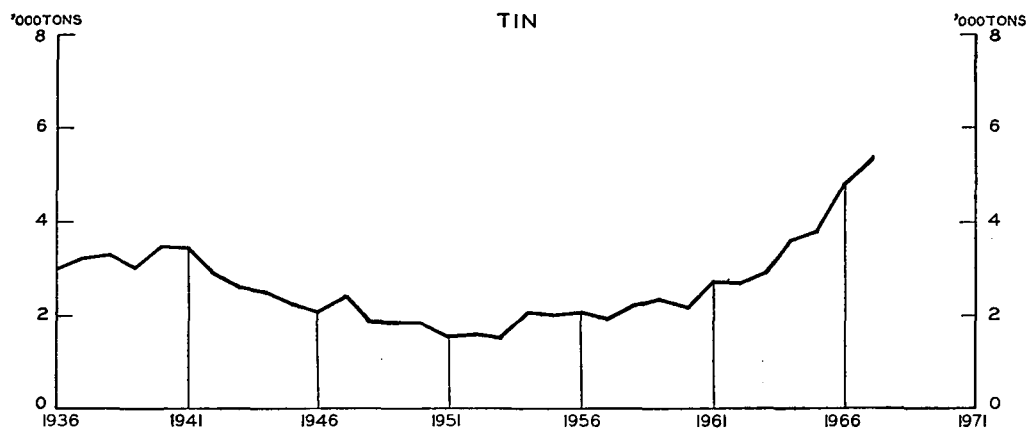


PLATE 65

Graphs showing details of the mine production of principal metals (metallic content) and coal from 1936 to 1967 are included on plates 62 and 65, pages 1056 and 1057.

#### Local value of minerals produced, 1962 to 1966

Particulars of the values of minerals (mine and quarry products) produced are shown in the following table. The values represent the selling value at the mine or quarry of minerals produced during the years concerned.

#### LOCAL VALUE OF MINERALS PRODUCED: AUSTRALIA, 1962 TO 1966

(\$'000)

<i>Mineral</i>	<i>1962</i>	<i>1963</i>	<i>1964</i>	<i>1965</i>	<i>1966</i>
<b>Metallic minerals—</b>					
Bauxite . . . . .	136	1,748	3,064	4,600	7,087
Copper ore, concentrate, etc. . . . .	48,604	52,036	51,380	50,790	87,523
Gold ore, concentrate, other forms, etc. . . . .	31,254	29,556	26,666	25,619	26,371
Ilmenite concentrate . . . . .	1,298	1,554	2,208	3,755	4,242
Iron ore . . . . .	10,650	12,200	12,550	14,640	42,317
Lead and lead-silver ore and concentrate, lead-copper concentrate, etc. . . . .	39,096	56,320	80,806	87,947	76,831
Manganese ore . . . . .	960	492	750	808	3,462
Pyrite concentrate . . . . .	2,230	2,354	3,054	3,040	2,745
Rutile concentrate . . . . .	7,038	12,114	12,080	15,038	17,088
Tin concentrate . . . . .	5,668	5,784	10,224	12,237	14,332
Tungsten concentrates . . . . .	1,118	900	1,420	2,692	4,469
Zinc ore and concentrate . . . . .	9,110	16,468	35,456	36,818	32,890
Zircon concentrate . . . . .	2,582	3,550	3,462	6,136	8,255
Other metallic minerals . . . . .	460	432	522	548	610
<i>Total, metallic minerals . . . . .</i>	<i>160,204</i>	<i>195,508</i>	<i>243,642</i>	<i>264,668</i>	<i>328,222</i>
<b>Fuel minerals—</b>					
Coal, black . . . . .	119,078	118,202	128,038	143,703	151,380
Coal, brown . . . . .	15,682	16,156	17,304	18,436	20,064
Other fuel minerals . . . . .	n.a.	58	2,164	5,344	9,229
<i>Total, fuel minerals . . . . .</i>	<i>134,760</i>	<i>134,416</i>	<i>147,506</i>	<i>167,483</i>	<i>180,675</i>
<i>Total, non-metallic minerals(a) . . . . .</i>	<i>24,320</i>	<i>26,038</i>	<i>27,814</i>	<i>29,241</i>	<i>31,951</i>
<i>Total, construction materials(a) . . . . .</i>	<i>55,854</i>	<i>60,720</i>	<i>73,244</i>	<i>80,183</i>	<i>83,477</i>
<b>Total, all minerals and construction materials . . . . .</b>	<b>375,138</b>	<b>416,682</b>	<b>492,208</b>	<b>541,575</b>	<b>624,325</b>

(a) Incomplete owing to difficulties of coverage. See scope and sources of statistics, page 1044.

NOTE. Particulars of the value of uranium concentrate produced are not available for publication and have been excluded from the table above.

Owing to the necessity of classifying individual mines according to the principal mineral produced, the values in the table on page 1050 for mining industry groups differ slightly in some cases from totals of the corresponding groups of mine products shown in the table above.

## Overseas participation in Australian mining industry

### Introduction

These statistics on overseas participation in the Australian mining industry were obtained from the first of a series of studies of overseas participation in Australian industry, and were published in the mimeographed bulletin *Overseas Participation in Australian Mining Industry, 1963 to 1965*.

Any attempt to provide statistical information on the extent of overseas participation in local industry involves difficult problems of statistical concept and measurement. Broadly, there are two ways in which overseas participation may be measured. One is to examine the financial accounts of Australian companies and compare the value of *assets* of companies in which there is significant overseas investment with those of other Australian companies. The other is to examine the *operations* (as expressed in terms of production, wages and salaries, output etc.) of establishments of Australian companies in which there is significant overseas investment and compare their operations with those of establishments of other Australian companies. The second method has been adopted for this series.

### Scope of the statistics

The statistics relate to the operations of establishments employing four or more persons in the mining and quarrying industry as defined for the annual mining and quarrying census except for establishments engaged in construction material quarrying and clay mining, which are excluded.

### Classification of companies

The extent of overseas participation in the mining industry is measured by the operations of the establishments of companies in which there is direct investment from overseas (as determined by the annual survey of overseas investments). These are defined as follows.

- (i) Companies in Australia in which at least 50 per cent of the ordinary shares (or voting stock) is held by individual shareholders or companies resident in one overseas country, or where 25 per cent or more of the ordinary shares (or voting stock) is held by one company, or a group of companies, incorporated in one overseas country.
- (ii) Branches of companies incorporated overseas and registered in Australia as foreign companies.
- (iii) Wholly and partly owned subsidiaries and sub-subsidiaries, etc., of companies included in (i) and (ii) above, provided that the proportion of their equity which is attributable to overseas ownership does not fall below the percentage limits specified in (i) above.

Investment in ordinary shares (or voting stock) of Australian companies (including companies in which there is direct investment from overseas) where the proportion of shares held in a single country falls below the percentages specified in (i) above is defined as portfolio investment. Because of the difficulties encountered in determining the proportion of ordinary shares (or voting stock) of individual Australian companies held by portfolio investors overseas, *the figures for overseas participation in the mining industry exclude participation by way of portfolio investment*.

### Further information available

In the following tables the degree of overseas participation is expressed in terms of value of production only. Further details in terms of the value of power, fuel and materials used, value of output, value of additions and replacements to fixed assets, salaries and wages paid, and average number of persons employed, as well as the value of production, may be found in the mimeographed bulletin *Overseas Participation in Australian Mining Industry, 1963 to 1965*.

## OVERSEAS OWNERSHIP AND CONTROL

In analysing the extent of overseas participation in local industry it is usual to distinguish between two aspects, overseas ownership and overseas control.

### Overseas ownership

Statistics which give a general indication of the degree of overseas ownership in terms of the value of production of Australian mining establishments are presented in the two following tables. In the compilation of these statistics the data for an establishment of a company in which there is no direct investment from overseas are allocated wholly to Australian ownership. The data relating to an establishment of a company in which there is direct investment from overseas are apportioned to overseas and Australian ownership according to the proportion of the ordinary shares (or voting stock) of the company that is held by the direct overseas investors.

**MINING(a): VALUE OF PRODUCTION APPORTIONED TO AUSTRALIAN AND DIRECT OVERSEAS OWNERSHIP, BY INDUSTRY, 1963 TO 1965**

<i>Industry and ownership</i>	<i>Value (\$'000)</i>			<i>Proportion Australian and overseas (per cent)</i>		
	<i>1963</i>	<i>1964</i>	<i>1965</i>	<i>1963</i>	<i>1964</i>	<i>1965</i>
<b>Metal mining—</b>						
Australian(b) . . . .	87,964	114,918	120,412	61.0	59.5	56.5
Overseas . . . . .	56,250	78,179	92,873	39.0	40.5	43.5
<b>Fuel mining—</b>						
Australian(b) . . . .	94,024	100,833	107,717	88.8	86.4	80.6
Overseas . . . . .	11,842	15,939	25,885	11.2	13.6	19.4
<b>Non-metal (excluding fuel) mining—</b>						
Australian(b) . . . .	9,043	10,203	10,015	85.2	84.1	82.8
Overseas . . . . .	1,574	1,926	2,082	14.8	15.9	17.2
<b>Total mining—</b>						
Australian(b) . . . .	191,031	225,954	238,144	73.3	70.2	66.3
Overseas . . . . .	69,666	96,044	120,840	26.7	29.8	33.7
<b>Grand total . . . .</b>	<b>260,697</b>	<b>321,998</b>	<b>358,984</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

(a) Excludes construction material quarrying and clay mining. (b) Includes ownership by overseas portfolio investors.

**MINING(a): VALUE OF PRODUCTION APPORTIONED TO DIRECT OVERSEAS OWNERSHIP(b), BY COUNTRY AND BY PROPORTION OF DIRECT OVERSEAS EQUITY, 1963 TO 1965**

<i>Country, and proportion of direct overseas equity</i>	<i>Value (\$'000)</i>			<i>Proportion(c) (per cent)</i>		
	<i>1963</i>	<i>1964</i>	<i>1965</i>	<i>1963</i>	<i>1964</i>	<i>1965</i>
<b>Country—</b>						
United Kingdom . . . .	42,778	62,708	74,777	16.4	19.5	20.8
United States of America . . . .	22,224	28,754	33,292	8.5	8.9	9.3
Other . . . . .	4,664	4,582	12,770	1.8	1.4	3.6
<b>Proportion of direct overseas equity—</b>						
25 per cent but less than 50 per cent . . . . .	3,745	3,067	2,990	1.4	0.9	0.9
50 per cent but less than 75 per cent . . . . .	22,421	27,450	35,243	8.6	8.5	9.8
75 per cent and over . . . . .	43,500	65,527	82,606	16.7	20.4	23.0
<b>Total apportioned to direct overseas ownership . . . . .</b>	<b>69,666</b>	<b>96,044</b>	<b>120,840</b>	<b>26.7</b>	<b>29.8</b>	<b>33.7</b>

(a) Excludes construction material quarrying and clay mining. (b) Excludes ownership by overseas portfolio investors. (c) Of total value of mining production.

**Overseas control**

The statistics in the following tables provide an indication of the relative importance of mining establishments of companies in which there is direct overseas investment. The concept of direct overseas investment is directly related to the concept of overseas control, and the statistics in these tables provide a measure of the value of production of mining establishments of companies which can be regarded as subject to a degree of overseas control. The statistics have been derived by allocating data relating to each mining establishment wholly to either one or the other of the following categories: (i) establishments of direct overseas investment companies; (ii) other establishments.

## OVERSEAS PARTICIPATION IN AUSTRALIAN MINING INDUSTRY 1061

The classification of establishments of companies in which 50 per cent of the voting stock is held in one overseas country (or 25 per cent by one overseas company) as subject to a degree of overseas control is, of course, based on a statistical convention. Such a convention is needed because of the lack of specific information as to the arrangements for managerial control of individual companies. The convention adopted for this study (including the actual percentages used) is the one suggested by the International Monetary Fund for use in the absence of other information. There are avenues of control other than through direct equity interest, e.g. through franchise or patent rights, marketing arrangements, financial commitments, etc. Such arrangements, of course, also typically exist between companies in which there is direct investment and their overseas parent companies and associated companies. Further, ownership of less than 25 per cent of voting stock may, in some cases, be sufficient to achieve effective control of a company's activities, just as in other cases ownership of more than 25 per cent of voting stock may not constitute control. In addition, the relationship between overseas parent companies and their Australian branches and subsidiaries covered by the statistics in the following tables can be one of *potential* rather than *actual* control.

**MINING(a): VALUE OF PRODUCTION OF ESTABLISHMENTS OF DIRECT OVERSEAS INVESTMENT COMPANIES AND OTHER ESTABLISHMENTS, BY INDUSTRY  
1963 TO 1965**

Industry	Value (\$'000)			Proportion (per cent)		
	1963	1964	1965	1963	1964	1965
<b>Metal mining—</b>						
Establishments of direct overseas investment companies . . .	76,323	101,744	122,880	52.9	52.7	57.6
Other establishments . . . .	67,892	91,353	90,406	47.1	47.3	42.4
<b>Fuel mining—</b>						
Establishments of direct overseas investment companies . . .	16,391	21,512	33,943	15.5	18.4	25.4
Other establishments . . . .	89,474	95,260	99,658	84.5	81.6	74.6
<b>Non-metal (excluding fuel) mining—</b>						
Establishments of direct overseas investment companies . . .	2,146	2,565	3,036	20.2	21.1	25.1
Other establishments . . . .	8,471	9,565	9,061	79.8	78.9	74.9
<b>Total mining—</b>						
Establishments of direct overseas investment companies . . .	94,860	125,820	159,860	36.4	39.1	44.5
Other establishments . . . .	165,837	196,178	199,124	63.6	60.9	55.5
<b>Grand total . . . . .</b>	<b>260,697</b>	<b>321,998</b>	<b>358,984</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

(a) Excludes construction material quarrying and clay mining.

**MINING(a): VALUE OF PRODUCTION OF ESTABLISHMENTS OF DIRECT OVERSEAS INVESTMENT COMPANIES, BY PROPORTION OF DIRECT OVERSEAS EQUITY  
1963 TO 1965**

Proportion of direct overseas equity	Value (\$'000)			Proportion(b) (per cent)		
	1963	1964	1965	1963	1964	1965
25 per cent but less than 50 per cent .	8,770	7,356	7,717	3.4	2.3	2.1
50 " " " " " 75 " " .	40,388	49,359	62,651	15.5	15.3	17.5
75 " " and over . . . .	45,702	69,105	89,492	17.5	21.5	24.9
<b>Total establishments of direct overseas investment companies . . . . .</b>	<b>94,860</b>	<b>125,820</b>	<b>159,860</b>	<b>36.4</b>	<b>39.1</b>	<b>44.5</b>

(a) Excludes construction material quarrying and clay mining. (b) Of total value of production.

## Mineral exploration (other than for petroleum)

### Definition

Mineral exploration consists of the search for, and or appraisal of, new ore occurrences and known deposits of minerals (including extensions to deposits being worked) by geological, geophysical, geochemical, and other methods (including drilling). Exploration for water is excluded. The construction of shafts and adits is included if primarily for exploration purposes. Excluded are mine development activities (which include the construction of drives, shafts, winzes, etc.) in underground mines and the preparation of quarrying sites for open-cut extraction (including overburden removal) carried out primarily for the purpose of commencing or extending mining and quarrying operations. Mine development activities (including mines under development) are included in the scope of the annual census of mining and quarrying.

### Sources of statistics

The statistics of exploration for minerals *other than petroleum* were derived from the first annual general mineral exploration collection (excluding petroleum exploration), that for 1965, which was carried out by this Bureau in association with State Mines Departments.

### Scope of mineral exploration collection

The scope of the mineral exploration collection is limited to private exploration on leases held for production and exploration purposes, and all government exploration. General exploration survey work and other exploration activity not connected with particular leases are excluded.

Leaseholders were instructed to report details of total exploration activity on areas held by them including exploration carried out on these areas by other companies or persons under joint venture agreements, options to purchase, etc. However, it appears that some leaseholders may not have reported details of exploration carried out by others under option.

The scope of the collection is divided into the following three sections.

(a) *Private exploration on production leases*—relates to exploration carried out *on the production lease* by privately operated mines currently producing or under development for production of minerals other than petroleum. This also includes particulars of exploration within their production leases by business undertakings operated by State government authorities. Mines included in this section of the mineral exploration collection are practically the same as those in the annual census of mining and quarrying (see Statistical Bulletin *Mining and Quarrying*, No. 15, 1966 for further details) with the exception of a limited number of itinerant prospectors and small mines for which information was not collected.

(b) *Private exploration in other areas*—relates to exploration carried out on areas covered by exploration licences, authorities to enter, authorities to prospect, and similar licences and authorities issued by State Governments for exploration for minerals other than petroleum. Other commercial exploration, such as that carried out under option to purchase agreements, is excluded.

(c) *Exploration by government*—relates to exploration for minerals other than petroleum carried out by—

- (i) Commonwealth Government (Bureau of Mineral Resources, Geology and Geophysics, and Joint Coal Board), and
- (ii) State Mines Departments.

**Summary of operations**

The following table shows the amounts expended, the man-weeks worked, and the footage drilled, etc. in mineral exploration other than petroleum during the years 1965 and 1966.

**MINERAL EXPLORATION (OTHER THAN FOR PETROLEUM)  
SUMMARY OF OPERATIONS, AUSTRALIA, 1965 AND 1966**

	1965	1966	Increase 1965-66
<b>EXPLORATION EXPENDITURE(a)</b>			
	\$'000	\$'000	Per cent
On drilling . . . . .	10,511	13,994	33.1
Other . . . . .	14,932	17,544	17.5
<b>Total . . . . .</b>	<b>25,443</b>	<b>31,539</b>	<b>24.0</b>
Payments to contractors(b) . . . . .	6,627	8,542	28.9
<b>MAN-WEEKS WORKED(c)</b>			
	'000	'000	Per cent
By professional persons(d) . . . . .	38.8	43.2	11.3
By non-professional persons(e) . . . . .	67.6	89.9	33.0
<b>Total . . . . .</b>	<b>106.5</b>	<b>133.0</b>	<b>24.9</b>
<b>FOOTAGE DRILLED, SUNK, OR DRIVEN</b>			
	'000 feet	'000 feet	Per cent
Drilling—			
Core . . . . .	1,139.1	1,645.1	44.4
Non-core . . . . .	1,399.9	2,375.3	69.7
<b>Total . . . . .</b>	<b>2,539.0</b>	<b>4,020.4</b>	<b>58.3</b>
Other(f) . . . . .	67.9	59.5	-12.4

(a) Expenditure whether charged as working expenses or capitalised. (b) Amounts paid to drilling contractors, geological consultants, technical advisers, etc., for exploration services. Included in total expenditure shown. (c) Operator and staff only (includes time spent on report writing and similar off-site activities associated with exploration); excludes contractors and their employees. (d) Geologists, geophysicists, engineers, etc., engaged on exploration work. (e) Drill operators, field hands, etc. (f) Includes shafts, winzes, etc., sunk, and drives, adits, etc., driven.

Minus sign (—) denotes decrease.



**Footage drilled, etc., States and Northern Territory**

The following table shows the footage drilled, etc. on mineral exploration other than for petroleum in each State and the Northern Territory during the years 1965 and 1966.

**MINERAL EXPLORATION (OTHER THAN FOR PETROLEUM)  
FOOTAGE DRILLED, SUNK, OR DRIVEN, STATES AND  
NORTHERN TERRITORY, 1965 AND 1966**  
(<sup>'000</sup> feet)

	1965		1966	
	<i>Drilling</i>	<i>Other (a)</i>	<i>Drilling</i>	<i>Other (a)</i>
<b>PRIVATE EXPLORATION(b)</b>				
New South Wales . . . . .	764.2	2.6	943.0	3.5
Victoria . . . . .	167.0	4.5	167.7	11.4
Queensland . . . . .	592.2	8.0	1,507.9	6.9
South Australia . . . . .	121.0	2.5	182.0	0.9
Western Australia . . . . .	303.4	39.6	629.6	9.9
Tasmania . . . . .	183.4	4.5	165.4	3.3
Northern Territory . . . . .	214.3	6.2	224.7	23.6
<i>Total</i> . . . . .	<i>2,345.4</i>	<i>67.9</i>	<i>3,820.4</i>	<i>59.5</i>
<b>GOVERNMENTS</b>				
Commonwealth(c) . . . . .	7.6	..	5.6	..
State Mines Departments. . . . .	186.0	..	194.3	..
<i>Total</i> . . . . .	<i>193.6</i>	<i>..</i>	<i>200.0</i>	<i>..</i>
<b>TOTAL FOOTAGE DRILLED, SUNK, OR DRIVEN</b>				
<b>Australia</b> . . . . .	<b>2,539.0</b>	<b>67.9</b>	<b>4,020.4</b>	<b>59.5</b>

(a) Includes shafts, winzes, etc., sunk and drives, adits, etc., driven. (b) Includes State government business undertakings. (c) Includes Joint Coal Board.

**Petroleum exploration****Definition**

Petroleum exploration and development consists of the search for, and or development of, deposits of crude petroleum and or gas by geological, geophysical, geochemical, and other means, including drilling. Included in the expenditures are the costs of drilling both exploratory and developmental oil and or gas wells and the testing and completion (up to and including the wellhead fittings and valves to control flow—christmas tree—or pumping wells) of these wells. Also included are the cost of access roads, site construction, permits, licences and similar fees, relevant office buildings and furniture, transportation equipment, storage facilities, plant and equipment, and review work, all of which are undertaken primarily for purposes of exploration for, and or development of, deposits of petroleum or natural gas. Details of expenditure on production facilities, and pipelines and production costs, etc. are excluded.

**Source of statistics**

These statistics were collected and compiled by the Bureau of Mineral Resources, Geology and Geophysics, Canberra. Statistical and other information relating to petroleum exploration is published

by the Bureau of Mineral Resources in *The Petroleum Newsletter* (issued quarterly), *The Australian Mineral Industry—Annual Review and Expenditures on Petroleum Exploration and Development*, 1965 (B.M.R. Record No. 1966 (205)).

### Operations

The following tables show particulars of expenditure, and wells and footage drilled in petroleum exploration in recent years.

#### EXPENDITURE ON PETROLEUM EXPLORATION BY PRIVATE ENTERPRISE AND BY GOVERNMENTS: AUSTRALIA, 1966(a)

<i>Origin of expenditure</i>	<i>Expenditure</i>	<i>Percentage contribution</i>
	\$'000	
Private enterprise—		
Funds of Australian origin . . . . .	14,898	22.4
Funds of overseas origin . . . . .	37,577	56.5
<i>Total, private enterprise</i> . . . . .	52,475	78.9
State Government departments . . . . .	767	1.1
Commonwealth Government departments (excluding subsidy payments) . . . . .	3,649	5.5
Commonwealth Government subsidy payments . . . . .	9,617	14.5
<i>Total expenditure</i> . . . . .	66,508	100.0

(a) Excludes expenditure in Papua and New Guinea.

#### EXPENDITURE ON PETROLEUM EXPLORATION BY PRIVATE ENTERPRISE AND BY COMMONWEALTH, STATE, AND BRITISH GOVERNMENTS TO 31 DECEMBER 1966(a)

<i>Origin of expenditure</i>	<i>Expenditure</i>	<i>Percentage contribution</i>
	\$'000	
Private enterprise—		
To end of 1966—		
Funds of Australian origin . . . . .	134,597	30.6
Funds of overseas origin . . . . .	214,105	48.7
<i>Total, private enterprise</i> . . . . .	348,702	79.4
Government—		
Prior to 1946—		
State Government . . . . .	3,084	0.7
British Government . . . . .	50	..
Commonwealth Government—Grants . . . . .	324	0.1
Other . . . . .	1,051	0.2
1946 to 1966—		
State and Territory Departments of Mines . . . . .	7,072	1.6
Commonwealth Government—subsidy payments . . . . .	52,179	11.9
Department of National Development (excluding subsidy payments) . . . . .	26,307	5.9
Department of Interior—topographic surveys, oil search . . . . .	610	0.2
<i>Total, Government</i> . . . . .	90,678	20.6
<i>Total expenditure</i> . . . . .	439,379	100.0

(a) Includes expenditure in Papua and New Guinea

**WELLS AND FOOTAGE DRILLED IN PETROLEUM EXPLORATION  
STATES AND TERRITORIES, 1966**

	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	T.P. N.G.	Total
Wells drilled(a)	5	6	65	13	37	1	7	..	134
Average total depth of wells drilled . . . feet	5,544	5,330	6,169	4,439	6,449	5,910	6,262	..	6,155
Wells completed as potential oil producers . . .	..	..	..	..	12	..	..	..	12
Wells completed as potential gas producers . . .	..	2	5	2	5	..	..	..	14
Wells drilled or drilling over 10,000 feet . . .	1	1	9	..	7	..	1	..	19
Footage drilled—									
Completed wells . . . feet	26,922	26,266	367,578	57,214	178,681	5,910	24,470	..	687,041
Uncompleted holes(b) . . . feet	15,347	4,999	7,693	9,711	21,448	697	8,886	..	68,781
Total footage drilled . .	42,269	31,265	375,271	66,925	200,129	6,607	33,356	..	755,822

(a) Number of holes which reached total depth during the year. (b) Uncompleted holes means wells suspended or drilling at 31 December 1966.

**WELLS AND FOOTAGE DRILLED IN PETROLEUM EXPLORATION  
STATES AND TERRITORIES TO 31 DECEMBER 1966**

State or Territory	To 31 December 1964		1965		1966		To 31 December 1966	
	Wells	Footage	Wells	Footage	Wells	Footage	Wells	Footage
New South Wales . . .	83	275,441	11	49,066	5	42,269	99	366,776
Victoria . . .	166	375,213	9	69,505	6	31,265	181	475,983
Queensland . . .	388	1,807,101	128	673,994	65	375,271	581	2,856,366
South Australia . . .	120	292,272	8	49,542	13	66,925	141	408,739
Western Australia . . .	121	504,165	37	214,598	37	200,129	195	918,892
Tasmania . . .	21	14,000	1	7,717	1	6,607	23	28,324
Northern Territory . . .	16	63,435	14	76,752	7	33,356	37	173,543
Papua and New Guinea . .	44	217,234	1	12,015	..	..	45	229,249
Total . . .	..	..	209	1,153,189	134	755,822	..	..
Cumulative total . . .	959	3,548,861	1,168	4,702,050	1,302	5,457,872	1,302	5,457,872

### Mineral processing and treatment

The extraction of minerals from ore deposits, as in mining and quarrying, is only part of the wider field of mineral technology. It is only in rare instances that minerals can be used directly in the form in which they are produced by mines, and much more commonly minerals must undergo considerable processing and treatment before their full utility and value can be realised. Examples of this processing and treatment are the smelting and refining of metals, the production of coke from coal, the refining of oil, and the treatment of non-metallic minerals as in the production of superphosphate and other chemicals and building materials like bricks and cement. The sectors of the economy which carry out this work are classified for statistical purposes to the manufacturing industry, and particulars relating to those activities which principally involve mineral processing and treatment—i.e. the treatment of non-metalliferous mine and quarry products, the manufacture of mineral oils and chemical fertilisers, the smelting, converting, refining and rolling of iron and steel, the extracting and refining of other metals, and the manufacture of alloys are given in the chapter Manufacturing Industry, pages 1078–1102 and 1111–16.

#### Principal products

The following table shows particulars of the production of certain important manufactured products of mineral origin during the years 1962–63 to 1966–67. Secondary metal is excluded from the metal production statistics except in the case of ingot steel. For blister copper and lead bullion the figures shown relate to the copper and lead content respectively.

**PRODUCTION OF PRINCIPAL MANUFACTURED PRODUCTS  
OF MINERAL ORIGIN: AUSTRALIA, 1962-63 TO 1966-67**

Commodity		1962-63	1963-64	1964-65	1965-66	1966-67
<b>METALS</b>						
<b>Non-ferrous—</b>						
Alumina . . . . .	tons	38,519	94,448	175,398	227,907	474,716
Refined aluminium . . . . .	"	26,870	58,937	85,497	87,222	92,826
Blister copper(a) . . . . .	"	88,901	92,809	57,880	98,529	77,888
Refined copper . . . . .	"	85,652	89,222	53,441	91,588	74,313
Lead bullion (for export)(a) . . . . .	"	78,299	82,440	63,827	81,709	84,690
Refined lead . . . . .	"	208,946	217,292	199,032	188,197	192,429
Refined zinc . . . . .	"	175,850	186,389	189,395	196,534	197,030
Refined tin . . . . .	"	2,714	2,959	2,931	3,537	3,237
<b>Ferrous—</b>						
Pig iron . . . . .	'000 tons	3,400	3,772	3,936	4,380	4,893
Steel ingots . . . . .	"	4,260	4,773	5,131	5,561	6,065
<b>Precious—</b>						
Refined gold(b) . . . . .	'000 f oz	1,006	911	871	774	726
Refined silver . . . . .	"	8,514	9,392	8,939	8,683	9,661
<b>FUELS</b>						
<b>Coal products—</b>						
Metallurgical coke . . . . .	'000 tons	2,759	2,915	3,118	3,179	3,365
Brown coal briquettes . . . . .	"	1,805	1,883	1,893	1,883	1,819
<b>Petroleum products—</b>						
Motor spirit . . . . .	mill. gal	1,263	1,358	1,482	1,524	1,763
Furnace fuel . . . . .	'000 tons	4,629	4,686	4,869	5,340	5,759
Automotive distillate . . . . .	"	1,654	1,616	1,603	1,829	2,167
Industrial diesel fuel . . . . .	"	981	917	862	859	901
<b>BUILDING MATERIALS</b>						
Clay bricks . . . . .	millions	1,059	1,238	1,353	1,360	1,358
Portland cement . . . . .	'000 tons	2,942	3,320	3,746	3,688	3,639
Plaster of paris . . . . .	"	241	260	277	266	262
Plaster sheets . . . . .	'000 sq yd	(c)15,932	(c)15,922	29,937	29,917	30,984
<b>CHEMICALS</b>						
Sulphuric acid . . . . .	'000 tons	1,256	1,447	1,610	1,752	1,979
Caustic soda . . . . .	tons	56,481	64,230	68,879	75,229	90,985
Superphosphate . . . . .	'000 tons	2,862	3,347	3,703	4,265	4,596

(a) Metallic content.

(b) Newly-won gold of Australian origin.

(c) Fibrous plaster sheets only.

## Overseas trade

### Exports and imports

Data of imports and exports of minerals and mineral products have been extracted from the official trade statistics compiled in the Commonwealth Bureau of Census and Statistics. Particulars of the quantities and values (\$ f.o.b. port of shipment) of the principal minerals and mineral products exported from and imported into Australia during the years 1964 to 1966 are shown in the following table.

**EXPORTS AND IMPORTS OF PRINCIPAL MINERALS AND MINERAL PRODUCTS  
AUSTRALIA, 1964 TO 1966**

Item		Quantity			Value (\$'000 f.o.b.)		
		1964	1965	1966	1964	1965	1966
EXPORTS(a)							
Coal . . . . .	tons	4,805,953	7,155,564	8,240,920	41,047	60,661	66,487
Copper—							
Ore and concentrate . . . . .	"	47,255	46,111	47,455	6,484	7,337	9,603
Ingots, pigs (refined) . . . . .	"	13,817	11,703	7,484	8,315	12,220	9,050
Rolled, drawn and extruded shapes . . . . .	"	5,077	11,721	11,907	4,265	11,444	12,896
Gold, refined . . . . .	fine oz	427,318	745,125	752,782	13,382	23,265	23,583
Iron and steel—							
Iron ore . . . . .	tons	12,471	149,824	2,011,979	76	1,239	16,863
Pig iron . . . . .	"	55,940	45,154	95,590	2,622	2,174	3,870
Ingots, blooms and slabs . . . . .	"	8,507	10,519	347,842	529	605	19,805
Tinplate . . . . .	"	65,435	71,363	87,945	9,028	9,282	10,651
Scrap . . . . .	"	392,408	308,648	378,673	10,114	9,773	8,510
Lead—							
Ore and concentrate . . . . .	"	112,194	108,256	109,134	17,614	20,829	19,386
Lead-silver bullion . . . . .	"	76,061	69,286	79,534	20,094	21,252	21,901
Pig . . . . .	"	156,305	156,545	159,504	35,267	43,502	37,786
Opals . . . . .					5,398	5,324	7,652
Petroleum oils—							
Gasolenes and solvents . . . . .	'000 gal	51,656	16,478	42,238	5,448	2,199	4,986
Kerosenes . . . . .	"	12,690	15,147	23,686	1,578	1,796	2,535
Automotive distillate . . . . .	"	74,183	41,458	97,599	7,442	3,836	13,642
Industrial and marine diesel fuels and heavy distillate, n.e.i. . . . .	"	233,953	165,571		13,064	7,760	
Residual oils . . . . .	"				117,694		
Lubricating oil . . . . .	"	14,342	15,697	17,654	4,444	4,776	5,557
Rutile concentrate . . . . .	tons	193,893	239,454	231,289	14,080	17,134	17,844
Zinc—							
Ore and concentrate . . . . .	"	224,117	212,946	226,561	15,684	14,328	15,442
Refinery type shapes . . . . .	"	80,184	87,051	120,759	21,226	24,205	31,069
Zircon concentrate . . . . .	"	198,664	216,661	210,428	5,124	6,816	8,978
IMPORTS							
Alumina . . . . .	tons	71,437	55,647	51,091	4,818	3,900	3,365
Aluminium, refined ingots . . . . .	"	565	357	461	372	312	353
Asbestos . . . . .	short tons	42,896	51,719	55,152	4,873	5,859	6,437
Gold, unrefined bullion(b) . . . . .	fine oz	143,144	137,143	151,462	4,466	4,252	4,104
Ferro-alloys . . . . .	tons	19,271	32,587	20,007	4,171	6,909	4,495
Petroleum oils—							
Crude . . . . .	'000 gal	3,253,862	3,399,992	3,653,396	147,356	155,851	160,139
Enriched crude and other refinery feedstock . . . . .	"	692,727	899,284	962,162	32,974	40,391	41,783
Gasolenes and solvents . . . . .	"	290,258	270,503	190,719	32,242	30,749	20,936
Kerosene . . . . .	"	59,312	79,820	47,143	6,268	8,503	4,973
Automotive distillate . . . . .	"	34,348	45,474	43,084	3,218	4,153	4,670
Industrial and marine diesel fuels and heavy distillate, n.e.i. . . . .	"	53,345	25,817		3,862	1,584	
Residual oils . . . . .	"				21,713		
Lubricating oil . . . . .	"	47,031	20,646	13,009	12,616	5,602	3,864
Phosphate rock . . . . .	'000 tons	2,355	2,527	3,286	16,236	17,505	27,479
Sulphur . . . . .	tons	376,639	387,869	434,045	6,508	7,496	11,930
Tin, refined . . . . .	"	1,283	1,582	203	3,798	5,259	661
Titanium oxide (pigments) . . . . .	"	2,875	2,167	1,349	1,231	870	525

(a) Australian produce.      (b) Gold content.

Considerable quantities of metallic ores, concentrates, slags, and residues are exported from Australia for refining overseas. The following table shows the quantities of selected items exported during 1966 and their principal metallic content as estimated by assay.

**PRINCIPAL METALLIC CONTENTS OF SELECTED ORES AND CONCENTRATES  
ETC., EXPORTED FROM AUSTRALIA, 1966**

<i>Ores and concentrates, etc.</i>	<i>Quantity exported</i>	<i>Metallic contents—estimated from assay</i>							
		<i>Anti- mony</i>	<i>Copper</i>	<i>Gold</i>	<i>Lead</i>	<i>Silver</i>	<i>Tin</i>	<i>Tungstic oxide</i>	<i>Zinc</i>
	tons	tons	tons	fine oz	tons	'000 fine oz	tons	tons	tons
Copper—									
Ore, concentrate and pre- cipitate . . . . .	47,822	..	10,657	23,421	..	79	..	..	..
Copper-lead dross and speiss . . . . .	3,487	..	834	..	2,073	125	..	..	..
Other slags and residues . .	368	..	154	..	4	..	4	..	1
Blister . . . . .	6,538	..	6,509	112,449	..	35	..	..	..
Matte . . . . .	6,298	8	2,159	53	2,976	235	..	..	..
Lead—									
Ore and concentrate(a) . .	109,134	120	1,265	23,774	75,722	2,390	..	..	6,990
Slags and residues . . . .	3,981	52	262	..	2,371	33	37	..	101
Lead-silver bullion . . . .	79,534	..	..	..	79,015	5,289	..	..	..
Tin concentrate . . . . .	2,606	..	5	..	1	..	1,285	..	..
Tungsten—									
Scheelite ore and concen- trate . . . . .	1,295	..	..	..	..	..	..	881	..
Wolfram ore and concen- trate . . . . .	520	..	..	..	..	..	..	380	..
Zinc—									
Ore and concentrate . . . .	226,560	..	..	..	2,493	111	..	..	116,278
Slags and residues . . . .	6,529	..	43	..	1	..	..	..	4,643
<b>Total metallic content . .</b>	<b>..</b>	<b>180</b>	<b>21,888</b>	<b>159,697</b>	<b>164,656</b>	<b>8,298</b>	<b>1,326</b>	<b>1,261</b>	<b>128,013</b>

(a) Includes lead-copper concentrate.

**Direction of trade**

The distribution of Australia's mineral exports according to principal destinations, and imports according to principal sources, for the years 1964 to 1966, are shown in the following table.

**VALUE OF OVERSEAS MINERAL TRADE, BY COUNTRY OR REGION  
AUSTRALIA(a), 1964 TO 1966**

<i>Country or region</i>	<i>Value (\$m f.o.b.)</i>			<i>Percentage</i>		
	<i>1964</i>	<i>1965</i>	<i>1966</i>	<i>1964</i>	<i>1965</i>	<i>1966</i>
<b>EXPORTS(b)</b>						
Japan . . . . .	72.6	92.4	124.2	32.1	32.5	37.5
Other Asian and Pacific . . .	25.8	30.1	41.3	11.4	10.6	12.5
United Kingdom . . . . .	68.4	68.2	65.3	30.2	24.0	19.7
European Economic Community .	27.8	43.8	38.7	12.3	15.4	11.7
United States . . . . .	27.0	42.5	46.0	11.9	14.9	13.9
Other . . . . .	5.0	7.6	15.7	2.1	2.6	4.7
<b>Total . . . . .</b>	<b>226.6</b>	<b>284.6</b>	<b>331.2</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>IMPORTS</b>						
Middle East . . . . .	126.8	132.4	138.4	50.6	44.0	50.1
Indonesia . . . . .	44.6	53.0	51.1	17.8	17.6	18.5
Other Asian . . . . .	14.8	24.0	16.9	5.9	8.0	6.1
Pacific . . . . .	15.6	14.3	19.9	6.2	4.8	7.2
United States . . . . .	17.2	23.6	16.0	6.9	7.9	5.8
Canada . . . . .	8.0	9.7	12.9	3.2	3.2	4.7
Europe (including United Kingdom and European Economic Com- munity) . . . . .	12.0	31.0	8.5	4.8	10.3	3.1
Other . . . . .	11.6	12.6	12.7	4.6	4.2	4.5
<b>Total . . . . .</b>	<b>250.6</b>	<b>300.6</b>	<b>276.4</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

(a) Excludes gold movements.

(b) Excludes alumina, details of which are not available for publication.

## REVIEW OF RECENT DEVELOPMENTS IN THE AUSTRALIAN MINERAL INDUSTRY

Prior to Year Book No. 52 it was customary to include a series of detailed reviews of the principal commodities produced by the Australian mineral industry and recent developments concerning these commodities. However, with the increasing diversification and development of the industry, it has become impractical to continue these reviews in the Year Book and the reader who wishes to obtain information of this kind is referred to *The Australian Mineral Industry—Annual Review* published by the Bureau of Mineral Resources, Geology and Geophysics. That publication contains comprehensive reviews of mineral commodities of importance to the Australian economy, as well as a general review of the industry's performance during each year. Major developments in the industry, particularly during the last year, are reviewed briefly in subsequent parts of this section.

### General review, 1967

Expansion of the Australian mineral industry was maintained during 1967, with the preliminary value of mineral production increasing by 12 per cent from \$626 million in 1966 to \$700 million in 1967. The major reasons for this increase in the value of mineral production were continued expansion of iron ore mining and the commencement of production of crude oil at Barrow Island and nickel concentrates at Kambalda, both in Western Australia. The total value of mineral exports continued to increase, in particular because of the increase of iron ore and coal shipments to Japan.

### Bauxite

The history of the aluminium industry and recent significant developments in the industry were reviewed in previous issues of the Year Book (No. 51, page 1168 and No. 52, page 1048). The year 1967 was a period of continued growth in the industry both in mining and processing as detailed below.

Bauxite production from deposits at Weipa, Queensland, has been increased to a rate of 3 million tons per annum following completion of a further stage in the development of the mine and associated township, and of ore treatment and loading facilities. It is expected that production will rise to nearly 5 million tons by the early 1970s. Approximately half the output from Weipa will be used by the Gladstone, Queensland, alumina refinery, a further 96 thousand tons will be shipped to Bell Bay, Tasmania, and the remaining production will be exported.

Bauxite deposits at Gove, Northern Territory, covering reserves of the order of 150 million tons of bauxite, are being developed by a consortium of seven Australian and one overseas company. The consortium plans to construct an alumina plant at Gove by 1971 with an initial capacity of 500,000 metric tons per annum.

### Alumina

An alumina refinery with a capacity of 600,000 tons per annum at Gladstone, Queensland, which was completed at a cost of approximately \$115 million, was commissioned in March 1967. Plans have already been announced to increase the capacity of the refinery to 900,000 tons per annum, with an eventual capacity of 1,800,000 tons per annum. Plans were also announced to increase the capacity of the alumina refinery at Kwinana, Western Australia, from 410,000 metric tons to 830,000 metric tons per annum by the end of 1969. Bauxite supplies for the Kwinana refinery are obtained from deposits 28 miles away at Jarrahdale, Western Australia, the reserves of which were recently re-assessed from 200 million tons to 500 million tons.

### Aluminium

Initial construction of an aluminium smelter with a capacity of 36,000 tons per annum at Kurri Kurri near Newcastle, New South Wales, was commenced in 1967 for completion in 1969. An aluminium powder and paste plant, capable of supplying the whole of Australia's needs, is to be established at Bell Bay, Tasmania. A letter of intent has been received by the Western Australian Government regarding the possible establishment of an aluminium smelter at Kwinana in possibly ten to twelve years.

### Copper

A \$130 million expansion programme at Mount Isa was completed in 1966 with the commissioning of a new shaft and concentration plant. During the development period when lower grade ore was being extracted, the Mount Isa output was supplemented by ore from the Young Australia mine, fifty miles south of Cloncurry, Queensland, where mining operations were terminated at the end of 1967.

A new copper-gold ore body, the Warrego Mine, is being developed near Tennant Creek, Northern Territory. The first stage of development, which will cost \$10 million, will have an installed mining capacity of 400,000 tons of ore per annum.

Since August 1966 the Australian Producers' price has been adjusted regularly to reflect movements in the London Metal Exchange and New York Merchants' prices, the price at the end of April 1968 being \$1,100 per ton after reaching \$1,350 per ton during February to April 1968.

### **Iron ore**

During 1967 iron ore output expanded by 60 per cent, with production doubling in Western Australia. Iron ore mined at Frances Creek, Northern Territory, was exported through Darwin, commencing June 1967.

Large scale production began during 1967 from deposits at Koolyanobbing, Western Australia. Ore is transported on a standard gauge railway 304 miles to the coast at Kwinana, where a 600,000 tons per annum blast furnace was commissioned in May 1968.

Pelletising plants at Dampier, Western Australia, Whyalla, South Australia, and Port Latta, Tasmania have a combined rated capacity of 5.75 million tons per annum. Shipment of pellets from these plants began in 1968.

In March 1968 plans for a 'metallised agglomerates' plant at Dampier were announced. The product would bypass the conventional blast furnace method of iron smelting and would be utilised directly in the making of steel.

In mid-1967 plans were announced for the development of deposits at Mount Newman, Western Australia, by a consortium of companies from Australia, the United States of America, Japan, and the United Kingdom. Contracts were signed to supply 100 million tons of ore to Japan over fifteen years at an approximate value of \$820 million. The project involves the construction of a 265-mile railway from Mount Newman to Port Hedland together with associated loading and port facilities.

Investigation and negotiations for export contracts continued with respect to deposits at Robe River and Nimingarra in Western Australia. Deposits were also being investigated in Western Australia at Mount Gibson, Northam, in the Robinson Ranges and near Wittenoom.

### **Lead and zinc**

Following an extensive expansion programme, output of lead bullion at Mount Isa increased sharply in 1967. Ultimately, this smelter is to produce 140,000 tons of lead bullion a year.

At Port Pirie, South Australia, a new zinc refinery commenced production in December 1967. This plant is refining zinc contained in the slags accumulated from lead refining; the rated annual capacity is 40,000 tons of refined metal.

### **Black coal**

There has been a significant revival in the Australian black coal industry in recent years as a result of increased exports and increased consumption of black coal in iron and steel production and electricity generation. These increases have more than balanced reduced consumption in some applications due to competition from fuel oil.

The expansion of the export trade has been of major significance. In 1955 exports were about 200,000 tons valued at about \$1.7 million; in 1967 exports were 9.3 million tons valued at \$76.2 million. These increased exports have been almost wholly to Japan for use in the iron and steel industry. As a result of this increased demand, new mines have been opened and others are under development in Queensland and New South Wales, and many established mines are being expanded. Exploration for coal has been stimulated and there are indications that a further rich deposit of coking coal has been located in Queensland.

### **Petroleum**

Developments in the last few years were reviewed in previous issues of the Year Book, and the following is a summary of developments in 1967 and 1968.

Petroleum exploration in Australia continued to expand in 1967 and 1968, and encouraging discoveries during this period have been a stimulus to further exploration. In 1967 the footage drilled for development and exploration was 1,079,756 feet, the second highest annual total. Of the 87 exploratory wells drilled in 1967, nine can be classed as discoveries, giving a success ratio of 1:9.7, which is high by international standards.



Australia now has three commercial oilfields, Moonie and Alton in Queensland (connected by pipeline to Brisbane, Queensland) and at Barrow Island, Western Australia, together capable of supplying about 8 per cent of the nation's requirements. The oilfield at Barrow Island was commissioned in April 1967, when the first shipment of oil was despatched to Kwinana, Western Australia, for refining. In addition, small amounts of oil totalling some 200 barrels per day are produced from individual wells in the Roma and Bennett areas in Queensland.

Commercial production of natural gas, currently restricted to a few wells in the Roma area in Queensland, where the gas is used as fuel for the local hospital and electrical power house, is planned for deposits at Gidgealpa and Moomba in South Australia and off-shore Victoria, in the Gippsland basin. Expansion of production from the Roma field is expected. A 10-inch pipeline from the Roma field to Brisbane, at a cost of \$11 million, is to be completed by the end of 1968. A 22-inch pipeline is planned from Gidgealpa and Moomba field 500 miles to Adelaide. Pipelines from the off-shore Barracouta and Marlin gas fields on the Gippsland shelf of Victoria will connect with a 30-inch pipeline to Dandenong, which was begun in December 1967. The Melbourne gas system is to receive gas through this line in early 1969. An absorption plant is under construction at Sale, Victoria, and off-shore platforms for drilling production wells have been built and production drilling is in progress.

Considerable attention has been given recently to off-shore exploration, particularly off the Victorian coast where several substantial gas and oil flows have been discovered. Several off-shore drilling rigs of various types have been transported from other countries, and a semi-submersible rig has been constructed at the shipbuilding works at Whyalla, South Australia.

#### Nickel

Significant discoveries of nickel have been made near Kambalda, Western Australia. Mining operations at Kambalda commenced in mid-1967. Shipments of ore are being made according to a contract to sell 40,000 tons of contained nickel over ten years to Japan and Canada for refining at a rate of 1,500 tons of contained nickel per year. An agreement with the Western Australian Government providing for the erection of a refinery at Kwinana by 1971, with a minimum annual production capacity of 15,000 tons of metal, was signed in January 1968. Exploration activities continued in the Kalgoorlie area and Blackstone Ranges in Western Australia and near Rockhampton and Greenvale in Queensland.

#### Phosphate

Major deposits of phosphate rock were discovered during 1966 near Duchess in north-west Queensland. The deposits are large by world standards, and feasibility studies are still in progress.

## CHAPTER 26

### MANUFACTURING INDUSTRY

Further detail on the subjects dealt with in this chapter is contained in the annual printed bulletins *Manufacturing Industry* and *Manufacturing Commodities*, formerly *Secondary Industries*, Parts I and II. Information is also published, as soon as the data can be prepared, in a series of thirty-five annual mimeographed bulletins, *Manufacturing Industries*, each relating to a particular industry or group of industries. Details of the industries covered are contained in Statistical and other official publications of Australia of the Miscellaneous chapter. Advance annual information is published in mimeographed form in *A Summary of Principal Statistics of Factories* and in *Principal Factory Products*. Current information on factory products is available in the *Quarterly Summary of Australian Statistics*, the *Monthly Review of Business Statistics*, the *Digest of Current Economics Statistics*, and the *Monthly Bulletin of Production Statistics*. A preliminary annual statement (*Factory Statistics*) and a monthly statement (*Production Statistics*) are also issued.

In addition to the above-mentioned publications, there is also a series of fifty-two *Monthly Production Summaries*, each relating to the production of a particular commodity or group of commodities (see reference above to Statistical publications).

The annual mimeographed bulletin *Indexes of Factory Production* deals comprehensively with this subject, which is treated only in summarised fashion on pages 1098–9.

#### Introduction

A complete statistical account of the growth of the manufacturing industry in Australia cannot be given, as the necessary statistics were not collected by the several States on a definite and uniform basis prior to 1906. A standard classification of manufacturing industries was formulated at a conference of Australian statisticians in 1902 and adopted by all States in 1906, and figures on this basis were prepared for 1907 and subsequent years.

An historical summary of the development of the manufacturing industry in Australia since 1901 is contained in earlier issues of the Year Book (see No. 51, pages 143–4).

#### Decentralisation of manufacturing industries

The decentralisation of secondary industries, and the steps taken by Commonwealth and State Governments towards its development, are referred to in previous issues of the Year Book (see No. 51, page 144).

#### Bounties on manufacture

Bounties are paid by the Commonwealth Government to encourage local manufacture of certain products. The statutory provisions usually fix a term of operation of the bounty, provide for payment at a rate varying according to changes in the corresponding customs duty, specify the annual maximum amount of bounty payable, and require the bounty to be withheld or reduced if a manufacturer's net profit in production of the commodity exceeds a certain rate, or if rates of wages and conditions of employment in production of the commodity do not conform to prescribed standards. (See Chapter 19, Public Finance for products on which bounties are paid.)

#### Standardisation

The *Commonwealth Scientific and Industrial Research Organization* has functions concerned with the improvement of efficiency in industrial operations. For further particulars see the chapter Education, Cultural Activities, and Research of this Year Book.

The *Standards Association of Australia* is the organisation responsible for industrial standardisation on a national basis. It issues Australian standards for materials and products and standard codes of practice.

Formed as the Australian Commonwealth Engineering Standards Association in 1922, it was reconstituted as the Standards Association of Australia in 1929, and was incorporated by Royal Charter in 1950. It is an independent body having the full recognition and support of the Commonwealth and State Governments and of industry. Half its funds are provided by Commonwealth

Government grant, the remainder coming primarily from membership subscriptions and from sale of publications. Organisations, companies, and individuals are eligible for subscribing membership.

The Association is controlled by a Council comprising representatives from Commonwealth and State Governments and their departments, from associations of manufacturing and commercial interests, and from professional institutions. Standards are prepared by committees composed of expert representatives from the interests associated with the subjects under consideration. This assistance is on a voluntary basis.

Preparation of standards is undertaken in response to requests from industrial associations or firms or from government departments. Standards may relate to one or more of several aspects of industrial practice such as terminology, test methods, dimensions, specifications of performance and quality of products, and safety or design codes. In general, standards derive authority from voluntary adoption based on their intrinsic merit, but in special cases where safety of life or property is involved, they may have compulsory application through statutory reference. The Association is the owner of a registered certification trade mark covering conformity of products to standards.

The Association has international affiliations and is a member, representing Australia, of the International Organization for Standardization (ISO) and of the International Electrotechnical Commission (IEC). Close links are maintained with overseas standards organisations, and the Association acts as Australian agent for the procurement of ISO and IEC publications and the standards of other countries.

The Association has two specialised libraries, one in Sydney and one in Melbourne, containing the national standards of all countries with standards organisations. These libraries provide necessary material for committee work and a free information service to those concerned with standards.

The headquarters office of the Association is in Sydney, and there is a major branch office in Melbourne. Branch offices are located also in other capital cities and at Newcastle, New South Wales.

*The National Association of Testing Authorities* organises testing facilities throughout Australia to serve private and governmental needs.

Membership is open to authorities whose testing laboratories conform to the standards of staffing and operation defined by the Association. Testing authorities may register their laboratories voluntarily. The Association assesses the competence of the laboratories and ensures that their standards of competence are maintained. Certificates of test issued by registered laboratories may be endorsed in the name of the Association. NATA endorsed test certificates are generally accepted by governmental, industrial and commercial interests.

Laboratories are registered for performance of specific tests in the fields of metrology, mechanical testing, electrical testing, optics and photometry, non-destructive testing, heat and temperature measurement, chemical testing, biological testing, and acoustic and vibration measurement. At the end of 1967 there were 630 laboratories registered with the Association, which had a further seventy applications for registration before it.

*The Industrial Design Council of Australia* was established in June 1958 for the purpose of encouraging better design in Australian-made goods and fostering an appreciation of good design throughout the community. It has a membership fully representative of industry, commerce and government, together with designers and educationists, and is financed by donations from industry and by Commonwealth grants. The Council is responsible for the Australian Design Index which provides a detailed, illustrated record of well-designed Australian products. A Record of Designers has been set up to register information about industrial designers and their work. The Council is also concerned, in co-operation with education authorities, with raising the standard of training in industrial design. For further particulars see Year Book No. 51, page 145.

#### **Definitions in factory statistics**

The statistics relating to factories have been compiled from tabulations made by the Deputy Commonwealth Statisticians in the several States from returns supplied to them annually by manufacturers in accordance with the statistical Acts of the States and the Commonwealth. A return must be supplied in respect of every *factory*, which is defined for this purpose as an establishment where four or more persons are employed or where power (other than manual) is used in any manufacturing process. This definition includes factories in educational and charitable institutions, reformatories, and other public institutions (except penitentiaries), but does not cover smallgoods makers, laundries, photography studios, florists and seedsmen, or most abattoirs. Details relating to small establishments not classified for statistical purposes as factories are not included in the figures contained in this chapter.

If a manufacturing business is conducted in conjunction with any other activity, particulars relating to the manufacturing section only are included in the statistics. Where two or more industries are conducted in the same establishment, a separate return is obtained for each industry wherever practicable.

Manufacturers are requested to state in their returns particulars of the number, age, etc. of their employees, salaries and wages paid, the value of premises and equipment, the horse-power of machinery, the value of raw materials (including containers), tools replaced, etc., the values and in most cases the quantities of fuel used, and quantities and values of principal materials used and articles produced. The returns obtained from manufacturers are not intended to show a complete record of the income and expenditure of factories nor to show the profits or losses of factories collectively or individually.

*Persons employed* in the manufacturing activities of the factory only are counted as factory employees. The figures relating to employment therefore include working proprietors as well as out-workers, but *exclude* all those engaged in selling and distribution such as salesmen, travellers, collectors, carters engaged solely on outward delivery of manufactured goods, and retailing storemen.

The *average number of persons* employed is quoted on two different bases, the average during the period of operation and the average over the whole year. Of these, the former is simply the aggregate of the average number of persons employed in each factory during its period of operation (whether the whole or only part of the year). This average is used only in respect of details relating to classification according to the number of persons employed. The latter, which is used in all other instances, is calculated by reducing the average number working in the factories (irrespective of period of operation) to the equivalent number working for a full year.

*Working proprietors* are included in all employment figures other than those relating to monthly employment and age dissections, but salaries and wages paid in all cases exclude drawings by working proprietors.

*Value of materials used* includes also the value of stores used, containers, tools replaced, and materials used in repairs to plant.

*Value of fuel, etc., used* includes also the cost of power and light used, lubricants and water.

The *value of factory output* is the value of the goods manufactured or their value after passing through the particular process of manufacture concerned, and includes the amount received for repair work, work done on commission and receipts for other factory work. The basis of valuation of the output is the selling value of the goods at the factory, exclusive of all delivery costs and charges and excise duties, but inclusive of bounty and subsidy payments to the manufacturer of the finished article. In the special case of government factories and workshops, the value of output is, in most cases, estimated by adding ten per cent to the value of materials and fuel used and other factory costs, including salaries and wages paid.

The *value of production* is the value added to materials by the process of manufacture. It is calculated by deducting from the value of factory output the value (at the factory) of the materials used, containers and packing, power, fuel and light used, tools replaced, and materials used in repairs to plant (but not depreciation charges). In the process of manufacture many goods are treated in several industries, the output of one becoming the material of another, so that such commodities are counted more than once in the aggregate value of output and of raw materials. Examples are raw sugar passing from the mills to the refinery, metals from the smelters which become materials in establishments concerned in the production of metal goods, timber from the sawmills used in furniture factories and in joinery, and synthetic resins from chemical works used to make plastic products. On the other hand, the aggregate value of production is assessed without duplication, the value added by each industry being taken into account once only. For this reason, the value of production, and not the value of output, is used as a measure of activity in the manufacturing industries as a whole.

The *rated horse-power of engines used* for factories other than central electric stations relates to the rated horse-power of engines ordinarily in use.

Statistics relating to factory activity in the Australian Capital Territory and Northern Territory are included in the figures contained in this chapter as from 1 July 1964, unless otherwise indicated.

A standard classification of manufacturing industries is used in compiling statistical data relating to factories in Australia. It is designed in accordance with decisions of the 1945 Conference of Statisticians, and represents a revision and extension of a classification which was introduced in 1930-31, replacing the revised versions of the original classification formulated in 1902.

Owing to limitations of space, details published in general tables in this chapter are confined either to the sixteen classes of industry or to total factory activity. Some particulars of certain of the sub-classes shown below are published in the latter portion of this chapter, and full details for all sub-classes may be found in the bulletin *Manufacturing Industry* (previously entitled *Secondary Industries, Part I—Factory and Building Operations*).

The classes and sub-classes in the current classification of factories are as follows.

### CLASSIFICATION OF FACTORIES

#### CLASS 1. TREATMENT OF NON-METALLIFEROUS MINE AND QUARRY PRODUCTS

1. Coke works
2. Briquetting and pulverised coal
3. Carbide
4. Lime, plaster of paris, asphalt
5. Fibrous plaster and products
6. Marble, slate, etc.
7. Cement, portland
8. Asbestos cement sheets and mouldings
9. Other cement goods
10. Other

#### CLASS 2. BRICKS, POTTERY, GLASS, ETC.

1. Bricks and tiles
2. Earthenware, china, porcelain, and terracotta
3. Glass (other than bottles)
4. Glass bottles
5. Other

#### CLASS 3. CHEMICALS, DYES, EXPLOSIVES, PAINTS, OILS, GREASE

1. Industrial and heavy chemicals and acids
2. Pharmaceutical and toilet preparations
3. Explosives (including fireworks)
4. White lead, paints and varnish
5. Oils, vegetable
6. Oils, mineral
7. Oils, animal
8. Boiling-down, tallow refining
9. Soap and candles
10. Chemical fertilisers
11. Inks, polishes, etc.
12. Matches
13. Other

#### CLASS 4. INDUSTRIAL METALS, MACHINES, CON- VEYANCES

1. Smelting, converting, refining, rolling of iron and steel
2. Foundries (ferrous)
3. Plant, equipment and machinery, including machine tools
4. Other engineering
5. Extracting and refining of other metals; alloys
6. Electrical machinery, cables and apparatus
- 7-16. Construction and repair of vehicles (10 groups)
- 17, 18. Ship and boat building and repairing, marine engineering (government and other)
19. Cutlery and small hand tools
20. Agricultural machines and implements
- Non-ferrous metals—
21. Rolling and extrusion
22. Founding, casting, etc.
24. Sheet metal working, pressing and stamping
25. Pipes, tubes and fittings—Ferrous
26. Wire and wire working (including nails)
27. Stoves, ovens and ranges
28. Gas fittings and meters
29. Lead mills
30. Sewing machines
31. Arms, ammunition (excluding explosives)
32. Wireless and amplifying apparatus
33. Other metal works

#### CLASS 5. PRECIOUS METALS, JEWELLERY, PLATE

1. Jewellery
2. Watches and clocks (including repairs)
3. Electroplating (gold, silver, chromium, etc.)

#### CLASS 6. TEXTILES AND TEXTILE GOODS (NOT DRESS)

1. Cotton ginning
2. Cotton spinning and weaving
3. Wool—carding, spinning, weaving
4. Hosiery and other knitted goods
5. Silk, natural
6. Rayon, acrylics and other synthetic fibres
7. Flax mills
8. Rope and cordage
9. Canvas goods, tents, tarpaulins, etc.
10. Bags and sacks
11. Textile dyeing, printing and finishing
12. Other

#### CLASS 7. SKINS AND LEATHER (NOT CLOTHING OR FOOTWEAR)

1. Furriers and fur-dressing
2. Woolscouring and fellmongery
3. Tanning, currying and leather-dressing
4. Saddlery, harness and whips
5. Machine belting (leather or other)
6. Bags, trunks and other goods of leather and leather substitutes

#### CLASS 8. CLOTHING (EXCEPT KNITTED)

1. Tailoring and ready-made clothing
2. Waterproof and oilskin clothing
3. Dressmaking, hemstitching
4. Millinery
5. Shirts, collars, underclothing
6. Foundation garments
7. Handkerchiefs, ties and scarves
8. Hats and caps
9. Gloves
10. Boots and shoes (not rubber)
11. Boot and shoe repairing
12. Boot and shoe accessories
13. Umbrellas and walking sticks
14. Dyeworks and cleaning (including renovating and repairing)
15. Other

#### CLASS 9. FOOD, DRINK AND TOBACCO

1. Flour-milling
2. Cereal foods and starch
3. Animal and bird foods
4. Chaffcutting and corncrushing
5. Bakeries (including cakes and pastry)
6. Biscuits
7. Sugar mills
8. Sugar refining
9. Confectionery (including chocolate and icing sugar)
10. Jam, fruit and vegetable canning
11. Pickles, sauces, vinegar
12. Bacon curing
13. Butter factories
14. Cheese factories
15. Condensed and dried milk factories
16. Margarine

CLASS 9. FOOD, DRINK AND TOBACCO—*continued*

17. Meat and fish preserving
18. Condiments, coffee, spices
19. Ice and refrigerating
20. Salt
21. Aerated waters, cordials, etc.
22. Breweries
23. Distilleries
24. Winemaking
25. Cider and perry
26. Malting
27. Bottling
28. Tobacco, cigars, cigarettes, snuff
29. Dehydrated fruit and vegetables
30. Ice cream
31. Sausage casings
32. Arrowroot
33. Other

## CLASS 10. SAWMILLS, JOINERY, BOXES, ETC., WOOD TURNING AND CARVING

1. Sawmills
2. Plywood mills (including veneers)
3. Bark mills
4. Joinery
5. Cooperage
6. Boxes and cases
7. Woodturning, woodcarving, etc.
8. Basketware and wickerware (including seagrass and bamboo furniture)
9. Perambulators (including pushers and strollers)
10. Wall and ceiling boards (not plaster or cement)
11. Other

## CLASS 11. FURNITURE OF WOOD, BEDDING, ETC.

1. Cabinet and furniture making (including billiard tables and upholstery)
2. Bedding and mattresses (not wire)
3. Furnishing drapery
4. Picture frames
5. Blinds

## CLASS 12. PAPER, STATIONERY, PRINTING, BOOK-BINDING, ETC.

1. Newspapers and periodicals
- Printing—
2. Government
3. General, including bookbinding
4. Manufactured stationery
5. Stereotyping, electrotyping
6. Process and photo engraving
7. Cardboard boxes, cartons and containers
8. Paper bags
9. Paper making
10. Pencils, penholders, chalks, crayons
11. Other

## CLASS 13. RUBBER

1. Rubber goods (including tyres made)
2. Tyre retreading and repairing

## CLASS 14. MUSICAL INSTRUMENTS

1. Gramophones and gramophone records
2. Pianos, piano-players, organs
3. Other

## CLASS 15. MISCELLANEOUS PRODUCTS

1. Linoleum, leather-cloth, oil-cloth, etc.
2. Bone, horn, ivory, and shell
3. Plastic moulding and products
4. Brooms and brushes
5. Optical instruments and appliances
6. Surgical and other scientific instruments and appliances
7. Photographic material (including developing and printing)
8. Toys, games and sports requisites
9. Artificial flowers
10. Other

## CLASS 16. HEAT, LIGHT, AND POWER

- 1-3. Electric light and power
- 4-6. Gas works

## Factory development since 1901, Australia

## FACTORIES: AUSTRALIA(a), 1901 TO 1966-67

Year	Factories	Employment (b)	Salaries and wages paid (c)	Value of—		Production (d)	Land and buildings	Plant and machinery
				Materials and fuel used	Output			
	No.	'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
1901	11,143	198	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1911	14,455	312	55,056	163,526	266,044	102,518	65,402	63,032
1920-21	17,113	367	125,864	427,118	647,986	220,868	121,662	137,310
1930-31	21,751	339	124,910	344,978	581,598	236,620	224,422	248,996
1940-41	27,300	650	275,838	773,762	1,289,590	515,828	288,188	322,712
1950-51	43,147	969	983,436	2,613,926	4,301,670	1,687,744	605,570	673,230
1960-61	57,782	1,145	2,289,230	6,115,930	10,465,765	4,349,835	2,389,140	2,785,565
1962-63	59,147	1,168	2,446,694	6,679,436	11,474,678	4,795,241	3,006,820	3,286,533
1963-64	59,375	1,210	2,651,620	7,372,682	12,642,686	5,270,003	3,204,685	3,480,673
1964-65	61,042	1,269	2,993,709	8,140,600	14,037,355	5,896,754	3,505,859	3,766,253
1965-66	61,686	1,294	3,162,769	8,437,958	14,689,819	6,251,861	3,776,590	4,154,652
1966-67	62,500	1,309	3,407,683	9,025,108	15,912,413	6,887,305	4,064,193	4,708,843

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory. (b) 1901 and 1911—average employment during period of operation. Later years relate to average employment over whole year. Working proprietors are included in all years. (c) Excludes amounts drawn by working proprietors. (d) Value added in process of manufacture (i.e. value of output less value of materials and fuel, etc. used).

## Number of factories

## Number in each State and Territory

## FACTORIES: NUMBER, STATES AND TERRITORIES, 1962-63 TO 1966-67

Year	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust. (a)
1962-63 . . .	23,729	17,501	5,895	5,766	4,492	1,764	n.a.	n.a.	59,147
1963-64 . . .	23,642	17,597	5,955	5,826	4,609	1,746	n.a.	n.a.	59,375
1964-65 . . .	24,368	17,925	5,962	5,887	4,734	1,805	174	187	61,042
1965-66 . . .	24,531	17,980	6,010	6,065	4,906	1,792	185	217	61,686
1966-67 . . .	24,849	18,053	6,013	6,222	5,167	1,771	187	238	62,500

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

## Number by class of industry

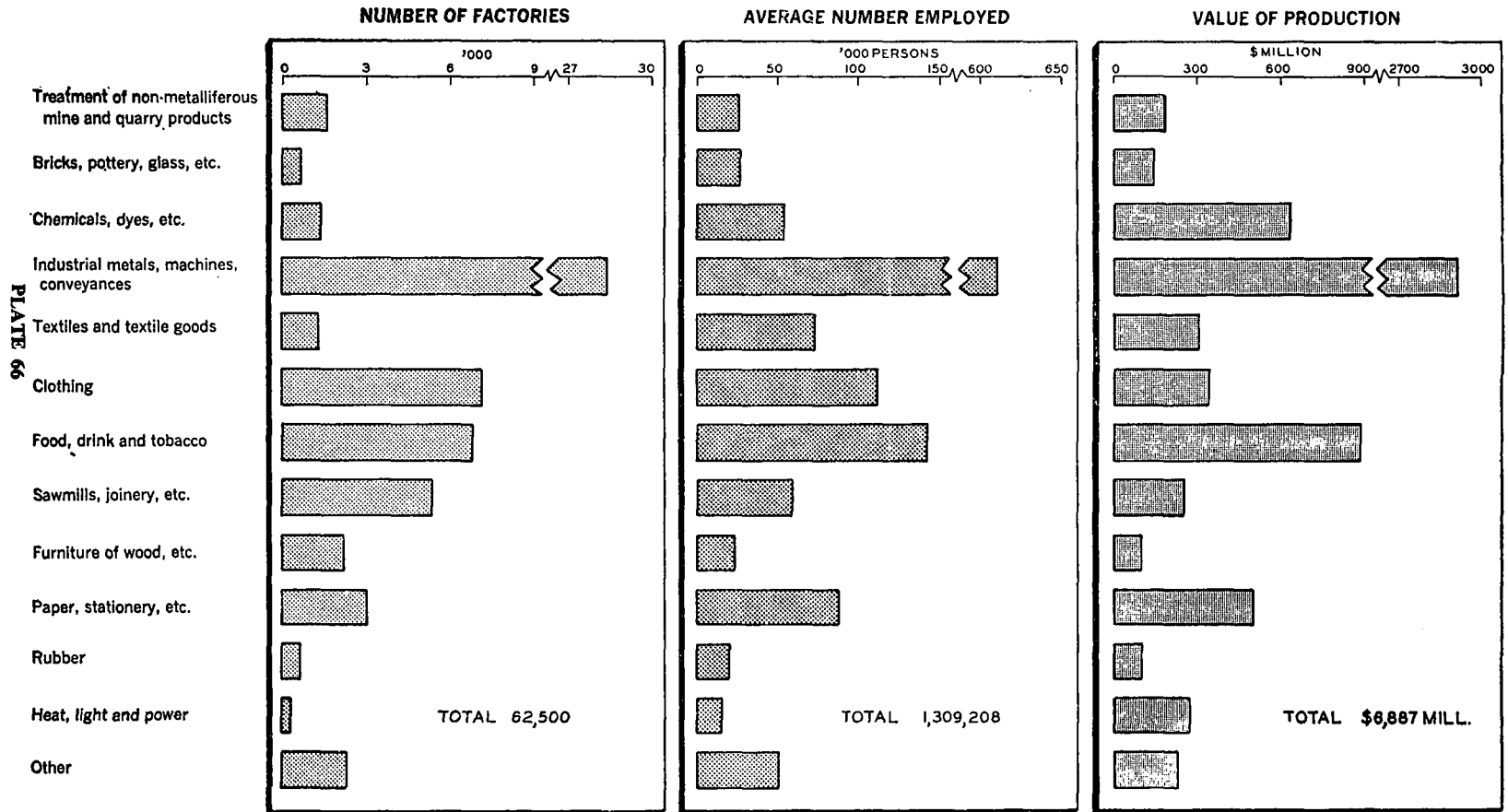
The next tables show the number of factories in Australia classified to the industrial classes agreed upon by the Conference of Statisticians in 1930.

## FACTORIES: NUMBER, BY CLASS OF INDUSTRY, AUSTRALIA(a), 1962-63 TO 1966-67

Class of industry	1962-63	1963-64	1964-65	1965-66	1966-67
1. Treatment of non-metalliferous mine and quarry products . . . . .	1,494	1,517	1,557	1,611	1,615
2. Bricks, pottery, glass, etc. . . . .	692	692	689	678	676
3. Chemicals, dyes, explosives, paints, oils, grease . . . . .	1,288	1,303	1,325	1,354	1,379
4. Industrial metals, machines, conveyances . . . . .	24,914	25,415	26,665	27,549	28,424
5. Precious metals, jewellery, plate . . . . .	918	927	980	970	975
6. Textiles and textile goods (not dress) . . . . .	1,368	1,358	1,373	1,360	1,329
7. Skins and leather (not clothing or footwear) . . . . .	656	645	639	631	616
8. Clothing (except knitted) . . . . .	7,614	7,447	7,450	7,271	7,141
9. Food, drink and tobacco . . . . .	7,161	7,034	7,060	6,938	6,834
10. Sawmills, joinery, boxes, etc., wood turning and carving . . . . .	5,521	5,422	5,454	5,402	5,414
11. Furniture of wood, bedding, etc. . . . .	2,154	2,181	2,210	2,200	2,260
12. Paper, stationery, printing, bookbinding, etc. . . . .	2,774	2,828	2,937	2,971	3,052
13. Rubber . . . . .	659	674	705	711	685
14. Musical instruments . . . . .	86	82	76	73	69
15. Miscellaneous products . . . . .	1,486	1,494	1,575	1,627	1,701
<i>Total, classes 1 to 15</i> . . . . .	<i>58,785</i>	<i>59,019</i>	<i>60,695</i>	<i>61,346</i>	<i>62,170</i>
16. Heat, light and power . . . . .	362	356	347	340	330
<b>Total, all classes</b> . . . . .	<b>59,147</b>	<b>59,375</b>	<b>61,042</b>	<b>61,686</b>	<b>62,500</b>

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

## AUSTRALIA, 1966-67





**FACTORIES: NUMBER, BY CLASS OF INDUSTRY, STATES AND TERRITORIES, 1966-67**

<i>Class of industry</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
1. Treatment of non-metalliferous mine and quarry products . . .	533	485	145	208	157	57	16	14	1,615
2. Bricks, pottery, glass, etc. . .	298	178	52	71	47	23	1	6	676
3. Chemicals, dyes, explosives, paints, oils, grease . . .	643	402	100	110	89	29	5	1	1,379
4. Industrial metals, machines, conveyances . . .	11,438	7,582	2,655	3,190	2,653	679	103	124	28,424
5. Precious metals, jewellery, plate . . .	389	253	40	177	91	19	..	6	975
6. Textiles and textile goods (not dress) . . .	434	741	31	65	35	23	..	..	1,329
7. Skins and leather (not clothing or footwear) . . .	284	222	42	40	23	5	..	..	616
8. Clothing (except knitted) . . .	3,261	2,384	539	519	333	81	8	16	7,141
9. Food, drink and tobacco . . .	2,378	1,864	904	739	633	275	22	19	6,834
10. Sawmills, joinery, boxes, etc., wood turning and carving . . .	1,932	1,394	713	452	469	411	15	28	5,414
11. Furniture of wood, bedding, etc. . .	843	641	290	216	196	65	2	7	2,260
12. Paper, stationery, printing, book-binding, etc. . .	1,284	1,106	233	195	170	48	4	12	3,052
13. Rubber . . .	248	176	118	56	56	20	6	5	685
14. Musical instruments . . .	31	16	6	10	6	..	..	..	69
15. Miscellaneous products . . .	769	562	88	140	123	19	..	..	1,701
<i>Total, classes 1 to 15</i> . . .	<i>24,765</i>	<i>18,006</i>	<i>5,956</i>	<i>6,188</i>	<i>5,081</i>	<i>1,754</i>	<i>182</i>	<i>238</i>	<i>62,170</i>
16. Heat, light and power . . .	84	47	57	34	86	17	5	..	330
<i>Total, all classes</i> . . .	<i>24,849</i>	<i>18,053</i>	<i>6,013</i>	<i>6,222</i>	<i>5,167</i>	<i>1,771</i>	<i>187</i>	<i>238</i>	<i>62,500</i>

**Classification of factories by number of persons employed**

The classification of factories by size in the following tables on pages 1080-1 is based on the average weekly number of *persons employed during the period of operation* (including working proprietors).

**FACTORIES: NUMBER OF FACTORIES AND PERSONS EMPLOYED, BY SIZE OF FACTORY STATES AND TERRITORIES, 1966-67**

<i>Persons employed</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
<b>NUMBER OF FACTORIES</b>									
Under 4 . . .	10,363	5,920	2,036	3,013	2,503	730	69	70	24,704
4 . . .	2,010	1,523	589	477	432	149	21	28	5,229
5 to 10 . . .	5,568	4,371	1,571	1,215	1,073	427	73	64	14,362
11 to 20 . . .	3,120	2,604	810	687	525	218	9	45	8,018
21 to 50 . . .	2,153	2,011	578	476	411	150	13	22	5,814
51 to 100 . . .	830	808	219	189	134	48	2	3	2,233
101 to 200 . . .	425	456	113	94	53	26	..	3	1,170
201 to 300 . . .	146	145	53	20	22	10	..	2	398
301 to 400 . . .	67	74	10	14	6	2	..	..	173
401 to 500 . . .	47	44	12	12	3	3	..	..	121
501 to 750 . . .	51	54	12	9	2	1	..	1	130
751 to 1,000 . . .	25	17	7	4	1	3	..	..	57
Over 1,000 . . .	44	26	3	12	2	4	..	..	91
<i>Total</i> . . .	<i>24,849</i>	<i>18,053</i>	<i>6,013</i>	<i>6,222</i>	<i>5,167</i>	<i>1,771</i>	<i>187</i>	<i>238</i>	<i>62,500</i>

**NUMBER EMPLOYED DURING PERIOD OF OPERATION**

Under 4 . . .	19,022	11,705	4,169	5,377	4,643	1,398	142	149	46,605
4 . . .	8,040	6,092	2,356	1,908	1,728	596	84	112	20,916
5 to 10 . . .	38,635	30,431	10,942	8,369	7,398	3,003	511	448	99,737
11 to 20 . . .	45,443	38,076	11,896	10,060	7,659	3,198	114	676	117,122
21 to 50 . . .	68,102	63,176	18,252	15,138	13,002	4,734	437	641	183,482
51 to 100 . . .	57,501	56,970	15,296	13,530	9,325	3,430	158	197	156,407
101 to 200 . . .	59,777	63,647	16,098	13,687	6,719	3,670	..	412	164,010
201 to 300 . . .	35,409	35,300	12,944	4,930	5,253	2,212	..	443	96,491
301 to 400 . . .	23,598	25,733	3,364	4,770	2,182	720	..	..	60,367
401 to 500 . . .	20,967	19,648	5,244	5,374	1,347	1,373	..	..	53,953
501 to 750 . . .	31,123	33,119	7,137	5,646	1,065	553	..	664	79,307
751 to 1,000 . . .	21,468	14,317	6,037	3,450	815	2,610	..	..	48,697
Over 1,000 . . .	98,081	49,741	5,151	26,580	3,779	7,634	..	..	190,966
<i>Total</i> . . .	<i>527,166</i>	<i>447,955</i>	<i>118,886</i>	<i>118,819</i>	<i>64,915</i>	<i>35,131</i>	<i>1,446</i>	<i>3,742</i>	<i>1,318,060</i>
<i>Average per factory</i> . . .	<i>21.21</i>	<i>24.81</i>	<i>19.77</i>	<i>19.10</i>	<i>12.56</i>	<i>19.84</i>	<i>7.73</i>	<i>15.12</i>	<i>21.09</i>

**FACTORIES: NUMBER OF FACTORIES AND PERSONS EMPLOYED, BY SIZE OF FACTORY  
AUSTRALIA(a), 1962-63 TO 1966-67**

Year	<i>Factories employing on the average—</i>							
	<i>20 and under</i>		<i>21 to 100</i>		<i>101 and upwards</i>		<i>Total</i>	
	<i>Factories</i>	<i>Persons employed</i>	<i>Factories</i>	<i>Persons employed</i>	<i>Factories</i>	<i>Persons employed</i>	<i>Factories</i>	<i>Persons employed</i>
1962-63—								
Number . . . . .	50,056	265,388	7,218	304,764	1,873	604,981	59,147	1,175,133
Average per factory . . . . .	..	5.30	..	42.22	..	323.00	..	19.87
1963-64—								
Number . . . . .	49,952	266,153	7,477	315,655	1,946	635,712	59,375	1,217,520
Average per factory . . . . .	..	5.33	..	42.22	..	326.68	..	20.51
1964-65—								
Number . . . . .	51,202	273,427	7,784	327,643	2,056	676,649	61,042	1,277,719
Average per factory . . . . .	..	5.34	..	42.09	..	329.11	..	20.93
1965-66—								
Number . . . . .	51,603	279,440	7,978	337,171	2,105	685,812	61,686	1,302,423
Average per factory . . . . .	..	5.42	..	42.26	..	325.80	..	21.11
1966-67—								
Number . . . . .	52,313	284,380	8,047	339,889	2,140	693,791	62,500	1,318,060
Average per factory . . . . .	..	5.44	..	42.24	..	324.20	..	21.09

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

**Classes of industry**

**FACTORIES: NUMBER OF FACTORIES AND PERSONS EMPLOYED, BY SIZE OF FACTORY  
AND CLASS OF INDUSTRY, AUSTRALIA, 1966-67**

Class of industry	<i>Factories employing on the average—</i>							
	<i>20 and under</i>		<i>21 to 100</i>		<i>101 and upwards</i>		<i>Total</i>	
	<i>Factories</i>	<i>Persons employed</i>	<i>Factories</i>	<i>Persons employed</i>	<i>Factories</i>	<i>Persons employed</i>	<i>Factories</i>	<i>Persons employed</i>
1. Treatment of non-metal-liferous mine and quarry products . . . . .	1,403	7,389	166	6,862	46	12,000	1,615	26,251
2. Bricks, pottery, glass, etc. . . . .	418	3,310	204	9,323	54	14,427	676	27,060
3. Chemicals, dyes, explosives, paints, oils, grease . . . . .	960	6,210	287	13,361	132	35,217	1,379	54,788
4. Industrial metals, machines, conveyances . . . . .	24,579	125,704	2,961	123,872	884	365,177	28,424	614,753
5. Precious metals, jewellery, plate . . . . .	922	3,755	50	1,748	3	527	975	6,030
6. Textiles and textile goods (not dress) . . . . .	787	5,901	365	16,632	177	50,893	1,329	73,426
7. Skins and leather (not clothing or footwear) . . . . .	481	3,058	117	5,065	18	3,317	616	11,440
8. Clothing (except knitted) . . . . .	5,864	30,401	1,092	45,512	185	36,950	7,141	112,863
9. Food, drink and tobacco . . . . .	5,650	30,481	905	40,118	279	74,618	6,834	145,217
10. Sawmills, joinery, boxes, etc., wood turning and carving . . . . .	4,748	28,048	607	23,195	59	9,751	5,414	60,994
11. Furniture of wood, bedding, etc. . . . .	1,960	10,138	278	10,764	22	3,665	2,260	24,567
12. Paper, stationery, printing, bookbinding, etc. . . . .	2,255	16,496	646	27,267	151	45,874	3,052	89,637
13. Rubber . . . . .	594	3,038	56	2,314	35	15,005	685	20,357
14. Musical instruments . . . . .	58	262	10	448	1	115	69	825
15. Miscellaneous products . . . . .	1,395	8,855	253	11,097	53	13,705	1,701	33,657
<i>Total, classes 1 to 15 . . . . .</i>	<i>52,074</i>	<i>283,046</i>	<i>7,997</i>	<i>337,578</i>	<i>2,099</i>	<i>681,241</i>	<i>62,170</i>	<i>1,301,865</i>
16. Heat, light and power . . . . .	239	1,334	50	2,311	41	12,550	330	16,195
<b>Total, all classes . . . . .</b>	<b>52,313</b>	<b>284,380</b>	<b>8,047</b>	<b>339,889</b>	<b>2,140</b>	<b>693,791</b>	<b>62,500</b>	<b>1,318,060</b>

**Employment in factories**

**Number employed**

All persons employed in the manufacturing activities of a factory are counted as factory employees. The figures relating to employment, therefore, exclude all those engaged in selling and distribution, such as salesmen, travellers, collectors, carters engaged solely on delivery of manufactured goods, and retailing storemen. The figures, however, do include proprietors who work in their own business, as well as 'out-workers' (see page 1084). From 1960-61 the occupational groupings collected have been—(i) working proprietors; (ii) managerial and clerical staff including salaried managers and

working directors; (iii) chemists, draughtsmen and other laboratory and research staff; and (iv) foremen and overseers, workers in factory and others, in which were amalgamated the three former groups—(iv) foremen and overseers; (v) skilled and unskilled workers; (vi) carters (excluding delivery only), messengers, and persons working regularly at home.

Statistics of factory employment represent the equivalent average number employed over a full year of fifty-two weeks except for the classification of factories according to size (*see* pages 1080–1), which is based on the average number employed during the period of operation.

Particulars of the numbers employed in Australia, the increase in employment, and the rate per cent of such increase are given in the table below.

#### FACTORIES: EMPLOYMENT, AUSTRALIA(a), 1962-63 TO 1966-67

Year	Males			Females			Persons		
	Number employed	Increase on preceding year		Number employed	Increase on preceding year		Number employed	Increase on preceding year	
		Number	Per cent		Number	Per cent		Number	Per cent
1962-63	888,721	30,750	3.58	278,832	15,533	5.90	1,167,553	46,283	4.13
1963-64	918,130	29,409	3.31	291,790	12,958	4.65	1,209,920	42,367	3.63
1964-65	957,261	39,131	4.26	311,674	19,884	6.81	1,268,935	59,015	4.88
1965-66	973,411	16,150	1.69	320,412	8,738	2.80	1,293,823	24,888	1.96
1966-67	982,907	9,496	0.98	326,301	5,889	1.84	1,309,208	15,385	1.19

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

The following table shows the average number of persons employed in manufacturing industries; the percentage for each State and Territory of the total number employed in factories in Australia; and the number so employed per thousand of mean population in each State and Australia.

#### FACTORIES: EMPLOYMENT, STATES AND TERRITORIES, 1962-63 TO 1966-67

Year	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.(a)
Average number employed during full year (fifty-two weeks)—									
1962-63	475,249	397,851	104,998	105,265	53,435	30,755	n.a.	n.a.	1,167,553
1963-64	487,753	413,120	110,696	110,813	55,705	31,833	n.a.	n.a.	1,209,920
1964-65	508,979	432,413	116,246	116,183	58,097	32,580	1,210	3,227	1,268,935
1965-66	519,364	439,149	117,581	118,343	60,282	34,315	1,294	3,495	1,293,823
1966-67	524,054	445,307	117,937	118,220	63,757	34,879	1,423	3,631	1,309,208
Percentage of Australian total—									
1962-63	40.70	34.08	8.99	9.02	4.58	2.63	n.a.	n.a.	100
1963-64	40.31	34.14	9.15	9.16	4.60	2.63	n.a.	n.a.	100
1964-65	40.11	34.08	9.16	9.15	4.58	2.57	0.10	0.25	100
1965-66	40.14	33.94	9.09	9.15	4.66	2.65	0.10	0.27	100
1966-67	40.03	34.01	9.01	9.03	4.87	2.66	0.11	0.28	100
Per 1,000 of population—									
1962-63	118	132	67	105	69	86	n.a.	n.a.	109
1963-64	120	134	69	108	70	88	n.a.	n.a.	111
1964-65	123	138	71	110	71	89	23	38	113
1965-66	123	137	71	109	72	93	23	38	113
1966-67	123	137	70	107	74	93	25	36	112

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

#### Rates of increase in employment

The percentage increase on the average number of persons employed in the preceding year is shown below for each State and Territory.

#### FACTORIES: ANNUAL PERCENTAGE INCREASE OF PERSONS EMPLOYED STATES AND TERRITORIES, 1962-63 TO 1966-67

Year	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.(a)
1962-63	3.07	5.15	3.31	6.23	4.71	2.28	n.a.	n.a.	4.13
1963-64	2.63	3.84	5.43	5.27	4.25	3.51	n.a.	n.a.	3.63
1964-65	4.35	4.67	5.01	4.85	4.29	2.35	n.a.	n.a.	4.88
1965-66	2.04	1.56	1.15	1.86	3.76	5.33	6.94	8.30	1.96
1966-67	0.90	1.40	0.30	-0.10	5.76	1.64	9.97	3.89	1.19

(a) Before 1 July 1965, excludes Northern Territory and Australian Capital Territory.

## Persons employed, by class of industry

## FACTORIES: AVERAGE NUMBER OF PERSONS EMPLOYED, BY CLASS OF INDUSTRY, AUSTRALIA(a), 1962-63 TO 1966-67

<i>Class of industry</i>	<i>1962-63</i>	<i>1963-64</i>	<i>1964-65</i>	<i>1965-66</i>	<i>1966-67</i>
1. Treatment of non-metalliferous mine and quarry products . . . . .	23,913	24,704	25,683	26,011	26,104
2. Bricks, pottery, glass, etc. . . . .	25,152	25,656	27,002	27,177	26,974
3. Chemicals, dyes, explosives, paints, oils, grease . . . . .	47,535	49,023	51,498	53,111	54,629
4. Industrial metals, machines, conveyances . . . . .	525,312	552,795	588,022	601,637	611,614
5. Precious metals, jewellery, plate . . . . .	5,308	5,543	5,900	5,926	5,990
6. Textiles and textile goods (not dress) . . . . .	72,022	73,076	75,281	74,708	73,036
7. Skins and leather (not clothing or footwear) . . . . .	12,264	12,209	12,026	11,807	11,355
8. Clothing (except knitted) . . . . .	107,932	108,909	110,613	111,793	111,909
9. Food, drink and tobacco . . . . .	131,301	134,487	138,768	142,153	143,510
10. Sawmills, joinery, boxes, etc., wood turning and carving . . . . .	57,114	57,650	59,815	60,642	59,976
11. Furniture of wood, bedding, etc. . . . .	21,815	22,545	23,251	23,740	24,390
12. Paper, stationery, printing, bookbinding, etc. . . . .	76,263	79,250	83,692	87,129	89,192
13. Rubber . . . . .	18,916	20,261	20,813	20,416	20,198
14. Musical instruments . . . . .	749	779	785	764	824
15. Miscellaneous products . . . . .	26,124	27,422	30,057	31,154	33,431
<i>Total, classes 1 to 15</i> . . . . .	<i>1,151,720</i>	<i>1,194,309</i>	<i>1,253,206</i>	<i>1,278,168</i>	<i>1,293,132</i>
16. Heat, light and power . . . . .	15,833	15,611	15,729	15,655	16,076
<b>Total all classes</b> . . . . .	<b>1,167,553</b>	<b>1,209,920</b>	<b>1,268,935</b>	<b>1,293,823</b>	<b>1,309,208</b>

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

## FACTORIES: AVERAGE NUMBER OF PERSONS EMPLOYED, BY CLASS OF INDUSTRY, STATES AND TERRITORIES, 1966-67

<i>Class of industry(a)</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
1. Treatment non-metal. mine, etc. products . . . . .	10,118	7,641	2,832	2,305	2,023	835	107	243	26,104
2. Bricks, etc. . . . .	13,101	7,773	1,868	2,117	1,593	354	(b)	(b)	26,974
3. Chemicals, etc. . . . .	26,756	18,154	2,393	3,298	3,003	995	(b)	(b)	54,629
4. Industrial metals, machines, etc. . . . .	263,795	189,176	45,878	69,321	29,593	11,908	822	1,121	611,614
5. Jewellery, etc. . . . .	2,355	2,180	349	569	275	47	..	215	5,990
6. Textiles, etc. . . . .	20,269	43,066	2,098	2,775	824	4,004	..	..	73,036
7. Skins, leather, etc. . . . .	4,977	3,740	1,041	995	555	47	..	..	11,355
8. Clothing, etc. . . . .	45,654	48,636	8,179	5,351	3,162	729	17	181	111,909
9. Food, drink, etc. . . . .	43,958	44,130	28,438	12,288	8,919	5,376	183	218	143,510
10. Sawmills, etc. . . . .	19,353	15,430	9,181	5,789	5,814	4,066	80	263	59,976
11. Furniture, etc. . . . .	9,554	7,094	3,166	2,245	1,654	614	(b)	(b)	24,390
12. Paper, stationery, etc. . . . .	35,926	30,354	7,236	5,654	3,657	5,168	55	1,142	89,192
13. Rubber . . . . .	7,823	8,092	1,957	1,621	499	151	22	33	20,198
14. Musical instruments . . . . .	531	211	25	31	26	..	..	..	824
15. Miscellaneous . . . . .	14,784	14,353	1,143	2,081	912	158	..	..	33,431
<i>Total, classes 1 to 15</i> . . . . .	<i>518,954</i>	<i>440,030</i>	<i>115,784</i>	<i>116,440</i>	<i>62,509</i>	<i>34,452</i>	<i>1,332</i>	<i>3,631</i>	<i>1,293,132</i>
16. Heat, light and power . . . . .	5,100	5,277	2,153	1,780	1,248	427	91	..	16,076
<b>Total all classes</b> . . . . .	<b>524,054</b>	<b>445,307</b>	<b>117,937</b>	<b>118,220</b>	<b>63,757</b>	<b>34,879</b>	<b>1,423</b>	<b>3,631</b>	<b>1,309,208</b>

(a) For full titles see table above. (b) Not available for publication.

## Persons employed, by occupational grouping

**FACTORIES: AVERAGE NUMBER OF PERSONS EMPLOYED, BY OCCUPATIONAL GROUPING  
STATES AND TERRITORIES, 1966-67**

State or Territory	Average number of persons employed				Total
	Working proprietors	Managerial and clerical staff, etc.(a)	Chemists, draughtsmen etc.	Foremen and overseers, workers in factory and others(b)	
New South Wales . . . . .	13,998	77,646	11,612	420,798	524,054
Victoria . . . . .	12,210	61,844	9,957	361,296	445,307
Queensland . . . . .	4,653	14,568	1,689	97,027	117,937
South Australia . . . . .	4,026	15,927	2,365	95,902	118,220
Western Australia . . . . .	3,349	7,119	840	52,449	63,757
Tasmania . . . . .	995	3,931	688	29,265	34,879
Northern Territory . . . . .	84	208	..	1,131	1,423
Australian Capital Territory . . . . .	139	594	20	2,878	3,631
Total males . . . . .	33,032	112,143	24,216	813,516	982,907
Total females . . . . .	6,422	69,694	2,955	247,230	326,301
Total persons . . . . .	39,454	181,837	27,171	1,060,746	1,309,208

(a) Includes salaried managers and working directors.

(b) Includes persons working regularly at home.

The term 'outworker' or 'homeworker' has acquired a special meaning in connection with manufacturing industries, and includes only persons to whom work is given out by factories to be done at home. Persons working regularly at home for factories are included in the group foremen, overseers, workers in factory, and others, and separate details are not available.

## Monthly employment

The following tables show the number of persons (excluding working proprietors) employed in factories on the last pay-day of each month.

**FACTORIES: MONTHLY EMPLOYMENT, BY SEX, AUSTRALIA(a), 1962-63 TO 1966-67**
**EXCLUDING WORKING PROPRIETORS**

Month	1962-63	1963-64	1964-65	1965-66	1966-67
MALES					
July . . . . .	843,123	867,166	911,211	940,995	944,379
August . . . . .	845,760	869,030	912,301	940,562	944,066
September . . . . .	847,798	872,381	914,016	939,023	942,483
October . . . . .	849,866	875,318	915,883	935,842	943,532
November . . . . .	852,304	879,265	918,029	938,019	948,409
December . . . . .	847,041	875,159	917,952	931,923	942,213
January . . . . .	852,999	884,788	922,676	935,635	948,181
February . . . . .	859,665	893,400	930,968	942,486	955,604
March . . . . .	862,890	894,393	934,409	944,702	957,679
April . . . . .	861,180	897,783	934,496	941,325	957,948
May . . . . .	861,254	898,809	933,759	941,860	957,356
June . . . . .	863,142	901,507	933,803	940,563	955,085

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

**FACTORIES: MONTHLY EMPLOYMENT  
BY SEX, AUSTRALIA(a), 1962-63 TO 1966-67—continued**

Month	1962-63	1963-64	1964-65	1965-66	1966-67
<b>FEMALES</b>					
July . . . . .	266,207	274,312	295,743	310,759	314,479
August . . . . .	267,761	277,063	297,752	311,629	315,007
September . . . . .	270,536	279,713	301,106	313,559	315,600
October . . . . .	272,789	283,778	304,287	314,539	318,251
November . . . . .	273,845	285,296	305,939	315,070	319,341
December . . . . .	270,355	282,296	301,987	310,424	314,881
January . . . . .	270,810	283,279	302,729	310,051	316,345
February . . . . .	276,901	291,966	310,989	317,691	325,236
March . . . . .	280,285	293,424	315,493	319,760	327,895
April . . . . .	274,379	290,823	311,114	314,458	324,889
May . . . . .	273,326	290,301	309,466	313,345	322,885
June . . . . .	272,074	290,833	308,583	312,896	322,226
<b>PERSONS</b>					
July . . . . .	1,109,330	1,141,478	1,206,954	1,251,754	1,258,858
August . . . . .	1,113,521	1,146,093	1,210,053	1,252,191	1,259,073
September . . . . .	1,118,334	1,152,094	1,215,122	1,252,582	1,258,083
October . . . . .	1,122,655	1,159,096	1,220,170	1,250,381	1,261,783
November . . . . .	1,126,149	1,164,561	1,223,968	1,253,089	1,267,750
December . . . . .	1,117,396	1,157,455	1,219,939	1,242,347	1,257,094
January . . . . .	1,123,809	1,168,067	1,225,405	1,245,686	1,264,526
February . . . . .	1,136,566	1,185,366	1,241,957	1,260,177	1,280,840
March . . . . .	1,143,175	1,187,817	1,249,902	1,264,462	1,285,574
April . . . . .	1,135,559	1,188,606	1,245,610	1,255,783	1,282,837
May . . . . .	1,134,580	1,189,110	1,243,225	1,255,205	1,280,241
June . . . . .	1,135,216	1,192,340	1,242,386	1,253,459	1,277,311

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

**FACTORIES: MONTHLY EMPLOYMENT, BY SEX, STATES AND TERRITORIES  
1966-67**

**EXCLUDING WORKING PROPRIETORS**

Month	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
<b>MALES</b>									
July . . . . .	376,626	299,719	94,972	92,515	49,450	26,948	1,219	2,930	944,379
August . . . . .	376,068	300,346	94,388	92,424	49,648	27,042	1,231	2,919	944,066
September . . . . .	376,209	300,073	93,827	91,585	49,585	27,082	1,226	2,896	942,483
October . . . . .	376,671	300,902	93,153	91,656	49,947	27,096	1,216	2,891	943,532
November . . . . .	378,578	303,046	92,994	91,778	50,373	27,505	1,215	2,920	948,409
December . . . . .	377,858	302,910	87,328	91,855	50,582	27,539	1,206	2,935	942,213
January . . . . .	378,015	305,489	89,023	92,726	51,046	27,759	1,193	2,930	948,181
February . . . . .	380,708	307,777	90,838	93,127	51,316	27,696	1,227	2,915	955,604
March . . . . .	380,988	308,264	91,639	93,297	51,634	27,731	1,232	2,894	957,679
April . . . . .	381,139	307,422	92,797	93,181	51,747	27,695	1,249	2,718	957,948
May . . . . .	381,030	306,739	93,435	92,749	51,822	27,588	1,263	2,730	957,356
June . . . . .	380,761	305,151	93,445	92,633	51,568	27,525	1,276	2,726	955,085
<b>FEMALES</b>									
July . . . . .	130,331	125,797	21,089	21,139	9,100	6,329	99	595	314,479
August . . . . .	130,964	125,814	21,210	21,205	9,092	6,016	102	604	315,007
September . . . . .	131,471	126,061	21,102	21,163	9,114	5,994	98	597	315,600
October . . . . .	132,773	127,527	20,970	21,122	9,274	5,888	97	600	318,251
November . . . . .	132,871	128,106	20,732	21,276	9,530	6,117	98	611	319,341
December . . . . .	130,603	126,616	19,941	21,329	9,467	6,211	100	614	314,881
January . . . . .	129,813	127,786	20,142	22,223	9,313	6,351	100	617	316,345
February . . . . .	133,244	131,395	21,176	22,620	9,608	6,459	100	634	325,236
March . . . . .	133,733	132,809	21,299	22,484	9,957	6,868	104	641	327,895
April . . . . .	132,960	131,236	21,037	21,757	10,119	7,045	109	626	324,889
May . . . . .	132,460	129,903	21,597	21,391	9,841	6,955	111	627	322,885
June . . . . .	133,002	129,271	21,509	21,221	9,611	6,865	119	628	322,226

**FACTORIES: MONTHLY EMPLOYMENT, BY SEX, STATES AND TERRITORIES, 1966-67—*contd***

<i>Month</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
<b>PERSONS</b>									
July . . . . .	506,957	425,516	116,061	113,654	58,550	33,277	1,318	3,525	1,258,858
August . . . . .	507,032	426,160	115,598	113,629	58,740	33,058	1,333	3,523	1,259,073
September . . . . .	507,680	426,134	114,929	112,748	58,699	33,076	1,324	3,493	1,258,083
October . . . . .	509,444	428,429	114,123	112,778	59,221	32,984	1,313	3,491	1,261,783
November . . . . .	511,449	431,152	113,726	113,054	59,903	33,622	1,313	3,531	1,267,750
December . . . . .	508,461	429,526	107,269	113,184	60,049	33,750	1,306	3,549	1,257,094
January . . . . .	507,828	433,275	109,165	114,949	60,359	34,110	1,293	3,547	1,264,526
February . . . . .	513,952	439,172	112,014	115,747	60,924	34,155	1,327	3,549	1,280,840
March . . . . .	514,721	441,073	112,938	115,781	61,591	34,599	1,336	3,535	1,285,574
April . . . . .	514,099	438,658	113,834	114,938	61,866	34,740	1,358	3,344	1,282,837
May . . . . .	513,490	436,642	115,032	114,140	61,663	34,543	1,374	3,357	1,280,241
June . . . . .	513,763	434,422	114,954	113,854	61,179	34,390	1,395	3,354	1,277,311

**Distribution of employees according to age**

The following table shows the number of each sex employed in Australia in each age group on the last pay day in June.

**FACTORIES: DISTRIBUTION OF EMPLOYEES, BY AGE AND SEX, AUSTRALIA(a)**  
**JUNE 1963 TO JUNE 1967**
**EXCLUDING WORKING PROPRIETORS**

<i>June—</i>	<i>Males</i>			<i>Females</i>			<i>Persons</i>		
	<i>Under 16 years</i>	<i>16 and under 21 years</i>	<i>21 years and over</i>	<i>Under 16 years</i>	<i>16 and under 21 years</i>	<i>21 years and over</i>	<i>Under 16 years</i>	<i>16 and under 21 years</i>	<i>21 years and over</i>
1963 . . . . .	8,736	92,211	762,195	7,852	51,803	212,419	16,588	144,014	974,614
1964 . . . . .	8,632	100,164	792,711	7,130	55,533	228,170	15,762	155,697	1,020,881
1965 . . . . .	7,614	104,477	821,711	5,920	57,226	245,437	13,534	161,703	1,067,148
1966 . . . . .	6,690	105,902	827,971	5,364	56,104	251,428	12,054	162,006	1,079,399
1967 . . . . .	5,703	107,285	842,097	5,005	54,727	262,494	10,708	162,012	1,104,591

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

**Distribution of sexes in factories**
**Average number of males and females employed**
**FACTORIES: MALES AND FEMALES EMPLOYED, STATES AND TERRITORIES, 1962-63 to 1966-67**

<i>State or Territory</i>	<i>1962-63</i>	<i>1963-64</i>	<i>1964-65</i>	<i>1965-66</i>	<i>1966-67</i>
<b>MALES</b>					
New South Wales . . . . .	358,116	366,250	379,672	387,181	390,087
Victoria . . . . .	285,709	295,440	307,006	310,303	314,017
Queensland . . . . .	86,536	91,123	95,328	96,150	96,082
South Australia . . . . .	86,655	90,933	94,690	96,194	96,076
Western Australia . . . . .	46,252	48,163	50,065	51,464	53,981
Tasmania . . . . .	25,453	26,221	26,768	28,041	28,364
Northern Territory . . . . .	n.a.	n.a.	1,098	1,182	1,308
Australian Capital Territory . . . . .	n.a.	n.a.	2,634	2,896	2,992
<b>Australia(a) . . . . .</b>	<b>888,721</b>	<b>918,130</b>	<b>957,261</b>	<b>973,411</b>	<b>982,907</b>
<b>FEMALES</b>					
New South Wales . . . . .	117,133	121,503	129,307	132,183	133,967
Victoria . . . . .	112,142	117,680	125,407	128,846	131,290
Queensland . . . . .	18,462	19,573	20,918	21,431	21,855
South Australia . . . . .	18,610	19,880	21,493	22,149	22,144
Western Australia . . . . .	7,183	7,542	8,032	8,818	9,776
Tasmania . . . . .	5,302	5,612	5,812	6,274	6,515
Northern Territory . . . . .	n.a.	n.a.	112	112	115
Australian Capital Territory . . . . .	n.a.	n.a.	593	599	639
<b>Australia(a) . . . . .</b>	<b>278,832</b>	<b>291,790</b>	<b>311,674</b>	<b>320,412</b>	<b>326,301</b>

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

## Rate of annual variation for each sex

The percentages of increase or decrease on the average numbers of males and females employed in the preceding year are shown in the following table.

**FACTORIES: ANNUAL PERCENTAGE INCREASES OF MALES AND FEMALES  
EMPLOYED, STATES AND TERRITORIES, 1962-63 TO 1966-67**

<i>State or Territory</i>	<i>1962-63</i>	<i>1963-64</i>	<i>1964-65</i>	<i>1965-66</i>	<i>1966-67</i>
<b>MALES</b>					
New South Wales . . . . .	2.57	2.27	3.66	1.98	0.75
Victoria . . . . .	4.29	3.41	3.91	1.07	1.20
Queensland . . . . .	2.86	5.30	4.61	0.86	-0.07
South Australia . . . . .	5.93	4.94	4.13	1.59	-0.12
Western Australia . . . . .	4.66	4.13	3.95	2.79	4.89
Tasmania . . . . .	2.87	3.02	2.09	4.76	1.15
Northern Territory . . . . .	n.a.	n.a.	n.a.	7.65	10.66
Australian Capital Territory . . . . .	n.a.	n.a.	n.a.	9.95	3.31
<b>Australia(a) . . . . .</b>	<b>3.58</b>	<b>3.31</b>	<b>4.26</b>	<b>1.69</b>	<b>0.98</b>
<b>FEMALES</b>					
New South Wales . . . . .	4.65	3.73	6.42	2.22	1.35
Victoria . . . . .	7.42	4.94	6.57	2.74	1.90
Queensland . . . . .	5.45	6.02	6.87	2.45	1.98
South Australia . . . . .	7.63	6.82	8.11	3.05	-0.02
Western Australia . . . . .	5.01	5.00	6.50	9.79	10.86
Tasmania . . . . .	-0.49	5.85	3.56	7.95	3.84
Northern Territory . . . . .	n.a.	n.a.	n.a.	..	2.68
Australian Capital Territory . . . . .	n.a.	n.a.	n.a.	1.01	6.68
<b>Australia(a) . . . . .</b>	<b>5.90</b>	<b>4.65</b>	<b>6.81</b>	<b>2.80</b>	<b>1.84</b>

(a) Before 1 July 1965, excludes Northern Territory and Australian Capital Territory.

Minus sign (-) indicates decrease.

## Masculinity of persons employed

The following table shows the proportion of males to females employed in factories in each State and Territory.

**FACTORIES: MASCULINITY(a) OF PERSONS EMPLOYED  
STATES AND TERRITORIES, 1962-63 TO 1966-67**

<i>Year</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust. (b)</i>
1962-63 . . . . .	306	255	469	466	644	480	n.a.	n.a.	319
1963-64 . . . . .	301	251	466	457	639	467	n.a.	n.a.	315
1964-65 . . . . .	294	245	456	441	623	461	980	444	307
1965-66 . . . . .	293	241	449	434	584	447	1,055	483	304
1966-67 . . . . .	291	239	440	434	552	435	1,137	468	301

(a) Number of males per 100 females.

(b) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.



**Employment of females in particular industries**

The majority of females in manufacturing industries are employed in four classes, namely: 4, Industrial metals, machines, etc.; 6, Textiles; 8, Clothing; and 9, Food, drink and tobacco. In 1966-67 these industries accounted for 77.15 per cent of all females in factories. In two classes only did the number of females exceed the number of males—in Class 6, Textiles, where there were 139 females to every 100 males, and in Class 8, Clothing, with 292 females to every 100 males. The following table shows the average number of males and females employed in each of the four classes.

**MALES AND FEMALES EMPLOYED IN PARTICULAR INDUSTRIES  
STATES AND TERRITORIES, 1966-67**

<i>Class of industry</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
<b>Males—</b>									
Industrial metals, etc.	225,133	160,724	42,128	61,165	27,723	11,121	766	1,045	529,805
Textiles and textile goods (not dress)	8,800	17,418	891	1,270	386	1,784	..	..	30,549
Clothing (except knitted)	10,638	12,981	1,992	1,724	826	291	9	57	28,518
Food, drink and tobacco	29,396	28,995	22,665	8,067	6,361	3,656	159	154	99,453
All other classes	116,120	93,899	28,406	23,850	18,685	11,512	374	1,736	294,582
<i>Total males</i>	<i>390,087</i>	<i>314,017</i>	<i>96,082</i>	<i>96,076</i>	<i>53,981</i>	<i>28,364</i>	<i>1,308</i>	<i>2,992</i>	<i>982,907</i>
<b>Females—</b>									
Industrial metals, etc.	38,662	28,452	3,750	8,156	1,870	787	56	76	81,809
Textiles and textile goods (not dress)	11,469	25,648	1,207	1,505	438	2,220	..	..	42,487
Clothing (except knitted)	35,016	35,655	6,187	3,627	2,336	438	8	124	83,391
Food, drink and tobacco	14,562	15,135	5,773	4,221	2,558	1,720	24	64	44,057
All other classes	34,258	26,400	4,938	4,635	2,574	1,350	27	375	74,557
<i>Total females</i>	<i>133,967</i>	<i>131,290</i>	<i>21,855</i>	<i>22,144</i>	<i>9,776</i>	<i>6,515</i>	<i>115</i>	<i>639</i>	<i>326,301</i>

**Children employed in factories****Number of children employed**

In the returns for the various States and Territories the term 'child' denotes any person under sixteen years of age. The following table shows the number of children of each sex employed in manufacturing industries in June of each year from 1965 to 1967.

**FACTORIES: CHILDREN(a) EMPLOYED  
STATES AND TERRITORIES, JUNE 1965 TO JUNE 1967**

<i>State or Territory</i>	<i>June 1965</i>			<i>June 1966</i>			<i>June 1967</i>		
	<i>Males</i>	<i>Females</i>	<i>Persons</i>	<i>Males</i>	<i>Females</i>	<i>Persons</i>	<i>Males</i>	<i>Females</i>	<i>Persons</i>
New South Wales	2,435	1,829	4,264	2,212	1,748	3,960	1,921	1,642	3,563
Victoria	1,690	1,614	3,304	1,525	1,488	3,013	1,333	1,392	2,725
Queensland	1,835	1,413	3,248	1,369	1,132	2,501	1,106	1,074	2,180
South Australia	528	539	1,067	471	471	942	386	433	819
Western Australia	962	409	1,371	944	430	1,374	792	307	1,099
Tasmania	121	107	228	126	87	213	141	131	272
Northern Territory	10	..	10	3	..	3	4	..	4
Australian Capital Territory	33	9	42	40	8	48	20	26	46
<b>Australia</b>	<b>7,614</b>	<b>5,920</b>	<b>13,534</b>	<b>6,690</b>	<b>5,364</b>	<b>12,054</b>	<b>5,703</b>	<b>5,005</b>	<b>10,708</b>

(a) Under sixteen years of age.

**Industries employing children**

The distribution of children employed in factories and the proportion of children employed to total employees, by the main classes of industry employing persons under sixteen years of age, are shown in the following table.

**FACTORIES: CHILDREN<sup>(a)</sup> EMPLOYED, BY SEX, AND CLASS OF INDUSTRY  
AUSTRALIA, JUNE 1967**

Class of industry	Children employed <sup>(a)</sup>		Total employed <sup>(b)</sup>		Proportion (per cent) of children employed to total employees <sup>(b)</sup>	
	Males	Females	Males	Females	Males	Females
Industrial metals, machines, conveyances	2,785	484	518,864	81,467	0.54	0.59
Textiles and textile goods (not dress)	209	722	30,711	43,039	0.68	1.68
Clothing (except knitted)	290	2,417	24,248	82,377	1.20	2.93
Food, drink and tobacco	663	498	94,036	41,205	0.71	1.21
Sawmills, joinery, boxes, etc.	502	65	52,546	4,155	0.96	1.56
Furniture of wood, bedding, etc.	271	73	16,968	5,627	1.60	1.30
Paper, stationery, printing, book-binding etc.	524	409	64,160	24,079	0.82	1.70
All other industries	459	337	153,552	40,277	0.30	0.84
<b>Total, all classes</b>	<b>5,703</b>	<b>5,005</b>	<b>955,085</b>	<b>322,226</b>	<b>0.60</b>	<b>1.55</b>

(a) Under sixteen years of age. (b) Excludes working proprietors.

### Apprenticeship

Acts are in force in all States for the regulation of the age at which children may be employed in gainful occupations. Legislative provision is also made for the regulation of apprenticeship under various State Factories Acts or Arbitration Acts. These Acts, while laying down general principles, leave to the wages tribunals the actual determination of the conditions under which apprentices may be employed.

### Power equipment in factories

Since 1936-37 statistics of power equipment in factories relate to the 'rated horsepower' of engines ordinarily in use and engines in reserve or idle, omitting obsolete engines. In addition, particulars of the power equipment of central electric stations are collected in greater detail. To avoid duplication it is essential that some distinction should be made between central electric stations and other classes of industries. In the following tables central electric stations have been treated separately from other factories.

#### Rated horsepower of engines in factories other than central electric stations

**FACTORIES<sup>(a)</sup>: TOTAL RATED HORSEPOWER OF ENGINES  
AND ELECTRIC MOTORS, STATES AND TERRITORIES, 1966-67**

State or Territory	Factories <sup>(a)</sup>	Rated horsepower of engines and motors	
		Ordinarily in use <sup>(b)</sup>	In reserve or idle (omitting obsolete)
New South Wales	24,799	3,302,279	452,156
Victoria	18,035	2,086,885	267,626
Queensland	5,970	891,418	135,792
South Australia	6,192	776,723	63,659
Western Australia	5,084	397,513	62,814
Tasmania	1,756	340,096	50,999
Northern Territory	182	6,462	725
Australian Capital Territory	238	13,481	1,658
<b>Australia</b>	<b>62,256</b>	<b>7,814,857</b>	<b>1,035,429</b>

(a) Excludes electric light and power works, details of which are shown on pages 1091-2.  
(b) Excludes motors driven by electricity of own generation.

## Rated horsepower of engines and electric motors ordinarily in use, by type

**FACTORIES(a): TOTAL RATED HORSEPOWER OF ENGINES AND ELECTRIC MOTORS ORDINARILY IN USE, BY TYPE, STATES AND TERRITORIES, 1966-67**

State or Territory	Steam		Internal com- bustion (all types)	Water	Motors driven by electricity		Total(b)
	Recipro- cating	Turbine			Purchased	Own generation	
New South Wales	47,652	254,252	73,054	77	2,927,244	141,318	3,302,279
Victoria . .	15,712	106,715	55,853	880	1,907,725	88,502	2,086,885
Queensland . .	51,179	213,238	28,777	..	598,224	183,736	891,418
South Australia .	3,566	56,545	10,754	..	705,858	30,721	776,723
Western Australia .	8,174	13,604	29,038	..	346,697	8,982	397,513
Tasmania . .	1,010	..	9,625	..	329,461	668	340,096
Northern Territory	..	..	194	..	6,268	131	6,462
Australian Capital Territory . .	20	30	247	..	13,184	..	13,481
Australia .	127,313	644,384	207,542	957	6,834,661	454,058	7,814,857

(a) Excludes electric light and power works, details of which are shown on pages 1091-2.

(b) Excludes motors driven by electricity of own generation.

**FACTORIES(a): TOTAL RATED HORSEPOWER OF ENGINES AND ELECTRIC MOTORS ORDINARILY IN USE, BY TYPE, AUSTRALIA(b), 1962-63 TO 1966-67**

Year	Steam		Internal com- bustion (all types)	Water	Motors driven by electricity		Total(c)
	Recipro- cating	Turbine			Purchased	Own generation	
1962-63 . .	165,312	397,213	193,309	900	5,376,452	322,828	6,133,186
1963-64 . .	154,628	439,121	198,597	840	5,733,810	335,580	6,526,996
1964-65 . .	147,417	477,268	194,458	891	6,089,766	362,719	6,909,800
1965-66 . .	127,775	615,622	201,195	901	6,450,895	419,990	7,396,388
1966-67 . .	127,313	644,384	207,542	957	6,834,661	454,058	7,814,857

(a) Excludes electric light and power works, details of which are shown on pages 1091-2.

(b) Prior to 1 July 1964 excludes Northern Territory and Australian Capital Territory.

(c) Excludes motors driven by electricity of own generation.

## Rated horsepower of engines and electric motors ordinarily in use, by class of industry

## FACTORIES(a): TOTAL RATED HORSEPOWER OF ENGINES AND ELECTRIC MOTORS ORDINARILY IN USE(b), BY CLASS OF INDUSTRY, STATES AND TERRITORIES, 1966-67

Class of industry(c)	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
1. Treatment non-metal. mine, etc. products .	133,000	124,577	44,065	49,156	28,950	21,787	461	902	402,898
2. Bricks, etc. .	86,282	58,697	14,983	18,699	15,893	3,735	(d)	(d)	200,111
3. Chemicals, etc. .	383,920	252,486	63,895	43,874	60,909	20,457	(d)	(d)	826,684
4. Industrial metals, machines, etc. .	1,793,303	723,712	192,337	423,074	118,821	67,049	1,717	1,381	3,321,394
5. Jewellery, etc. .	4,600	4,082	652	1,257	708	131	..	4,430	15,860
6. Textiles, etc. .	68,711	121,729	9,544	9,121	3,790	12,054	..	..	224,949
7. Skins, leather, etc. .	18,939	20,010	6,457	5,930	3,594	485	..	..	55,415
8. Clothing, etc. .	30,833	33,754	5,901	5,458	2,884	935	40	217	80,022
9. Food, drink, etc. .	267,057	270,850	369,548	77,824	57,925	35,157	2,129	682	1,081,172
10. Sawmills, etc. .	202,646	136,159	122,609	61,674	68,360	59,709	763	2,072	653,992
11. Furniture, etc. .	24,760	17,060	9,975	7,467	4,899	1,967	(d)	(d)	66,224
12. Paper, stationery, etc.	131,183	143,482	31,210	39,402	20,285	115,497	94	1,701	482,854
13. Rubber .	77,264	97,859	13,009	19,699	6,389	551	145	148	215,064
14. Musical instruments .	1,523	288	51	15	11	..	..	..	1,888
15. Miscellaneous .	55,023	55,119	3,843	6,087	2,699	456	..	..	123,227
Total, classes 1 to 15	3,279,044	2,059,864	888,079	768,737	396,117	339,970	6,462	13,481	7,751,754
16. Gas works .	23,235	27,021	3,339	7,986	1,396	126	..	..	63,103
Total, all classes	3,302,279	2,086,885	891,418	776,723	397,513	340,096	6,462	13,481	7,814,857

(a) Excludes electric light and power works, details of which are shown below. (b) Excludes motors driven by electricity of own generation. (c) For full titles see table on page 1094. (d) Not available for publication.

## Capacity of engines and generators installed in central electric stations, by type

## CENTRAL ELECTRIC STATIONS: POWER EQUIPMENT, BY TYPE, AUSTRALIA, 1966-67

Equipment		Capacity of engines and generators					Total
		Steam		Internal combustion (all types)	Water		
		Reciprocating	Turbine				
Engines installed—							
Total installed .	rated hp	800	10,592,812	382,105	3,992,851	14,968,568	
Generators installed—							
Kilowatt capacity—							
Total installed .	kW	560	7,883,852	273,166	2,893,085	11,050,663	
Effective capacity .	„	500	7,729,772	250,858	2,850,835	10,831,965	
Horsepower equivalent—							
Total installed .	hp	751	10,568,146	366,174	3,878,123	14,813,194	
Effective capacity .	„	670	10,361,605	336,270	3,821,487	14,520,032	

**CENTRAL ELECTRIC STATIONS: NUMBER AND POWER EQUIPMENT  
STATES AND TERRITORIES, 1966-67**

<i>Equipment</i>		<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
Central electric stations .	No.	50	18	43	30	83	15	5	..	244
Engines installed . . .	rated hp	6,813,817	3,354,145	1,701,693	1,086,301	762,483	1,212,180	37,949	..	14,968,568
<b>Generators installed—</b>										
<b>Kilowatt capacity—</b>										
Total installed . . .	kW	5,055,744	2,453,782	1,259,300	809,080	565,253	860,710	46,794	..	11,050,663
Effective capacity . . .	„	5,024,204	2,337,369	1,191,976	814,721	559,111	857,790	46,794	..	10,831,965
<b>Horsepower equivalent—</b>										
Total installed . . .	hp	6,777,124	3,289,246	1,688,066	1,084,556	757,710	1,153,766	62,726	..	14,813,194
Effective capacity . . .	„	6,734,846	3,133,196	1,597,820	1,092,117	749,477	1,149,850	62,726	..	14,520,032

**Salaries and wages paid, value of materials used, output, and production**

In all tables relating to salaries and wages paid in factories the amounts drawn by working proprietors are excluded.

The gross value of factory output for 1966-67 was \$15,912 million, of which \$8,503 million (53.4 per cent) was the value of the materials used, including containers, etc., tools replaced, and repairs to plant and buildings, and \$522 million the value of the power, fuel, light, water, and lubricating oil used. The difference between the sum of the last two amounts and the gross value of output, namely, \$6,887 million, represents the net value of factory production, defined as 'the value of consumable commodities produced during the year, deducting, so far as possible, the value of goods consumed in process of production'. Depreciation, however, is not deducted (*see* page 1097). The gross value of factory output and the value of materials used each contain inherent elements of duplication, as the output of some factories becomes the materials used in other factories.

**Salaries and wages paid**

*By class of industry*

**FACTORIES: SALARIES AND WAGES PAID, BY CLASS OF INDUSTRY  
STATES AND TERRITORIES, 1966-67**

(\$'000)

<i>Class of industry(a)</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
1. Treatment non-metal. mine, etc. products . . .	31,722	23,299	7,873	6,560	5,446	2,466	303	932	78,602
2. Bricks, etc. . . . .	37,735	22,858	5,038	5,684	4,503	925	(b)	(b)	77,292
3. Chemicals, etc. . . .	81,883	58,093	7,302	9,640	9,327	3,463	(b)	(b)	169,845
4. Industrial metals, machines, etc. . . . .	748,781	532,554	111,550	184,115	73,563	32,839	2,607	2,970	1,688,978
5. Jewellery, etc. . . .	4,899	5,122	671	993	466	83	..	812	13,046
6. Textiles, etc. . . . .	45,607	95,969	3,996	6,019	1,600	8,455	..	..	161,647
7. Skins, leather, etc. . .	11,451	8,841	2,459	2,614	1,219	116	..	..	26,700
8. Clothing, etc. . . . .	80,075	91,525	11,855	8,536	4,299	1,148	23	324	197,786
9. Food, drink, etc. . . .	111,935	111,107	73,472	28,354	20,047	12,886	509	528	358,838
10. Sawmills, etc. . . . .	47,604	37,815	19,564	12,628	13,692	9,549	217	773	141,842
11. Furniture, etc. . . . .	22,452	15,500	6,509	4,321	3,245	1,142	(b)	(b)	53,319
12. Paper, stationery, etc.	100,404	85,574	18,966	14,465	9,017	15,613	187	3,398	247,624
13. Rubber . . . . .	21,885	23,444	4,397	4,638	1,288	361	72	106	56,191
14. Musical instruments . .	1,340	539	38	47	52	..	..	..	2,016
15. Miscellaneous . . . .	36,499	37,187	2,402	4,774	1,774	278	..	..	82,913
<i>Total, classes 1 to 15</i>	<i>1,384,272</i>	<i>1,149,427</i>	<i>276,093</i>	<i>293,391</i>	<i>149,537</i>	<i>89,323</i>	<i>4,112</i>	<i>10,483</i>	<i>3,356,638</i>
16. Heat, light and power	15,474	18,011	6,116	5,715	4,060	1,433	237	..	51,046
<b>Total, all classes</b>	<b>1,399,746</b>	<b>1,167,437</b>	<b>282,209</b>	<b>299,105</b>	<b>153,597</b>	<b>90,756</b>	<b>4,349</b>	<b>10,483</b>	<b>3,407,683</b>

(a) For full titles *see* table on page 1094. (b) Not available for publication.

*Totals and averages.* The following table shows the total amount of salaries and wages paid, and the average amount paid, according to sex, per employee in each State and Territory. The figures exclude working proprietors and the amounts drawn by them.

In comparing the figures in the following table regard should be paid to the nature of certain industries which are carried on to a greater extent in some States than in others. In Victoria, for instance, there are a large number of employees in Class 8, Clothing, comprising a relatively high percentage of women and children.

**FACTORIES: TOTAL AND AVERAGE SALARIES AND WAGES PAID  
STATES AND TERRITORIES, 1962-63 TO 1966-67**

Year	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.(a)
<b>MALES</b>									
Total amount paid (\$'000)—									
1962-63 . . .	864,505	685,576	175,486	197,821	91,917	57,835	n.a.	n.a.	2,073,141
1963-64 . . .	927,806	747,177	196,484	215,127	99,978	63,007	n.a.	n.a.	2,249,580
1964-65 . . .	1,034,044	840,704	226,329	245,565	110,368	68,183	3,298	7,854	2,536,347
1965-66 . . .	1,092,517	877,256	239,885	252,260	123,022	73,932	3,666	8,819	2,671,358
1966-67 . . .	1,174,476	949,744	251,545	266,640	140,114	80,685	4,146	9,306	2,876,656
Average per male employee (\$)—									
1962-63 . . .	2,499	2,491	2,127	2,377	2,109	2,367	n.a.	n.a.	2,425
1963-64 . . .	2,618	2,621	2,254	2,457	2,201	2,491	n.a.	n.a.	2,542
1964-65 . . .	2,812	2,833	2,476	2,689	2,337	2,644	3,242	3,091	2,746
1965-66 . . .	2,913	2,921	2,600	2,720	2,538	2,730	3,333	3,172	2,843
1966-67 . . .	3,105	3,120	2,725	2,880	2,755	2,939	3,354	3,238	3,028
<b>FEMALES</b>									
Total amount paid (\$'000)—									
1962-63 . . .	162,712	153,285	20,345	22,246	7,964	7,002	n.a.	n.a.	373,553
1963-64 . . .	173,214	165,247	22,278	25,188	8,537	7,575	n.a.	n.a.	402,040
1964-65 . . .	195,912	187,788	26,029	28,659	9,609	8,332	185	848	457,362
1965-66 . . .	211,163	199,977	28,160	30,691	11,149	9,030	192	1,047	491,411
1966-67 . . .	225,270	217,693	30,664	32,466	13,483	10,071	203	1,177	531,027
Average per female employee (\$)—									
1962-63 . . .	1,414	1,395	1,145	1,241	1,141	1,336	n.a.	n.a.	1,369
1963-64 . . .	1,448	1,432	1,182	1,312	1,163	1,367	n.a.	n.a.	1,406
1964-65 . . .	1,537	1,526	1,290	1,372	1,228	1,454	1,799	1,469	1,496
1965-66 . . .	1,623	1,584	1,369	1,420	1,295	1,457	1,904	1,806	1,565
1966-67 . . .	1,708	1,691	1,462	1,502	1,411	1,567	1,972	1,904	1,660
<b>PERSONS</b>									
Total amount paid (\$'000)—									
1962-63 . . .	1,027,216	838,862	195,831	220,067	99,880	64,837	n.a.	n.a.	2,446,694
1963-64 . . .	1,101,021	912,424	218,762	240,315	108,515	70,582	n.a.	n.a.	2,651,620
1964-65 . . .	1,229,957	1,028,492	252,358	274,225	119,978	76,515	3,483	8,702	2,993,709
1965-66 . . .	1,303,680	1,077,234	268,046	282,951	134,171	82,963	3,859	9,866	3,162,769
1966-67 . . .	1,399,746	1,167,437	282,209	299,105	153,597	90,756	4,349	10,483	3,407,683
Average per employee (\$)—									
1962-63 . . .	2,228	2,179	1,953	2,175	1,976	2,185	n.a.	n.a.	2,170
1963-64 . . .	2,323	2,278	2,064	2,251	2,057	2,290	n.a.	n.a.	2,265
1964-65 . . .	2,484	2,450	2,262	2,444	2,180	2,427	3,110	2,791	2,435
1965-66 . . .	2,581	2,525	2,376	2,474	2,351	2,493	3,213	2,936	2,523
1966-67 . . .	2,744	2,696	2,491	2,619	2,543	2,678	3,248	3,002	2,684

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

The following table shows, by class of industry, the amounts paid to managerial and clerical staff, including salaried managers and working directors, chemists, draughtsmen and other laboratory and research staff, and those paid to other employees. Amounts drawn by working proprietors are excluded in all cases.

**FACTORIES: SALARIES AND WAGES PAID TO MANAGERS, CLERICAL STAFF, ETC.  
AND OTHER EMPLOYEES, BY CLASS OF INDUSTRY, AUSTRALIA, 1966-67**

Class of industry	Managers, clerical staff, chemists, draughtsmen, etc.		All other employees	
	Males	Females	Males	Females
	\$'000	\$'000	\$'000	\$'000
1. Treatment of non-metalliferous mine and quarry products . . . . .	13,276	2,232	62,721	372
2. Bricks, pottery, glass, etc. . . . .	9,718	2,022	62,794	2,757
3. Chemicals, dyes, explosives, paints, oils, grease . . . . .	45,218	9,983	102,602	12,043
4. Industrial metals, machines, conveyances . . . . .	299,663	58,797	1,250,045	80,473
5. Precious metals, jewellery, plate . . . . .	1,875	603	9,321	1,248
6. Textiles and textile goods (not dress) . . . . .	18,523	7,229	72,776	63,118
7. Skins and leather (not clothing or footwear) . . . . .	3,274	813	17,239	5,374
8. Clothing (except knitted) . . . . .	16,521	9,011	51,762	120,492
9. Food, drink and tobacco . . . . .	56,198	17,286	231,506	53,847
10. Sawmills, joinery, boxes, etc., wood turning and carving . . . . .	17,589	3,962	117,937	2,353
11. Furniture of wood, bedding, etc. . . . .	6,546	2,492	37,778	6,502
12. Paper, stationery, printing, bookbinding, etc. . . . .	38,078	11,581	170,606	27,359
13. Rubber . . . . .	9,334	2,032	39,545	5,280
14. Musical instruments . . . . .	222	95	1,366	332
15. Miscellaneous products . . . . .	15,537	4,846	46,391	16,139
<i>Total, classes 1 to 15</i> . . . . .	<i>551,574</i>	<i>132,984</i>	<i>2,274,390</i>	<i>397,690</i>
16. Heat, light and power . . . . .	6,094	290	44,598	63
<i>Total, all classes</i> . . . . .	<i>557,668</i>	<i>133,274</i>	<i>2,318,988</i>	<i>397,753</i>
Average paid per employee . . . . .	\$ 4,090	\$ 1,834	\$ 2,851	\$ 1,609

**Power, fuel and light used***By class of industry*

**FACTORIES: VALUE OF POWER, FUEL AND LIGHT USED(a), BY CLASS OF INDUSTRY  
STATES AND TERRITORIES, 1966-67**

(\$'000)

Class of industry(b)	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
1. Treatment non-metalliferous mine, etc. products . . . . .	12,641	6,802	2,723	2,243	1,679	836	18	46	26,987
2. Bricks, etc. . . . .	9,461	6,220	1,554	1,756	1,594	366	(c)	(c)	21,128
3. Chemicals, etc. . . . .	24,338	18,419	3,450	4,724	5,297	1,557	(c)	(c)	57,864
4. Industrial metals, etc. . . . .	119,351	32,787	7,522	24,102	5,671	9,889	64	57	199,444
5. Jewellery, etc. . . . .	377	430	46	108	76	(c)	..	(c)	1,190
6. Textiles, etc. . . . .	3,670	6,875	225	491	148	649	..	..	12,059
7. Skins, leather, etc. . . . .	780	909	(c)	271	151	(c)	..	..	2,321
8. Clothing, etc. . . . .	2,241	2,480	421	335	184	80	4	26	5,770
9. Food, drink, etc. . . . .	15,248	15,907	8,438	3,333	2,794	1,622	147	55	47,545
10. Sawmills, etc. . . . .	3,365	2,172	1,343	889	826	914	9	20	9,539
11. Furniture, etc. . . . .	552	391	126	110	74	30	(c)	(c)	1,285
12. Paper, stationery, etc. . . . .	5,603	7,063	1,247	1,915	762	3,785	(c)	(c)	20,550
13. Rubber . . . . .	2,429	3,163	470	566	149	40	7	14	6,838
14. Musical instruments . . . . .	73	28	(c)	(c)	(c)	..	..	..	105
15. Miscellaneous . . . . .	2,379	3,433	(c)	(c)	(c)	(c)	..	..	6,314
<i>Total, classes 1 to 15</i> . . . . .	<i>202,508</i>	<i>107,080</i>	<i>27,894</i>	<i>41,106</i>	<i>(c)</i>	<i>(c)</i>	<i>314</i>	<i>735</i>	<i>418,940</i>
16. Heat, light and power . . . . .	35,605	27,319	19,055	10,196	(c)	(c)	632	..	103,360
<i>Total, all classes</i> . . . . .	<i>238,113</i>	<i>134,399</i>	<i>46,949</i>	<i>51,302</i>	<i>30,031</i>	<i>19,826</i>	<i>946</i>	<i>735</i>	<i>522,300</i>

(a) Includes value of lubricants and water.

(b) For full titles see table above.

(c) Not available for publication.

*Total value*

**FACTORIES: VALUE OF POWER, FUEL AND LIGHT USED(a), STATES AND TERRITORIES  
1962-63 TO 1966-67**  
(\\$'000)

<i>Year</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.(b)</i>
1962-63 . . .	197,509	103,550	35,198	32,072	21,722	14,436	n.a.	n.a.	404,487
1963-64 . . .	210,157	114,648	37,462	34,772	23,749	16,364	n.a.	n.a.	437,153
1964-65 . . .	217,548	125,161	38,749	39,295	26,045	18,327	865	644	466,633
1965-66 . . .	223,517	127,858	43,791	44,066	27,314	19,181	856	760	487,343
1966-67 . . .	238,113	134,399	46,949	51,302	30,031	19,826	946	735	522,300

(a) Includes value of lubricants and water.  
Capital Territory.

(b) Before 1 July 1964, excludes Northern Territory and Australian

*Value of items*

**FACTORIES: VALUE OF ITEMS OF POWER, FUEL AND LIGHT USED(a)  
STATES AND TERRITORIES, 1966-67**  
(\\$'000)

<i>Item of power, fuel, etc.</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
Coal, black . . .	38,225	2,724	21,475	(b)7,074	5,729	545	..	126	75,898
„ brown . . .	(c)	18,215	..	..	..	..	..	..	18,215
Brown coal briquettes	(d)	11,340	..	..	..	(c)	..	(d)	11,353
Coke . . .	45,522	1,124	876	11,797	388	727	..	..	60,433
Wood . . .	716	675	458	522	577	111	(d)	..	3,063
Fuel oil . . .	28,594	23,702	7,215	11,796	11,094	4,167	667	130	87,366
Tar (fuel) . . .	2,382	156	(d)	61	39	(d)	..	(d)	2,669
Electricity . . .	73,258	59,391	12,801	14,505	7,952	12,742	(d)	(d)	181,287
Gas . . .	23,693	4,396	536	1,770	231	94	(c)	(c)	30,721
Other (charcoal, etc.)	(d)	2,732	(d)	1,068	2,168	(d)	(d)	(d)	18,401
Water . . .	10,106	7,197	2,038	1,843	1,193	554	26	16	22,973
Lubricating oils . . .	4,224	2,746	1,114	865	659	246	36	30	9,921
<b>Total . . .</b>	<b>238,113</b>	<b>134,399</b>	<b>46,949</b>	<b>51,302</b>	<b>30,031</b>	<b>19,826</b>	<b>946</b>	<b>735</b>	<b>522,300</b>

(a) Includes value of lubricants and water.  
Leigh Creek coal.

(b) Includes \$5,817,789, the value of 2,089,916 tons of sub-bituminous  
(c) Less than \$500. (d) Not available for publication.

*Quantities of fuel used*

**FACTORIES: QUANTITIES OF FUEL USED, STATES AND TERRITORIES, 1966-67**

<i>Fuel</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
Coal, black . . . '000 tons	7,711	256	2,528	(a)2,214	858	54	..	11	13,632
„ brown . . . „	(b)	17,403	..	..	..	..	..	..	17,403
Brown coal briquettes	(c)	978	..	..	..	(b)	..	(c)	979
Coke . . . „	2,785	47	24	634	12	20	..	..	3,522
Wood . . . „	151	169	111	247	177	44	(c)	(c)	901
Fuel oil . . . '000 gal	428,471	341,283	103,545	166,277	159,877	57,118	2,421	886	1,259,879
Tar (fuel) . . . „	171	8	(c)	5	3	(c)	..	(c)	189

(a) Includes 2,089,916 tons of Leigh Creek coal.

(b) Less than 500 tons.

(c) Not available for publication.



**Value of materials used**

*By class of industry.* The value of materials used includes the value of containers, packing, etc., the cost of tools replaced, and repairs to plant.

**FACTORIES: VALUE OF MATERIALS USED, BY CLASS OF INDUSTRY  
STATES AND TERRITORIES, 1966-67  
(\$'000)**

<i>Class of industry(a)</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
1. Treatment non-metal. mine, etc. products . . .	121,665	62,465	19,680	18,210	13,342	5,834	1,242	3,330	245,768
2. Bricks, etc. . . . .	36,821	23,735	4,393	5,812	3,165	572	(b)	(b)	75,127
3. Chemicals, etc. . . . .	396,628	310,835	66,359	62,345	87,749	9,056	(b)	(b)	933,329
4. Industrial metals, etc. .	1,651,498	891,831	274,202	402,864	130,862	71,356	3,301	3,938	3,429,853
5. Jewellery, etc. . . . .	6,359	5,535	544	868	336	46	..	1,222	14,911
6. Textiles, etc. . . . .	110,807	237,755	9,253	11,637	5,711	19,697	..	..	394,860
7. Skins, leather, etc. . .	31,632	22,280	5,637	10,891	1,984	865	..	..	73,288
8. Clothing, etc. . . . .	140,697	134,435	13,477	9,679	4,657	1,007	20	188	304,160
9. Food, drink, etc. . . .	499,338	569,962	483,573	128,163	95,558	60,027	1,127	1,308	1,839,057
10. Sawmills, etc. . . . .	109,497	76,968	35,504	26,843	25,699	23,160	302	1,371	299,345
11. Furniture, etc. . . . .	45,421	31,582	13,333	8,528	7,567	2,435	(b)	(b)	109,226
12. Paper, stationery, etc. .	187,240	173,517	33,192	23,815	14,715	27,425	76	2,352	462,333
13. Rubber . . . . .	48,832	49,003	9,988	7,826	2,891	797	84	398	119,819
14. Musical instruments . .	3,142	579	44	18	14	..	..	..	3,797
15. Miscellaneous . . . . .	59,892	74,674	4,612	8,849	2,839	204	..	..	151,070
<i>Total, classes 1 to 15</i>	<i>3,449,469</i>	<i>2,665,154</i>	<i>973,791</i>	<i>726,351</i>	<i>397,088</i>	<i>222,483</i>	<i>6,689</i>	<i>14,918</i>	<i>8,455,944</i>
16. Heat, light and power	16,665	13,637	9,105	3,531	2,318	1,084	524	..	46,864
<b>Total, all classes</b>	<b>3,466,134</b>	<b>2,678,791</b>	<b>982,896</b>	<b>729,882</b>	<b>399,406</b>	<b>223,566</b>	<b>7,214</b>	<b>14,918</b>	<b>8,502,808</b>

(a) For full titles see table on page 1094. (b) Not available for publication.

**Total amount**

**FACTORIES: VALUE OF MATERIALS USED, STATES AND TERRITORIES  
1962-63 TO 1966-67  
(\$'000)**

<i>Year</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.(a)</i>
1962-63 . . . . .	2,629,648	2,001,508	713,728	502,860	279,756	147,450	n.a.	n.a.	6,274,950
1963-64 . . . . .	2,859,622	2,190,398	812,924	599,658	300,798	172,130	n.a.	n.a.	6,935,530
1964-65 . . . . .	3,212,677	2,425,961	824,681	668,946	329,740	195,972	4,550	11,440	7,673,967
1965-66 . . . . .	3,266,547	2,469,372	924,427	698,996	362,634	209,794	5,497	13,349	7,950,615
1966-67 . . . . .	3,466,134	2,678,791	982,896	729,882	399,406	223,566	7,214	14,918	8,502,808

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

**Value of output**

*By class of industry.* The value of the output of factories in the various classes in each State and Territory in 1966-67 is shown in the following table. It represents the selling value at the factory (excluding delivery costs and charges) of goods made or processed during the year, including by-products. In addition, it includes the amount received for other work done, such as repair work, assembling and making up for customers. The difference between the sum of the values of the materials and of the power, fuel and light used, and the value of output is the net value of factory production (see page 1097).

**FACTORIES: VALUE OF OUTPUT, BY CLASS OF INDUSTRY  
STATES AND TERRITORIES, 1966-67**

(\$'000)

<i>Class of industry(a)</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
1. Treatment non-metal. mine, etc. products .	206,740	121,060	43,244	38,200	30,712	11,745	2,164	5,550	459,415
2. Bricks, etc. .	116,720	73,898	15,959	18,416	13,487	2,680	(b)	(b)	242,627
3. Chemicals, etc. .	735,529	522,377	107,831	106,921	135,646	19,778	(b)	(b)	1,628,841
4. Industrial metals, etc.	3,105,850	1,783,781	481,145	733,368	272,518	150,041	6,779	8,793	6,542,275
5. Jewellery, etc. .	16,209	15,547	1,673	2,907	1,428	201	..	2,893	40,857
6. Textiles, etc. .	211,681	415,663	16,809	23,590	8,782	33,452	..	..	709,976
7. Skins, leather, etc. .	51,641	38,285	9,821	14,777	4,117	1,062	..	..	119,703
8. Clothing, etc. .	289,132	286,311	34,897	24,854	12,136	3,225	86	792	651,432
9. Food, drink, etc. .	812,179	870,056	659,475	196,623	146,967	88,846	2,439	2,485	2,779,070
10. Sawmills, etc. .	200,733	144,392	72,795	50,961	52,217	41,155	608	2,572	565,434
11. Furniture, etc. .	88,552	60,289	25,558	16,648	13,929	4,540	(b)	(b)	210,182
12. Paper, stationery, etc.	409,471	351,382	68,834	53,778	32,269	61,365	314	8,784	986,199
13. Rubber .	88,655	91,955	20,110	17,342	5,559	1,555	216	734	226,126
14. Musical instruments .	9,110	1,389	108	104	89	..	..	..	10,801
15. Miscellaneous .	130,644	149,826	9,915	18,781	6,377	636	..	..	316,179
<i>Total, classes 1 to 15</i>	<i>6,472,847</i>	<i>4,926,212</i>	<i>1,568,173</i>	<i>1,317,270</i>	<i>736,234</i>	<i>420,280</i>	<i>13,588</i>	<i>34,514</i>	<i>15,489,117</i>
16. Heat, light and power	169,627	122,408	54,278	27,889	28,990	17,684	2,419	..	423,295
<b>Total, all classes</b>	<b>6,642,474</b>	<b>5,048,620</b>	<b>1,622,451</b>	<b>1,345,159</b>	<b>765,224</b>	<b>437,964</b>	<b>16,007</b>	<b>34,514</b>	<b>15,912,413</b>

(a) For full titles see table on page 1094. (b) Not available for publication.

*Total value*

**FACTORIES: VALUE OF OUTPUT, STATES AND TERRITORIES, 1962-63 TO 1966-67**

(\$'000)

<i>Year</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.(a)</i>
1962-63 .	4,902,043	3,706,850	1,129,892	914,074	517,899	303,920	n.a.	n.a.	11,474,678
1963-64 .	5,337,695	4,054,822	1,292,260	1,061,786	555,058	341,065	n.a.	n.a.	12,642,686
1964-65 .	5,951,702	4,500,786	1,341,853	1,206,830	616,422	381,549	12,068	26,145	14,037,355
1965-66 .	6,154,835	4,624,915	1,511,214	1,270,539	678,751	404,581	13,456	31,528	14,689,819
1966-67 .	6,642,474	5,048,620	1,622,451	1,345,159	765,224	437,964	16,007	34,514	15,912,413

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

**Value of production**

*By class of industry.* The value of production for any industry was defined at the Conference of Statisticians at Sydney in 1925 as 'the value of consumable commodities produced during the year, deducting, so far as possible, the value of goods consumed in process of production'.

In accordance with this definition, it was agreed that a deduction consisting of the costs of raw material, containers, power, fuel, light, lubricants, water, tools replaced, repairs to plant and depreciation should be made from the 'value of output'. Because of the difficulty experienced in securing accurate figures for depreciation, however, it was subsequently decided that no deduction should be made on this account. All the deductions mentioned above, with the exception of depreciation, are included in the items 'value of materials used' and 'value of fuel used' as defined above. The net value of production as given in the following tables is obtained, therefore, by deducting only 'value of materials used' and 'value of fuel used' from the 'value of output'. The value of factory production therefore, approximates 'net value added' in the manufacturing process.

Only certain selected items of costs are recorded in the annual census of production. It must not, therefore, be inferred that when wages and salaries are deducted from the value of production the whole of the 'surplus' is available for interest and profit, as many miscellaneous expenses such as taxation, insurance, advertising, and other overhead charges, as well as depreciation, also have to be taken into account.

The following table shows the value of production in each State and Territory for the various classes of industry.

**FACTORIES: VALUE OF PRODUCTION, BY CLASS OF INDUSTRY  
STATES AND TERRITORIES, 1966-67**

(\$'000)

<i>Class of industry(a)</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
1. Treatment non-metal. mine, etc. products . . .	72,435	51,792	20,841	17,747	15,691	5,076	904	2,174	186,660
2. Bricks, etc. . . . .	70,438	43,943	10,012	10,848	8,728	1,742	(b)	(b)	146,372
3. Chemicals, etc. . . . .	314,563	193,123	38,021	39,852	42,601	9,165	(b)	(b)	637,647
4. Industrial metals, etc. . .	1,335,000	859,163	199,421	306,402	135,985	68,795	3,414	4,798	2,912,978
5. Jewellery, etc. . . . .	9,473	9,582	1,083	1,930	1,016	148	..	1,524	24,756
6. Textiles, etc. . . . .	97,203	171,033	7,330	11,461	2,923	13,106	..	..	303,057
7. Skins, leather, etc. . . .	19,229	15,096	3,985	3,615	1,982	186	..	..	44,093
8. Clothing, etc. . . . .	146,193	149,396	20,999	14,840	7,296	2,138	63	577	341,502
9. Food, drink, etc. . . . .	297,593	284,187	167,464	65,126	48,615	27,197	1,165	1,121	892,468
10. Sawmills, etc. . . . .	87,871	65,252	35,948	23,229	25,692	17,081	297	1,180	256,551
11. Furniture, etc. . . . .	42,580	28,317	12,099	8,010	6,289	2,074	(b)	(b)	99,671
12. Paper, stationery, etc. . .	216,628	170,802	34,395	28,048	16,793	30,155	231	6,263	503,315
13. Rubber . . . . .	37,394	39,789	9,652	8,950	2,520	718	125	321	99,469
14. Musical instruments . . .	5,896	782	63	85	75	..	..	..	6,899
15. Miscellaneous . . . . .	68,373	71,719	5,174	9,671	3,437	420	..	..	158,795
<i>Total, classes 1 to 15</i>	<i>2,820,870</i>	<i>2,153,978</i>	<i>556,488</i>	<i>549,814</i>	<i>319,640</i>	<i>178,000</i>	<i>6,584</i>	<i>18,860</i>	<i>6,614,233</i>
16. Heat, light and power	117,357	81,452	26,119	14,161	16,148	16,572	1,263	..	273,072
<b>Total, all classes</b>	<b>2,938,227</b>	<b>2,235,430</b>	<b>592,607</b>	<b>563,975</b>	<b>335,788</b>	<b>194,571</b>	<b>7,847</b>	<b>18,860</b>	<b>6,887,305</b>

(a) For full titles see table on page 1094. (b) Not available for publication.

*Total and average values.* The value of production and the amount per person employed and per head of population are shown in the following table.

**FACTORIES: VALUE OF PRODUCTION—TOTALS AND AVERAGES  
STATES AND TERRITORIES, 1962-63 TO 1966-67**

<i>Year</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.(a)</i>
<b>Total value (\$'000)—</b>									
1962-63 . . . . .	2,074,886	1,601,792	380,966	379,142	216,422	142,033	n.a.	n.a.	4,795,241
1963-64 . . . . .	2,267,917	1,749,776	441,873	427,356	230,511	152,571	n.a.	n.a.	5,270,003
1964-65 . . . . .	2,521,476	1,949,665	478,423	498,588	260,637	167,251	6,654	14,060	5,896,754
1965-66 . . . . .	2,664,771	2,027,685	542,996	527,477	288,803	175,606	7,103	17,418	6,251,861
1966-67 . . . . .	2,938,227	2,235,430	592,607	563,975	335,788	194,571	7,847	18,860	6,887,305
<b>Average per person employed (\$)—</b>									
1962-63 . . . . .	4,366	4,026	3,628	3,602	4,050	4,618	n.a.	n.a.	4,107
1963-64 . . . . .	4,650	4,236	3,992	3,857	4,138	4,793	n.a.	n.a.	4,356
1964-65 . . . . .	4,954	4,509	4,116	4,291	4,486	5,134	5,499	4,357	4,647
1965-66 . . . . .	5,131	4,617	4,618	4,457	4,791	5,117	5,489	4,984	4,854
1966-67 . . . . .	5,607	5,020	5,025	4,771	5,267	5,578	5,514	5,194	5,261
<b>Average per head of population (\$)—</b>									
1962-63 . . . . .	516	532	244	380	278	397	n.a.	n.a.	447
1963-64 . . . . .	556	569	277	418	289	421	n.a.	n.a.	482
1964-65 . . . . .	609	622	294	474	319	457	126	167	523
1965-66 . . . . .	633	635	327	488	345	475	128	188	544
1966-67 . . . . .	688	688	351	511	389	520	135	189	588

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

**Indexes of Factory Production**

The tables following contain annual indexes of factory production for the years 1949-50 to 1965-66. They present indexes, on 1955-56 and 1959-60 bases respectively, for classes and combinations of classes of manufacturing industry. The indexes are designed to provide broad measures of growth in manufacturing industry over the period.

The indexes have been compiled by methods which are commonly adopted, the indexes for classes and combinations of classes comprising in fact indexes of the output of factory sub-classes at constant prices combined by the use of base period value-added weights. Indexes of this type are subject to a number of limitations, and can be compiled only on the basis of many assumptions and approximations. An understanding of the basis of the indexes is therefore essential if inappropriate use of

the indexes is to be avoided. For a comprehensive treatment of concepts, sources, and methods, reference should be made to the annual mimeographed bulletin *Indexes of Factory Production*. This bulletin also contains indexes for a considerable number of individual factory sub-classes.

### INDEXES OF FACTORY PRODUCTION(a): AUSTRALIA(b), 1949-50 TO 1959-60

(Base of each index: year 1955-56 = 100)

Class of industry	Proportion of total value added(c) 1955-56	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58	1958-59	1959-60
	per cent											
1. Treatment non-metal. mine, etc. products . . .	2.3	63	72	76	73	81	94	100	104	112	121	141
2. Bricks, etc. . . . .	2.1	76	78	86	78	89	96	100	92	96	103	117
3. Chemicals, etc. . . .	7.9	51	59	61	58	69	85	100	111	123	132	146
4. Industrial metals, etc.	39.8	63	74	78	75	83	93	100	102	114	122	137
6. Textiles, etc. . . . .	5.5	83	89	79	78	99	97	100	111	116	114	132
7. Skins, leather, etc. .	1.1	106	101	97	98	103	104	100	100	99	105	105
8. Clothing, etc. . . . .	6.8	87	93	89	84	96	97	100	99	102	104	109
9. Food, drink, etc. . . .	13.2	87	89	89	90	95	98	100	103	104	109	111
10. Sawmills, etc. . . . .	5.2	79	85	89	79	89	98	100	96	93	102	110
11. Furniture, etc. . . . .	1.7	83	95	89	78	87	97	100	102	113	119	136
12. Paper, stationery, etc.	6.6	71	74	72	64	79	90	100	108	111	124	140
13. Rubber . . . . .	1.7	66	74	73	58	84	96	100	102	111	118	127
Other (Classes 5, 14, 15)(d) . . . . .	2.6	64	76	72	71	81	93	100	109	111	120	144
Classes 1 to 15 (com- bined) . . . . .	96.5	71	78	80	76	86	94	100	103	110	117	130
16. Heat, light and power	3.5	62	68	73	76	83	92	100	108	116	123	132
All classes (combined)	100.0	71	78	79	76	85	94	100	104	110	118	130

(a) The indexes in this table are combinations of sub-class indexes of value of output as estimated at constant prices. Indexes for all sub-classes within the respective groupings have been combined according to the value-added weights of 1955-56. (b) Excludes factories in Northern Territory and Australian Capital Territory. (c) Value of production—see pages 1075 and 1097. (d) Combination of Class 5, Precious metals, jewellery, plate; Class 14, Musical instruments; and Class 15, Miscellaneous products.

### INDEXES OF FACTORY PRODUCTION(a): AUSTRALIA(b), 1955-56 AND 1959-60 TO 1965-66

(Base of each index: year 1959-60 = 100)

Class of industry	Proportion of total value added(c) 1959-60	1955-56	1959-60	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66
	per cent								
1. Treatment of non-metalliferous mine and quarry products . .	2.5	72	100	113	114	122	137	149	153
2. Bricks, pottery, glass, etc. . .	2.2	87	100	101	97	104	116	129	124
3. Chemicals, dyes, explosives, paints oils, grease . . . . .	8.6	70	100	104	113	123	136	151	159
4. Industrial metals, machines, con- veyances . . . . .	40.9	75	100	104	102	116	130	143	149
6. Textiles and textile goods (not dress) . . . . .	5.2	76	100	98	100	111	121	128	130
7. Skins and leather (not clothing or footwear) . . . . .	0.9	97	100	94	95	100	99	102	98
8. Clothing (except knitted) . . . .	5.7	93	100	103	105	111	116	121	125
9. Food, drink, and tobacco . . . .	12.5	90	100	103	108	113	118	127	133
10. Sawmills, joinery, boxes, etc. . .	4.7	90	100	100	96	100	107	117	119
11. Furniture of wood, bedding, etc. .	1.6	74	100	97	100	105	112	121	126
12. Paper, stationery, printing, etc. .	7.2	72	100	107	106	117	129	146	151
13. Rubber . . . . .	1.6	80	100	102	99	118	128	134	135
Other (classes 5, 14 and 15)(d) . .	2.5	77	100	102	106	120	139	157	168
Classes 1 to 15 (combined) . . . .	96.1	79	100	103	104	115	126	138	142
16. Heat, light and power . . . . .	3.9	77	100	107	112	127	135	149	158
All classes (combined) . . . . .	100.0	79	100	104	105	115	126	138	143

(a) The indexes in this table are combinations of sub-class indexes of value of output as estimated at constant prices. Indexes for all sub-classes within the respective groupings have been combined according to the value-added weights of 1959-60. (b) Excludes factories in Northern Territory and Australian Capital Territory. (c) Value of production—see pages 1075 and 1097. (d) Combination of Class 5, Precious metals, jewellery, plate; Class 14, Musical instruments; and Class 15, Miscellaneous products.

### Value of land, buildings, plant and machinery

The values recorded in this section are generally the values apportioned in the books of the individual firms after allowance has been made for depreciation, but they include estimates of the capital value of premises and plant rented. Consequently, the totals shown in the table do not represent the actual amount of capital invested in the items specified.

#### FACTORIES: VALUE OF LAND, BUILDINGS, PLANT AND MACHINERY(a) STATES AND TERRITORIES, 1966-67

(\$'000)

Value of—	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Land and buildings	1,785,172	1,254,455	294,662	296,351	170,308	233,983	6,482	22,779	4,064,193
Plant and machinery	1,837,287	1,361,994	601,393	470,959	250,858	169,159	6,825	10,368	4,708,843
<b>Total</b>	<b>3,622,460</b>	<b>2,616,449</b>	<b>896,054</b>	<b>767,310</b>	<b>421,166</b>	<b>403,142</b>	<b>13,308</b>	<b>33,147</b>	<b>8,773,036</b>

(a) At end of year. Includes estimated value of rented premises and plant.

#### Value of land and buildings

#### FACTORIES: VALUE OF LAND AND BUILDINGS(a), STATES AND TERRITORIES 1962-63 TO 1966-67

(\$'000)

Year	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.(b)
1962-63	1,379,533	954,065	193,484	212,963	102,856	163,919	n.a.	n.a.	3,006,820
1963-64	1,454,527	1,020,794	211,520	230,627	118,813	168,403	n.a.	n.a.	3,204,685
1964-65	1,539,169	1,105,712	237,443	256,336	131,739	209,010	5,668	20,583	3,505,859
1965-66	1,658,597	1,176,942	273,559	276,331	151,047	211,923	6,100	21,891	3,776,590
1966-67	1,785,172	1,254,455	294,662	296,351	170,308	233,983	6,482	22,779	4,064,193

(a) Depreciated or book value at 30 June, including estimated value of rented premises. (b) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

#### FACTORIES: VALUE OF LAND AND BUILDINGS(a), BY CLASS OF INDUSTRY AUSTRALIA(b), 1962-63 TO 1966-67

(\$'000)

Class of industry	1962-63	1963-64	1964-65	1965-66	1966-67
1. Treatment of non-metalliferous mine and quarry products	66,009	72,616	76,489	82,525	86,126
2. Bricks, pottery, glass, etc.	63,060	68,470	73,402	79,323	86,770
3. Chemicals, dyes, explosives, paints, oils, grease	201,028	219,212	231,170	247,653	263,840
4. Industrial metals, machines, conveyances	1,102,874	1,188,289	1,320,522	1,419,339	1,535,902
5. Precious metals, jewellery, plate	10,788	11,657	16,597	16,584	17,443
6. Textiles and textile goods (not dress)	122,955	130,425	132,770	137,174	144,923
7. Skins and leather (not clothing or footwear)	21,591	23,322	24,495	25,427	25,478
8. Clothing (except knitted)	126,807	135,959	147,996	156,895	164,304
9. Food, drink and tobacco	370,015	392,089	428,224	465,596	494,778
10. Sawmills, joinery, boxes, etc., wood turning and carving	85,632	90,956	100,165	107,406	115,475
11. Furniture of wood, bedding, etc.	41,083	44,142	49,601	52,594	57,401
12. Paper, stationery, printing, bookbinding, etc.	182,791	198,860	227,332	250,587	265,348
13. Rubber	37,408	50,595	52,322	58,796	64,271
14. Musical instruments	1,593	1,550	1,640	1,730	1,836
15. Miscellaneous products	58,214	64,090	69,571	74,873	85,761
<b>Total, classes 1 to 15</b>	<b>2,491,848</b>	<b>2,692,232</b>	<b>2,952,295</b>	<b>3,176,504</b>	<b>3,409,654</b>
16. Heat, light and power	514,973	512,453	553,565	600,087	654,539
<b>Total, all classes</b>	<b>3,006,820</b>	<b>3,204,685</b>	<b>3,505,859</b>	<b>3,776,590</b>	<b>4,064,193</b>

(a) Depreciated or book value at 30 June, including estimated value of rented premises. (b) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

**FACTORIES: VALUE OF LAND AND BUILDINGS(a), BY CLASS OF INDUSTRY  
STATES AND TERRITORIES, 1966-67**  
(\$'000)

<i>Class of industry(b)</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
1. Treatment non-metal. mine, etc. products . . .	28,380	29,804	7,120	10,317	7,706	1,884	303	612	86,126
2. Bricks, etc. . . . .	46,321	24,490	4,679	5,806	3,575	1,292	(c)	(c)	86,770
3. Chemicals, etc. . . . .	135,239	87,612	10,968	10,604	15,382	3,646	(c)	(c)	263,840
4. Industrial metals, etc. . .	675,521	495,854	102,345	153,568	67,104	32,881	2,684	5,946	1,535,902
5. Jewellery, etc. . . . .	6,029	4,877	665	1,483	724	147	..	3,517	17,443
6. Textiles, etc. . . . .	44,304	87,003	2,725	4,658	1,761	4,473	..	..	144,923
7. Skins, leather, etc. . . .	12,296	9,642	1,003	1,385	1,094	58	..	..	25,478
8. Clothing, etc. . . . .	71,656	69,599	9,011	7,535	4,066	1,761	90	585	164,304
9. Food, drink, etc. . . . .	150,733	173,363	78,697	38,979	30,457	20,001	1,284	1,263	494,778
10. Sawmills, etc. . . . .	43,023	36,541	10,477	11,191	6,810	6,173	281	978	115,475
11. Furniture, etc. . . . .	22,254	19,582	5,964	4,641	3,059	1,423	(c)	(c)	57,401
12. Paper, stationery, etc. . .	110,609	89,569	15,541	17,190	9,786	14,093	29	8,532	265,348
13. Rubber . . . . .	23,755	27,173	6,114	4,166	1,695	787	210	371	64,271
14. Musical instruments . . .	1,051	513	98	96	78	..	..	..	1,836
15. Miscellaneous . . . . .	35,719	41,297	2,212	3,857	2,254	423	..	..	85,761
<i>Total, classes 1 to 15</i> . . .	<i>1,406,889</i>	<i>1,196,919</i>	<i>257,619</i>	<i>275,475</i>	<i>155,552</i>	<i>89,042</i>	<i>5,379</i>	<i>22,779</i>	<i>3,409,654</i>
16. Heat, light and power . .	378,283	57,536	37,043	20,876	14,757	144,941	1,103	..	654,539
<i>Total, all classes</i> . . . . .	<i>1,785,172</i>	<i>1,254,455</i>	<i>294,662</i>	<i>296,351</i>	<i>170,308</i>	<i>233,983</i>	<i>6,482</i>	<i>22,779</i>	<i>4,064,193</i>

(a) Depreciated or book value at 30 June 1967, including estimated value of rented premises. (b) For full titles see table below. (c) Not available for publication.

**Value of plant and machinery**

**FACTORIES: VALUE OF PLANT AND MACHINERY(a), STATES AND TERRITORIES  
1962-63 TO 1966-67**  
(\$'000)

<i>Year</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.(b)</i>
1962-63 . . . . .	1,438,382	1,003,390	280,585	293,608	132,635	137,933	n.a.	n.a.	3,286,533
1963-64 . . . . .	1,504,195	1,040,724	308,307	330,281	155,514	141,651	n.a.	n.a.	3,480,673
1964-65 . . . . .	1,564,408	1,127,948	350,318	388,932	163,526	155,336	6,103	9,682	3,766,253
1965-66 . . . . .	1,672,719	1,209,046	477,459	423,458	197,210	158,672	5,953	10,134	4,154,652
1966-67 . . . . .	1,837,287	1,361,994	601,393	470,959	250,858	169,159	6,825	10,368	4,708,843

(a) Depreciated or book value at 30 June, including estimated value of rented plant and machinery. (b) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

**FACTORIES: VALUE OF PLANT AND MACHINERY(a), BY CLASS OF INDUSTRY  
AUSTRALIA(b), 1962-63 TO 1966-67**  
(\$'000)

<i>Class of industry</i>	<i>1962-63</i>	<i>1963-64</i>	<i>1964-65</i>	<i>1965-66</i>	<i>1966-67</i>
1. Treatment of non-metalliferous mine and quarry products . . . . .	153,657	155,387	171,063	197,365	206,403
2. Bricks, pottery, glass, etc. . . . .	63,409	70,476	76,841	84,789	90,183
3. Chemicals, dyes, explosives, paints, oils, grease . . . . .	424,982	459,429	455,567	521,872	610,518
4. Industrial metals, machines, conveyances . . . . .	1,100,595	1,187,576	1,311,045	1,418,984	1,619,467
5. Precious metals, jewellery, plate . . . . .	3,018	3,454	7,060	7,197	7,632
6. Textiles and textile goods (not dress) . . . . .	104,031	106,160	113,469	121,398	125,448
7. Skins and leather (not clothing or footwear) . . . . .	9,215	9,472	10,206	10,215	10,357
8. Clothing (except knitted) . . . . .	43,006	46,489	51,361	53,749	57,221
9. Food, drink and tobacco . . . . .	362,541	383,922	438,152	499,512	534,232
10. Sawmills, joinery, boxes, etc., wood turning and carving . . . . .	68,924	71,548	75,441	78,321	85,107
11. Furniture of wood, bedding, etc. . . . .	9,964	11,137	12,020	12,902	13,450
12. Paper, stationery, printing, bookbinding, etc. . . . .	199,086	209,705	231,722	256,681	278,596
13. Rubber . . . . .	28,556	36,532	41,208	54,194	60,281
14. Musical instruments . . . . .	643	603	581	658	681
15. Miscellaneous products . . . . .	42,278	46,137	54,444	59,571	64,713
<i>Total, classes 1 to 15</i> . . . . .	<i>2,613,905</i>	<i>2,798,027</i>	<i>3,050,180</i>	<i>3,377,406</i>	<i>3,764,288</i>
16. Heat, light and power . . . . .	672,628	682,646	716,072	777,245	944,555
<i>Total, all classes</i> . . . . .	<i>3,286,533</i>	<i>3,480,673</i>	<i>3,766,253</i>	<i>4,154,652</i>	<i>4,708,843</i>

(a) Depreciated or book value at 30 June, including estimated value of rented plant and machinery. (b) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

**FACTORIES: VALUE OF PLANT AND MACHINERY(a), BY CLASS OF INDUSTRY  
STATES AND TERRITORIES, 1966-67**  
(\$'000)

<i>Class of industry(b)</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
1. Treatment non-metal. mine, etc., products . . .	94,727	58,136	16,372	18,021	9,215	8,554	361	1,018	206,403
2. Bricks, etc. . . . .	43,110	27,111	6,391	7,569	3,881	885	(c)	(c)	90,183
3. Chemicals, etc. . . . .	272,581	192,686	60,851	34,565	41,123	7,485	(c)	(c)	610,518
4. Industrial metals, etc. . .	733,485	363,346	162,758	230,776	81,544	45,789	1,017	752	1,619,467
5. Jewellery, etc. . . . .	1,715	1,491	242	480	169	38	..	3,497	7,632
6. Textiles, etc. . . . .	39,220	70,230	2,489	4,244	1,197	8,067	..	..	125,448
7. Skins, leather, etc. . . .	4,038	3,495	954	1,313	521	36	..	..	10,357
8. Clothing, etc. . . . .	21,751	25,298	3,965	3,789	1,578	616	32	193	57,221
9. Food, drink, etc. . . . .	123,817	152,184	184,889	30,423	23,439	18,025	836	618	534,232
10. Sawmills, etc. . . . .	29,507	19,219	11,452	9,610	7,457	7,503	175	184	85,107
11. Furniture, etc. . . . .	5,603	3,531	1,802	1,326	812	339	(c)	(c)	13,450
12. Paper, stationery, etc. . .	100,287	86,258	20,397	31,457	14,467	22,951	85	2,692	278,596
13. Rubber . . . . .	23,181	26,759	2,579	5,902	1,400	255	80	126	60,281
14. Musical instruments . . .	471	183	12	9	7	..	..	..	681
15. Miscellaneous . . . . .	23,906	34,664	1,994	2,549	1,233	367	..	..	64,713
<i>Total, classes 1 to 15</i>	<i>1,517,398</i>	<i>1,064,590</i>	<i>477,149</i>	<i>382,033</i>	<i>188,043</i>	<i>120,910</i>	<i>3,797</i>	<i>10,368</i>	<i>3,764,288</i>
16. Heat, light and power	319,889	297,404	124,244	88,926	62,815	48,248	3,028	..	944,555
<b>Total, all classes</b>	<b>1,837,287</b>	<b>1,361,994</b>	<b>601,393</b>	<b>470,959</b>	<b>250,858</b>	<b>169,159</b>	<b>6,825</b>	<b>10,368</b>	<b>4,708,843</b>

(a) Depreciated or book value at 30 June 1967, including estimated value of rented plant and machinery. (b) For full titles, see table on page 1101. (c) Not available for publication.

**Depreciation of land and buildings and plant and machinery**

The following table shows, by class of industry, the allowance made for the depreciation of land and buildings and plant and machinery used in connection with the manufacturing industries in each State and Territory as recorded by factory proprietors at the annual census of factory production.

**FACTORIES: ALLOWANCE FOR DEPRECIATION OF LAND AND BUILDINGS AND  
PLANT AND MACHINERY, BY CLASS OF INDUSTRY  
STATES AND TERRITORIES, 1966-67**  
(\$'000)

<i>Class of industry(a)</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
1. Treatment non-metal. mine, etc., products . . .	11,625	9,740	1,855	1,929	1,147	389	50	75	26,810
2. Bricks, etc. . . . .	4,282	3,337	676	977	508	178	(c)	(c)	10,058
3. Chemicals, etc. . . . .	33,073	27,950	4,908	4,196	5,921	1,278	(c)	(c)	77,391
4. Industrial metals, etc. . .	86,489	48,534	7,851	28,608	5,489	3,310	96	74	180,450
5. Jewellery, etc. . . . .	176	156	23	50	20	2	..	200	627
6. Textiles, etc. . . . .	5,505	10,770	464	696	150	939	..	..	18,525
7. Skins, leather, etc. . . .	480	374	97	173	75	3	..	..	1,202
8. Clothing, etc. . . . .	2,245	2,251	308	252	172	69	3	20	5,319
9. Food, drink, etc. . . . .	16,609	19,577	16,222	3,583	3,476	2,178	95	90	61,829
10. Sawmills, etc. . . . .	3,644	2,230	1,346	1,087	819	1,049	11	32	10,217
11. Furniture, etc. . . . .	626	388	201	167	82	33	(c)	(c)	1,504
12. Paper, stationery, etc. . .	11,578	11,423	2,457	2,092	1,203	3,752	12	390	32,908
13. Rubber . . . . .	3,587	3,613	497	669	290	60	13	8	8,737
14. Musical instruments . . .	92	13	1	1	(b)	..	..	..	108
15. Miscellaneous . . . . .	3,657	5,414	251	423	146	10	..	..	9,902
<i>Total, classes 1 to 15</i>	<i>183,668</i>	<i>145,770</i>	<i>37,156</i>	<i>44,903</i>	<i>19,499</i>	<i>13,251</i>	<i>341</i>	<i>999</i>	<i>445,587</i>
16. Heat, light and power	28,038	9,925	7,504	4,847	4,242	2,159	285	..	56,999
<b>Grand total</b>	<b>211,705</b>	<b>155,695</b>	<b>44,660</b>	<b>49,750</b>	<b>23,741</b>	<b>15,410</b>	<b>625</b>	<b>999</b>	<b>502,586</b>

(a) For full titles see table on page 1101. (b) Less than \$500. (c) Not available for publication.

**Land and buildings, plant and machinery—values, additions and replacements, depreciation**

The following table summarises the recorded totals for Australia and also includes particulars of additions and replacements.

**FACTORIES: VALUE OF LAND AND BUILDINGS, PLANT AND MACHINERY  
AUSTRALIA(a), 1962-63 TO 1966-67**

(\$'000)

Year	Book values at 30 June (b)		Additions and replace- ments during year(b)		Depreciation allowed during year	
	Land and buildings	Plant and machinery	Land and buildings	Plant and machinery	Land and buildings	Plant and machinery
1962-63 . . .	3,006,820	3,286,533	191,797	566,066	38,796	304,154
1963-64 . . .	3,204,685	3,480,673	192,419	564,958	39,711	336,929
1964-65 . . .	3,505,859	3,766,253	249,779	666,490	46,095	366,702
1965-66 . . .	3,776,590	4,154,652	272,052	773,322	51,813	407,388
1966-67 . . .	4,064,193	4,708,843	287,951	1,032,889	52,440	450,146

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory. (b) Includes estimated value of rented premises, plant and machinery.

**Principal factory products**

The factory production of certain commodities is shown in the monthly and quarterly publications of this Bureau, in the series *Manufacturing Industries*, and in the bulletin *Manufacturing Commodities*, formerly *Secondary Industries, Part II.—Materials Used and Articles Produced in Factories*.

The following table shows the total recorded production of some of the principal articles (i.e. of those for which production can be represented in quantitative terms) manufactured in Australia. A more complete list, together with values, where available, is published in the aforementioned bulletin and in the mimeographed statement *Principal Factory Products*. Because of revisions, figures for some items for the year 1966-67 in the following table may differ from corresponding figures in earlier chapters.

**QUANTITIES OF PRINCIPAL ARTICLES PRODUCED IN FACTORIES: AUSTRALIA(a)  
1963-64 TO 1966-67**

Article	1963-64	1964-65	1965-66	1966-67
<b>Acid (in terms of 100%)—</b>				
Hydrochloric . . . . . tons	4,304	4,491	5,447	6,765
Nitric . . . . . „	19,782	24,817	25,522	31,009
Sulphuric . . . . . '000 tons	1,447	1,610	1,752	1,998
Aerated and carbonated waters . . . . . '000 gal	93,304	99,062	105,381	112,937
<b>Air conditioning equipment—</b>				
Room air conditioners (refrigerated) . . . . . No.	4,511	6,027	18,217	22,217
Room air coolers (evaporative coolers) . . . . . „	1,896	2,886	6,000	10,414
Package unit air conditioners . . . . . „	1,830	2,304	2,047	3,491
Asbestos cement building sheets (finished) . . . . . '000 sq yd	29,778	32,477	32,364	32,609
<b>Bags, leather, fibre, etc.—</b>				
<b>Handbags—</b>				
Leather . . . . . No.	509,569	529,133	534,121	501,762
Plastic . . . . . '000	2,065	2,392	2,053	1,938
Other . . . . . No.	278,359	410,190	393,037	392,798
Hessian and calico bags . . . . . '000 doz	3,000	3,095	3,601	4,835
Suitcases, kitbags and trunks . . . . . '000	1,567	1,613	1,657	1,660
All other(b) . . . . . „	2,037	2,080	1,985	2,048
<b>Bath heaters—</b>				
Electric . . . . . No.	14,498	14,087	13,524	11,701
Gas . . . . . „	11,943	11,348	9,971	9,026
Solid fuel . . . . . „	17,606	16,120	13,963	12,446

(a) Excludes Northern Territory and Australian Capital Territory.

(b) Excludes canvas water bags.



**QUANTITIES OF PRINCIPAL ARTICLES PRODUCED IN FACTORIES**  
**AUSTRALIA(a), 1963-64 TO 1966-67—continued**

<i>Article</i>		<i>1963-64</i>	<i>1964-65</i>	<i>1965-66</i>	<i>1966-67</i>
Bathing suits . . . . .	doz	205,945	241,203	270,698	301,723
Baths—					
C.I.P.E. . . . .	No.	77,868	84,852	85,447	74,489
Other . . . . .	„	53,292	67,523	67,068	79,988
Batteries, wet cell type—					
Auto (S.L.I.) 6 volts . . . . .	'000	579	503	470	444
„ „ 12 volts . . . . .	„	1,192	1,257	1,312	1,274
Radio, homelighter, fencer . . . . .	No. of 2 volt cells	190,608	158,381	136,173	110,518
Traction, plant and other . . . . .	„	56,359	63,717	78,066	99,537
Beer (excluding waste beer) . . . . .	'000 gal	262,344	274,895	279,503	293,714
Biscuits . . . . .	'000 lb	197,970	208,945	223,678	230,118
Blankets . . . . .	'000	2,176	2,079	1,701	1,724
Boots and shoes (see Footwear)					
Bran (wheaten) . . . . .	tons (2,000 lb)	252,746	228,746	206,127	202,183
Brandy . . . . .	'000 proof gal	1,220	1,400	1,371	791
Brassieres . . . . .	doz	681,846	673,551	719,739	792,574
Bread (2 lb loaf equivalent) . . . . .	'000	779,458	781,317	787,841	803,639
Breakfast food, cereal (ready to eat) . . . . .	cwt	833,726	878,533	904,040	900,231
Bricks, clay . . . . .	mill.	1,238	1,353	1,360	1,361
Briquettes, brown coal . . . . .	'000 tons	1,883	1,893	1,883	1,820
Butter . . . . .	'000 lb	454,292	454,878	460,433	489,217
Cardigans, sweaters, etc. . . . .	'000 doz	1,327	1,418	1,432	1,436
Cement, Portland . . . . .	'000 tons	3,320	3,746	3,688	3,661
Cheese (green weight) . . . . .	'000 lb	130,405	138,008	131,300	153,834
Cigarettes and cigars . . . . .	„	46,040	49,544	47,543	50,384
Cloth (including mixtures)—					
Cotton(b) . . . . .	'000 sq yd	53,354	56,667	55,701	57,573
Rayon and acetate . . . . .	„	26,798	32,016	32,985	35,692
Synthetic (non-cellulosic) . . . . .	„	19,916	22,491	20,805	23,530
Wool . . . . .	„	34,827	35,300	32,588	30,635
Coke—					
Metallurgical . . . . .	'000 tons	2,915	3,118	3,179	3,365
Other . . . . .	tons	693,361	632,501	599,301	551,326
Concrete, ready mixed . . . . .	'000 cu yd	5,410	6,060	6,603	7,000
Confectionery—					
Chocolate . . . . .	'000 lb	92,714	95,634	104,312	106,822
Other . . . . .	„	100,482	106,274	107,856	111,496
Copper, refined(c) . . . . .	tons	89,222	53,441	91,588	74,284
Coppers (wash boilers)—					
Electric . . . . .	No.	10,412	11,051	9,113	8,011
Gas . . . . .	„	8,255	7,503	5,740	4,949
Inserts . . . . .	„	19,540	18,213	19,074	9,047
Cordials and syrups . . . . .	'000 gal	6,888	7,295	9,144	9,168
Corsets and corselets . . . . .	doz	303,538	342,336	380,835	393,231
Cycles, (complete) . . . . .	No.	62,326	67,874	63,641	69,365
Dentifrices (toothpaste) . . . . .	'000 lb	8,800	9,799	9,774	10,773
Electric generators—					
Non-automatic—Alternating current . . . . .	No.	1,011	1,480	1,676	1,763
Direct current . . . . .	„	1,339	1,139	1,022	708
Electricity . . . . .	mill. kWh	32,519	35,671	38,279	41,587
Electrodes for manual welding . . . . .	'000 lb	44,147	47,654	43,405	45,656
Engines, internal combustion(d) . . . . .	'000	290	292	224	270
Essences, flavouring—					
Domestic . . . . .	gal	127,915	130,532	134,011	100,460
Industrial . . . . .	„	585,015	587,753	599,426	733,289
Face powder . . . . .	lb	282,122	310,586	285,870	287,751
Fans, electric . . . . .	No.	156,836	204,285	223,409	321,600
Fish, canned (including fish loaf) . . . . .	'000 lb	11,149	10,914	11,853	13,724

(a) Excludes Northern Territory and Australian Capital Territory. (b) Excludes travelling and tyre-cord fabric.  
(c) Primary origin only. (d) Petrol and diesel. Excludes car, motor cycle, truck, tractor, aero, and marine engines.

QUANTITIES OF PRINCIPAL ARTICLES PRODUCED IN FACTORIES  
AUSTRALIA(a), 1963-64 TO 1966-67—*continued*

Article		1963-64	1964-65	1965-66	1966-67
Floorboards—					
Australian timber . . . . .	'000 super ft	146,148	160,165	162,710	154,286
Imported timber . . . . .	"	665	798	721	324
Floor coverings—					
Soft . . . . .	'000 sq yd	10,297	11,542	11,692	12,624
Smooth surface . . . . .	"	8,191	11,869	14,041	12,150
Underfelts, underlays, etc. . . . .	"	9,662	11,158	11,067	n.a.
Floor polishers, electric . . . . .	No.	92,108	105,077	89,193	88,840
Flour—					
Self-raising . . . . .	'000 cwt	967	902	864	832
Wheaten(b) . . . . .	'000 tons (2,000 lb)	1,672	1,553	1,414	1,392
Footwear (not rubber)—					
Boots, shoes and sandals . . . . .	'000 pairs	28,241	28,607	27,963	29,237
Slippers . . . . .	"	11,388	12,211	11,594	12,228
Fruit juices, natural—					
Single strength . . . . .	'000 gal	8,088	10,106	10,727	13,674
Concentrated(c) . . . . .	"	644	753	815	1,139
Gas (town) . . . . .	mill. cubic ft	53,209	55,260	55,742	56,743
Gloves—					
Dress . . . . .	doz pairs	28,057	28,299	26,163	27,761
Work—					
Sewn(d) . . . . .	'000 doz pairs	379	407	382	358
Dipped . . . . .	"	1,100	1,195	1,309	1,343
Glucose . . . . .	'000 lb	48,638	57,444	60,779	65,422
Golf clubs . . . . .	doz	29,800	28,635	33,145	40,680
Handkerchiefs—					
Men's . . . . .	'000 doz	1,717	2,089	1,901	1,721
Women's . . . . .	"	1,539	1,603	1,507	1,333
Heaters, room—					
Solid fuel . . . . .	No.	38,557	47,883	37,967	31,606
Radiators and electric fires . . . . .	"	579,446	749,889	706,943	600,294
Gas fires and space heaters, domestic . . . . .	"	26,253	30,858	31,186	38,764
Ice . . . . .	tons	221,182	205,545	198,701	192,119
Ice cream . . . . .	'000 gal	22,403	25,019	30,026	34,974
Infants' and invalids' milk-based health beverages(e) . . . . .	'000 lb	44,105	45,179	45,280	49,348
Ink, printing—					
News . . . . .	"	14,673	14,948	14,900	16,190
Other . . . . .	"	13,838	14,545	14,972	15,783
Iron and steel—					
Pig iron . . . . .	'000 tons	3,772	3,936	4,380	4,893
Steel ingots, open hearth and electric . . . . .	"	4,773	5,131	5,561	6,114
Blooms and slabs . . . . .	"	4,068	4,503	4,823	4,978
Irons, electric (hand, domestic) . . . . .	No.	363,617	430,326	450,230	507,882
Jams (including conserves, jellies, etc.) . . . . .	'000 lb	90,462	89,362	97,149	90,761
Lard . . . . .	"	6,526	5,356	5,853	6,670
Lawn mowers—					
Petrol, rotary . . . . .	No.	199,204	201,125	176,396	219,826
Other types(f) . . . . .	"	16,486	10,799	11,403	11,635
Lead refined(g) . . . . .	tons	217,292	199,032	188,197	192,346
Leather—					
Dressed or finished—					
Chrome tanned (including retanned) . . . . .	'000 sq ft	87,474	85,900	83,175	71,850
Vegetable tanned, by weight . . . . .	'000 lb	21,010	19,865	15,326	12,943
Vegetable tanned, by measurement . . . . .	'000 sq ft	5,423	4,036	3,956	3,784
Tanned or dressed skins with hair or wool retained . . . . .	doz	55,973	88,592	117,778	82,018

(a) Excludes Northern Territory and Australian Capital Territory. (b) Includes wheatmeal for baking and sharps.  
(c) Excludes grape must. (d) Excludes fabric liners for dipped gloves but includes moulded or heat sealed work gloves.  
(e) Includes malted milk and milk sugar (lactose). (f) Petrol cylinder, electric and hand. (g) Includes lead content of lead only from primary sources, but excludes lead-silver bullion produced for export.

**QUANTITIES OF PRINCIPAL ARTICLES PRODUCED IN FACTORIES**  
**AUSTRALIA(a), 1963-64 TO 1966-67—continued**

<i>Article</i>		<i>1963-64</i>	<i>1964-65</i>	<i>1965-66</i>	<i>1966-67</i>
<b>Lime—</b>					
Crushed . . . . .	tons	180,694	200,040	219,912	249,807
Hydrated . . . . .	"	81,508	89,840	96,566	97,544
Quick . . . . .	"	110,429	133,957	135,311	155,173
Lipstick . . . . .	lb	84,512	65,458	70,104	64,739
<b>Malt (excluding extract) . . . . .</b>	'000 bus	12,127	12,328	13,444	14,239
<b>Margarine—</b>					
Table . . . . .	'000 lb	n.a.	50,937	53,698	48,356
Other . . . . .	"	73,025	69,060	67,884	76,138
<b>Mattresses—</b>					
Box spring . . . . .	No.	46,580	64,699	80,319	100,362
Inner spring . . . . .	"	689,114	727,248	705,702	682,587
Woven wire, link mesh and spring . . . . .	"	462,768	504,377	529,019	584,444
Other . . . . .	"	279,924	294,074	273,040	302,882
<b>Meat, canned(b) . . . . .</b>	'000 lb	99,902	115,578	113,051	108,994
<b>Meters—</b>					
Electric (domestic)(c) . . . . .	No.	254,884	302,532	302,511	296,571
Gas . . . . .	"	53,551	50,010	41,443	37,884
Water . . . . .	"	127,689	127,316	141,042	146,915
<b>Milk, condensed, concentrated and evaporated—</b>					
Full cream, sweetened . . . . .	'000 lb	95,744	102,479	73,985	61,510
Full cream, unsweetened . . . . .	"	71,964	89,390	88,482	91,700
Skim . . . . .	"	25,712	21,936	22,047	24,974
<b>Milk powder—</b>					
Full cream . . . . .	"	42,178	43,669	45,060	48,018
Skim . . . . .	"	92,129	107,823	112,342	188,584
Buttermilk or mixed skim and buttermilk . . . . .	"	21,710	20,885	25,900	32,518
<b>Motors, electric . . . . .</b>	'000	2,223	2,585	2,510	2,667
<b>Motor vehicles, finished—</b>					
Cars . . . . .	No.	240,429	250,477	235,326	238,720
Station wagons . . . . .	"	80,900	83,992	58,334	57,534
Utilities . . . . .	"	28,663	25,661	33,038	33,909
Panel vans . . . . .	"	11,890	12,972	14,427	14,013
Truck and truck-type vehicles . . . . .	"	1,273	1,220	766	768
<b>Motor vehicles, partly finished—</b>					
Cars, station wagons, utilities, vans . . . . .	"	1,935	1,825	1,666	1,381
Trucks and truck-type vehicles . . . . .	"	23,633	27,029	20,874	21,746
<b>Motor vehicle safety belts . . . . .</b>	"	329,780	437,189	426,847	801,448
<b>Nails . . . . .</b>	tons	24,987	26,802	23,414	23,830
<b>Neckties . . . . .</b>	doz	467,557	494,107	496,989	490,845
<b>Oatmeal and rolled oats—</b>					
Kilned, for porridge . . . . .	cwt	294,515	312,143	307,028	335,440
Unkilned . . . . .	"	525,930	544,018	404,360	314,053
<b>Oils, vegetable, crude . . . . .</b>	'000 lb	79,402	87,676	87,898	84,519
<b>Paints, etc.—</b>					
Paints, (not water) and enamels ready for use . . . . .	'000 gal	15,491	16,260	15,188	16,037
in paste form . . . . .	'000 lb	3,191	2,926	3,158	2,589
Lacquers (nitro-cellulose) . . . . .	'000 gal	1,525	1,563	1,437	1,427
Tinting colours, packaged ready for sale . . . . .	"	65	57	54	57
Stains and clear varnishes packaged ready for sale . . . . .	"	888	899	845	913
<b>Water paints—</b>					
Emulsion type . . . . .	"	3,348	3,710	4,321	4,193
In powder form . . . . .	'000 lb	2,423	2,269	1,945	1,935
Thinners . . . . .	'000 gal	3,908	4,163	4,018	4,031
<b>Paper—</b>					
Newsprint . . . . .	tons	92,039	93,142	93,211	97,255
Other . . . . .	"	295,651	341,642	351,303	389,223

(a) Excludes Northern Territory and Australian Capital Territory.  
 basis—electricity consumption meters from 1 July 1965.

(b) Excludes poultry and baby food.

(c) New

QUANTITIES OF PRINCIPAL ARTICLES PRODUCED IN FACTORIES  
AUSTRALIA(a), 1963-64 TO 1966-67—continued

Article		1963-64	1964-65	1965-66	1966-67
Paperboard . . . . .	tons	258,374	296,387	317,553	329,496
Perambulators, pushers and strollers . . . . .	No.	147,338	135,621	132,499	133,018
Petrol—					
For blending and refining . . . . .	million gal	45	52	45	1,766
Other (all types) . . . . .	„	1,365	1,495	1,609	
Plaster of paris . . . . .	tons	260,092	277,445	265,553	261,054
Plaster sheets(b) . . . . .	'000 sq yd	15,922	29,937	29,917	30,601
Plywood, $\frac{3}{8}$ inch basis . . . . .	'000 sq ft	216,281	217,059	187,258	200,451
Pollard . . . . .	tons (2,000 lb)	349,095	326,418	303,162	284,628
Preserves—					
Fruit—					
Canned or bottled . . . . .	'000 lb	471,289	513,713	579,619	611,552
Pulp and puree—single strength . . . . .	'000 cwt	83	86	62	51
Vegetables—					
Canned or bottled . . . . .	'000 lb	144,070	152,117	180,098	194,834
Quick frozen . . . . .	„	57,413	77,254	93,885	118,173
Pyjamas—					
Men's and boys' (suits only) . . . . .	doz	422,731	430,589	480,396	422,640
Women's and girls' (incl. nightdresses) . . . . .	„	675,940	711,139	726,711	722,519
Racquet frames (all types) . . . . .	„	14,466	16,190	15,308	16,866
Radio receiving sets (including radiograms) . . . . .	No.	469,025	455,970	392,526	445,766
Records (phonograph)—					
Single play (78 and 45 rpm) . . . . .	'000	3,885	4,198	4,295	4,727
Extended play . . . . .	„	1,121	1,474	1,486	2,103
Long play . . . . .	„	4,078	4,459	5,086	6,714
Refrigerators, domestic . . . . .	No.	203,391	227,728	213,870	232,200
Resins, plastic and synthetic, for all purposes . . . . .	'000 cwt	1,974	2,123	2,433	2,854
Rice, polished, unpolished and broken . . . . .	„	1,596	1,969	2,080	2,373
Ropes and cables (excluding wire) . . . . .	cwt	147,207	140,770	133,355	130,845
Rugs . . . . .	'000	193	201	175	191
Sauce . . . . .	'000 pints	37,385	38,271	46,111	42,213
Semolina . . . . .	tons (2,000 lb)	13,213	16,532	18,744	20,777
Shirts (men's and boys') . . . . .	'000 doz	1,965	2,146	2,266	2,214
Sink heaters, electric . . . . .	No.	11,320	12,155	10,646	10,174
Sinks, pressed steel . . . . .	„	193,453	219,371	220,037	n.a.
Soap, for personal toilet use . . . . .	'000 cwt	428	465	478	483
Socks and stockings—					
Men's and youths' . . . . .	'000 doz pairs	1,628	1,707	1,690	1,815
Women's and maids' . . . . .	„	3,992	4,440	4,563	4,971
Children's and infants' . . . . .	„	937	1,025	903	1,045
Soup—					
Canned . . . . .	'000 pints	55,124	63,077	72,032	78,935
Dry-mix . . . . .	'000 lb	6,805	7,291	8,293	8,837
Starch . . . . .	„	102,132	132,271	145,536	153,457
Stearine (stearic acid) . . . . .	„	9,877	11,538	9,647	10,722
Steel, constructional, fabricated . . . . .	tons	456,045	509,121	542,267	567,342
Stoves, ovens and ranges, domestic cooking—					
Electric(c) . . . . .	No.	166,311	180,541	180,532	192,640
Gas(d) . . . . .	„	77,380	84,503	71,265	75,482
Solid fuel . . . . .	„	28,076	23,612	20,859	18,785
Sugar—					
Raw (94 net titre) . . . . .	'000 tons	1,724	1,950	1,953	2,343
Refined . . . . .	„	576	592	609	613
Sulphate of ammonia . . . . .	tons	85,488	108,275	118,387	111,317
Superphosphate . . . . .	'000 tons	(e) 3,347	(e) 3,703	(f) 4,265	(f) 4,430
Talcum powder . . . . .	'000 lb	7,382	7,835	6,860	7,878

(a) Excludes Northern Territory and Australian Capital Territory. (b) Figures prior to 1964-65 refer only to the production of fibrous plaster sheers. (c) Includes wall ovens but excludes cooking tops and portable units. (d) Up-right and elevated (with oven) including wall ovens, but excluding hotplates, stovettes, etc. (e) Source: Department of Primary Industry. Figures from June 1964 to June 1965 include double and triple superphosphate and ammonium phosphate expressed in terms of single phosphate, i.e. 22%  $P_2O_5$  equivalent. (f) From 1 July 1965 excludes ammonium phosphate.

**QUANTITIES OF PRINCIPAL ARTICLES PRODUCED IN FACTORIES**  
**AUSTRALIA(a), 1963-64 TO 1966-67—continued**

<i>Article</i>		<i>1963-64</i>	<i>1964-65</i>	<i>1965-66</i>	<i>1966-67</i>
<b>Tallow (including dripping), rendering—</b>					
Edible . . . . .	'000 lb	172,933	161,967	148,628	150,789
Inedible . . . . .	"	357,507	391,152	343,906	361,588
Television sets . . . . .	No.	270,235	308,737	276,586	254,811
Television picture tubes . . . . .	"	356,990	400,675	361,534	368,517
<b>Tiles, roofing—</b>					
Cement . . . . .	'000	76,543	87,744	82,921	88,509
Terracotta . . . . .	"	53,785	52,984	51,258	47,290
<b>Timber—</b>					
From native logs—					
Hardwood, etc. . . . .	'000 super ft	1,157,176	1,203,705	1,185,831	1,151,369
Softwood . . . . .	"	330,014	329,509	331,708	317,591
From imported logs . . . . .	"	32,967	36,346	27,892	25,771
Toasters, electric (domestic) . . . . .	No.	305,248	321,042	329,626	366,972
Tobacco . . . . .	'000 lb	10,046	8,993	8,407	7,595
Tomato juice . . . . .	'000 gal	1,131	987	1,927	2,627
" paste and puree . . . . .	'000 pints	13,451	16,446	22,428	22,776
" pulp . . . . .	'000 cwt	522	168	133	181
Towels . . . . .	'000 doz	826	895	960	992
Toilet cisterns . . . . .	No.	n.a.	359,944	340,895	352,791
Transformers, chokes and ballasts, for distribution of power and light, etc. . . . .	"	21,592	22,308	19,361	16,823
Tubes, pneumatic(b) . . . . .	'000	3,409	3,651	3,823	4,051
Twine (all types) . . . . .	cwt	184,356	195,461	174,646	248,825
Tyres, pneumatic(b) . . . . .	'000	5,097	5,530	5,613	5,806
<b>Umbrellas, street and general purpose</b> . . . . .	No.	771,597	764,510	716,987	825,032
Underwear (men's, women's, children's) . . . . .	'000 doz	6,017	6,231	6,305	6,179
<b>Vacuum cleaners (domestic)</b> . . . . .	No.	140,708	181,326	181,691	156,307
<b>Wash basins—</b>					
C.I.P.E. . . . .	"	72,744	71,430	64,126	58,040
Earthenware . . . . .	"	113,905	149,257	140,652	146,546
Pressed steel . . . . .	"	45,289	56,126	62,852	78,893
Washing machines, household, electric . . . . .	"	222,070	264,001	240,189	231,601
<b>Weatherboards—</b>					
Australian timber . . . . .	'000 super ft	20,755	20,599	20,307	19,025
Imported timber . . . . .	"	2,740	3,094	2,583	1,857
Wheatmeal for stock feed . . . . .	tons (2,000 lb)	118,347	207,696	284,474	228,872
Wheelbarrows (metal) . . . . .	No.	104,464	111,366	116,838	123,291
<b>Wine, beverage—</b>					
Fortified . . . . .	'000 gal	10,825	11,137	9,678	12,401
Unfortified . . . . .	"	7,874	8,697	8,663	12,020
Wood pulp . . . . .	tons	286,008	317,435	330,625	357,665
Wool, scoured or carbonised . . . . .	'000 lb	160,906	158,832	156,113	154,119
Wool tops, pure . . . . .	"	51,140	45,835	45,798	44,535
<b>Yarn (including mixtures)—</b>					
Cotton . . . . .	"	55,387	59,092	59,021	60,792
Woollen . . . . .	"	28,380	30,647	30,534	32,641
Wool worsted . . . . .	"	23,826	23,532	21,519	18,780
Rayon and acetate, spun . . . . .	"	4,583	6,218	5,970	6,771
Synthetic (non-cellulosic) fibres spun . . . . .	"	5,083	6,387	6,720	8,843
<b>Zinc, refined(c)</b> . . . . .	tons	186,389	189,395	196,534	197,030

(a) Excludes Northern Territory and Australian Capital Territory.  
 origin only—includes small quantities of zinc dust.

(b) Excludes bicycle and 'other'.

(c) Primary

**Individual industries**

Particulars on pages 1078-1102 afford a general view of the magnitude of industries in the sixteen groups adopted by the Conference of Statisticians in 1930. While it is not possible within the limits of this publication to give a detailed account of each industry, particular industries dealt with hereunder are of special importance because of the employment which they provide for labour or capital, or for other features of special interest. Details for individual States are available from publications issued by the Deputy Commonwealth Statistician in each State and, for selected industries, in the Central Office series *Manufacturing Industries*.

**PORTLAND CEMENT, ASBESTOS CEMENT SHEETS, ETC., AND OTHER CEMENT  
GOODS: AUSTRALIA, 1966-67**

	Portland cement	Asbestos cement sheets and mouldings	Other cement goods	Total
Number of factories . . . . .	17	15	770	802
Number of persons employed . . . . .	3,471	2,980	9,032	15,483
Salaries and wages paid . . . . . \$'000	11,058	9,177	27,497	47,732
Value of power, fuel, etc., used . . . . .	12,095	1,224	1,718	15,037
Value of materials used . . . . .	21,426	15,188	99,357	135,971
Value of production . . . . .	36,162	20,557	62,809	119,527
Total value of output . . . . .	69,682	36,969	163,884	270,535
Value of land and buildings . . . . .	16,751	9,460	22,860	49,071
Value of plant and machinery . . . . .	81,739	9,815	25,916	117,469
Horsepower of engines ordinarily in use . . . . .	161,930	27,720	45,959	235,609

**PORTLAND CEMENT, ASBESTOS CEMENT SHEETS, ETC., AND OTHER CEMENT  
GOODS: AUSTRALIA(a), 1962-63 TO 1966-67**

	1962-63	1963-64	1964-65	1965-66	1966-67
Number of factories . . . . .	640	669	702	761	802
Number of persons employed . . . . .	13,601	14,230	15,070	15,327	15,483
Salaries and wages paid . . . . . \$'000	33,202	37,050	42,339	44,541	47,732
Value of power, fuel, etc., used . . . . .	12,864	13,689	15,631	15,156	15,037
Value of materials used . . . . .	89,399	103,035	120,439	129,821	135,971
Value of production . . . . .	79,274	91,570	103,887	106,460	119,527
Total value of output . . . . .	181,537	208,294	239,957	251,437	270,535
Value of land and buildings . . . . .	34,019	37,465	40,555	45,648	49,071
Value of plant and machinery . . . . .	74,230	76,667	87,093	103,212	117,469
Horsepower of engines ordinarily in use . . . . .	162,239	170,763	206,585	218,387	235,609

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

**BRICKS, TILES, POTTERY AND EARTHENWARE: AUSTRALIA(a), 1962-63 TO 1966-67**

	1962-63	1963-64	1964-65	1965-66	1966-67
Number of factories . . . . .	419	412	406	393	388
Number of persons employed . . . . .	14,496	15,132	15,467	15,636	15,290
Salaries and wages paid . . . . . \$'000	33,076	36,416	40,544	41,317	43,347
Value of power, fuel, etc., used . . . . .	11,625	13,240	14,092	14,152	14,635
Value of materials used . . . . .	17,796	21,931	26,089	27,111	28,647
Value of production . . . . .	54,977	65,622	77,607	77,217	83,133
Total value of output . . . . .	84,399	100,792	117,788	118,481	126,415
Value of land and buildings . . . . .	31,474	35,675	38,738	41,375	44,105
Value of plant and machinery . . . . .	41,964	49,165	55,320	59,146	62,929
Horsepower of engines ordinarily in use . . . . .	118,673	127,124	137,727	147,103	149,017

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

## GLASS AND GLASS BOTTLES: AUSTRALIA(a), 1962-63 TO 1966-67

	1962-63	1963-64	1964-65	1965-66	1966-67
Number of factories . . . . .	255	263	268	271	274
Number of persons employed . . . . .	10,510	10,382	11,391	11,402	11,530
Salaries and wages paid . . . . . \$'000	23,171	24,231	28,695	30,220	33,510
Value of power, fuel, etc., used . . . . .	5,575	6,485	6,425	6,155	6,465
Value of materials used . . . . .	35,922	37,259	42,779	41,717	45,996
Value of production . . . . .	44,479	47,454	53,704	57,636	62,401
Total value of output . . . . .	85,976	91,197	102,908	105,508	114,862
Value of land and buildings . . . . .	31,354	32,567	34,480	37,761	42,411
Value of plant and machinery . . . . .	21,388	21,256	21,472	25,604	27,221
Horsepower of engines ordinarily in use . . . . .	40,627	41,527	41,849	46,320	50,573

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

In order to avoid the publication of confidential information, particulars relating to industrial and heavy chemicals include details for the explosives industry.

INDUSTRIAL AND HEAVY CHEMICALS AND ACIDS (INCLUDING EXPLOSIVES)  
AUSTRALIA(a), 1962-63 TO 1966-67

	1962-63	1963-64	1964-65	1965-66	1966-67
Number of factories . . . . .	320	325	323	326	334
Number of persons employed . . . . .	14,165	15,075	16,511	16,668	17,505
Salaries and wages paid . . . . . \$'000	37,567	42,158	49,876	52,179	60,063
Value of power, fuel, etc., used . . . . .	13,304	15,627	18,249	17,847	20,698
Value of materials used . . . . .	117,449	133,473	157,975	166,441	193,730
Value of production . . . . .	111,600	125,599	146,062	150,135	168,307
Total value of output . . . . .	242,353	274,698	322,286	334,423	382,736
Value of land and buildings . . . . .	68,673	75,208	78,090	84,336	90,751
Value of plant and machinery . . . . .	136,126	151,235	160,853	174,484	218,387
Horsepower of engines ordinarily in use . . . . .	174,380	205,235	225,599	257,132	301,984

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

PHARMACEUTICAL AND TOILET PREPARATIONS: AUSTRALIA(a)  
1962-63 TO 1966-67

	1962-63	1963-64	1964-65	1965-66	1966-67
Number of factories . . . . .	209	213	230	236	227
Number of persons employed . . . . .	8,058	8,173	8,818	9,342	9,782
Salaries and wages paid . . . . . \$'000	16,940	16,904	19,492	21,667	24,251
Value of power, fuel, etc., used . . . . .	1,850	1,070	1,228	1,411	1,586
Value of materials used . . . . .	55,176	56,454	64,061	68,577	75,843
Value of production . . . . .	63,996	73,418	84,588	88,243	103,568
Total value of output . . . . .	121,022	130,943	149,877	158,231	180,997
Value of land and buildings . . . . .	34,175	37,474	39,739	43,294	45,333
Value of plant and machinery . . . . .	12,639	13,440	14,283	16,806	18,145
Horsepower of engines ordinarily in use . . . . .	22,772	21,808	24,873	27,396	28,366

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

## WHITE LEAD, PAINTS AND VARNISH: AUSTRALIA(a), 1962-63 TO 1966-67

	1962-63	1963-64	1964-65	1965-66	1966-67
Number of factories . . . . .	184	184	196	197	208
Number of persons employed . . . . .	5,144	5,356	5,605	5,665	5,789
Salaries and wages paid . . . . . \$'000	11,659	12,845	14,297	15,153	16,425
Value of power, fuel, etc., used . . . . . "	873	876	959	969	1,049
Value of materials used . . . . . "	57,463	62,494	66,495	64,914	67,187
Value of production . . . . . "	34,634	36,674	40,196	40,605	44,107
Total value of output . . . . . "	92,971	100,044	107,650	106,487	112,342
Value of land and buildings . . . . . "	16,800	17,888	19,495	19,550	21,976
Value of plant and machinery . . . . . "	10,785	10,438	10,957	10,668	11,078
Horsepower of engines ordinarily in use . . . . .	29,162	32,695	33,816	35,483	36,419

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

## MINERAL OILS: AUSTRALIA(a), 1962-63 TO 1966-67

	1962-63	1963-64	1964-65	1965-66	1966-67
Number of factories . . . . .	79	82	85	87	89
Number of persons employed . . . . .	5,044	5,159	5,408	5,775	5,779
Salaries and wages paid . . . . . \$'000	15,490	17,066	18,610	21,171	23,281
Value of power, fuel, etc., used . . . . . "	17,590	20,906	23,319	24,977	26,920
Value of materials used . . . . . "	287,008	297,591	314,040	325,230	355,694
Value of production . . . . . "	95,572	97,628	107,285	132,262	157,533
Total value of output . . . . . "	400,170	416,125	444,644	482,469	540,147
Value of land and buildings . . . . . "	40,244	42,606	42,705	45,596	46,806
Value of plant and machinery . . . . . "	218,387	232,193	215,046	250,672	282,171
Horsepower of engines ordinarily in use . . . . .	183,935	203,325	215,339	263,226	284,997

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

## SOAP AND CANDLES: AUSTRALIA(a), 1962-63 TO 1966-67

	1962-63	1963-64	1964-65	1965-66	1966-67
Number of factories . . . . .	117	122	118	124	138
Number of persons employed . . . . .	3,340	3,232	3,130	3,196	3,384
Salaries and wages paid . . . . . \$'000	7,542	7,679	8,265	8,596	9,741
Value of power, fuel, etc., used . . . . . "	838	832	902	844	845
Value of materials used . . . . . "	32,876	34,956	38,600	43,124	44,368
Value of production . . . . . "	32,754	34,610	38,205	41,389	60,770
Total value of output . . . . . "	66,467	70,398	77,707	85,357	105,983
Value of land and buildings . . . . . "	5,964	6,546	8,373	8,853	9,157
Value of plant and machinery . . . . . "	6,437	6,824	7,054	8,732	9,453
Horsepower of engines ordinarily in use . . . . .	16,256	16,812	17,058	15,948	17,875

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

## CHEMICAL FERTILISERS: AUSTRALIA(a), 1962-63 TO 1966-67

	1962-63	1963-64	1964-65	1965-66	1966-67
Number of factories . . . . .	48	48	48	48	48
Number of persons employed . . . . .	4,432	4,476	4,633	4,802	4,741
Salaries and wages paid . . . . . \$'000	11,016	11,842	13,415	15,101	15,778
Value of power, fuel, etc., used . . . . . "	1,840	2,022	2,395	2,959	3,004
Value of materials used . . . . . "	59,360	65,699	77,860	93,969	113,155
Value of production . . . . . "	24,918	26,059	31,111	31,435	44,274
Total value of output . . . . . "	86,117	93,780	111,366	128,363	160,433
Value of land and buildings . . . . . "	12,712	14,412	16,238	16,525	19,639
Value of plant and machinery . . . . . "	18,761	20,739	27,167	37,618	46,997
Horsepower of engines ordinarily in use . . . . .	59,188	68,689	74,467	91,221	85,231

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.



**SMELTING, CONVERTING, REFINING, AND ROLLING OF IRON AND STEEL  
AUSTRALIA(a), 1962-63 TO 1966-67**

	1962-63	1963-64	1964-65	1965-66	1966-67
Number of factories . . . . .	33	30	31	32	33
Number of persons employed . . . . .	35,605	37,094	38,469	39,146	39,014
Salaries and wages paid . . . . . \$'000	95,090	120,041	115,917	121,972	126,708
Value of power, fuel, etc., used . . . . .	73,547	78,955	84,413	90,637	102,971
Value of materials used . . . . .	368,873	390,414	426,217	422,786	437,095
Value of production . . . . .	216,504	231,902	266,937	249,795	289,446
Total value of output . . . . .	658,924	701,271	777,567	763,218	829,511
Value of land and buildings . . . . .	78,759	83,708	87,252	88,387	89,956
Value of plant and machinery . . . . .	389,806	410,432	440,909	482,284	524,513
Horsepower of engines ordinarily in use . . . . .	872,050	943,974	1,019,335	1,075,145	1,139,234

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

**FOUNDRIES—FERROUS: AUSTRALIA(a), 1962-63 TO 1966-67**

	1962-63 (b)	1963-64	1964-65	1965-66	1966-67
Number of factories . . . . .	231	230	228	224	211
Number of persons employed . . . . .	7,711	8,152	8,749	8,855	8,411
Salaries and wages paid . . . . . \$'000	17,940	19,942	24,338	25,069	24,931
Value of power, fuel, etc., used . . . . .	2,320	2,482	2,856	2,931	2,835
Value of materials used . . . . .	17,955	20,069	23,943	23,445	25,991
Value of production . . . . .	24,972	29,478	36,545	38,014	36,414
Total value of output . . . . .	45,247	52,029	63,344	64,390	65,241
Value of land and buildings . . . . .	10,949	12,652	13,032	12,650	13,512
Value of plant and machinery . . . . .	7,460	8,574	9,124	10,076	12,084
Horsepower of engines ordinarily in use . . . . .	32,752	34,581	34,711	34,919	36,233

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

(b) Excludes Tasmania. See Other engineering, page 1113.

**PLANT, EQUIPMENT AND MACHINERY (INCLUDING MACHINE TOOLS)  
AUSTRALIA(a), 1962-63 TO 1966-67**

	1962-63 (b)	1963-64	1964-65	1965-66	1966-67
Number of factories . . . . .	2,857	3,027	3,294	3,474	3,687
Number of persons employed . . . . .	80,758	87,277	94,980	100,967	101,152
Salaries and wages paid . . . . . \$'000	186,292	212,937	252,401	276,896	293,871
Value of power, fuel, etc., used . . . . .	8,230	9,102	10,071	10,511	10,888
Value of materials used . . . . .	334,717	389,996	449,151	480,040	495,160
Value of production . . . . .	311,341	357,982	425,060	459,327	502,002
Total value of output . . . . .	654,287	757,080	884,282	949,877	1,008,050
Value of land and buildings . . . . .	162,815	178,429	199,184	221,370	245,733
Value of plant and machinery . . . . .	98,263	105,786	120,380	129,838	139,993
Horsepower of engines ordinarily in use . . . . .	303,606	321,550	332,041	365,776	381,342

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

(b) Includes agricultural machines and implements, Tasmania.

**OTHER ENGINEERING(a): AUSTRALIA(b), 1962-63 TO 1966-67**

	1962-63 (c)	1963-64	1964-65	1965-66	1966-67
Number of factories . . . . .	2,472	2,449	2,514	2,597	2,665
Number of persons employed . . . . .	28,997	30,044	31,759	32,823	33,850
Salaries and wages paid . . . . . \$'000	63,465	69,093	78,649	84,632	92,442
Value of power, fuel, etc., used . . . . .	2,498	2,667	2,966	3,032	3,347
Value of materials used . . . . .	82,198	91,145	104,778	109,007	114,973
Value of production . . . . .	104,438	112,492	129,498	139,533	153,459
Total value of output . . . . .	189,134	206,304	237,241	251,573	271,779
Value of land and buildings . . . . .	56,375	58,584	64,014	69,998	79,778
Value of plant and machinery . . . . .	36,600	40,194	43,800	47,871	58,889
Horsepower of engines ordinarily in use . . . . .	107,735	114,317	122,086	132,552	153,257

(a) Jobbing and general engineering works, n.e.i. (b) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory. (c) Includes Foundries—ferrous, Tasmania.

The following table shows particulars of establishments engaged in metal extraction and ore reduction including secondary recovery of metals, but excluding blast furnaces engaged in production of pig iron from iron ore. Ore dressing and elementary smelting of metallic minerals (e.g. in the case of gold), when these are carried out in an associated plant at or near the mine, are included in the mineral industry (see the chapter Mineral Industry).

**EXTRACTING AND REFINING OF NON-FERROUS METALS; ALLOYS  
AUSTRALIA(a), 1962-63 TO 1966-67**

	1962-63	1963-64	1964-65	1965-66	1966-67
Number of factories . . . . .	64	68	70	74	77
Number of persons employed . . . . .	8,277	8,960	8,990	9,349	9,966
Salaries and wages paid . . . . . \$'000	22,905	25,996	28,722	31,289	34,778
Value of power, fuel, etc., used . . . . .	13,331	17,840	19,643	21,277	24,151
Value of materials used . . . . .	185,661	235,481	274,354	320,380	324,231
Value of production . . . . .	52,090	62,349	76,960	103,397	117,519
Total value of output . . . . .	251,082	315,670	370,957	445,054	465,901
Value of land and buildings . . . . .	28,051	37,881	40,538	41,477	55,507
Value of plant and machinery . . . . .	79,506	100,851	107,294	110,421	225,256
Horsepower of engines ordinarily in use . . . . .	93,482	118,723	121,473	122,444	172,426

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

**ELECTRICAL MACHINERY, CABLES AND APPARATUS  
AUSTRALIA(a), 1962-63 TO 1966-67**

	1962-63	1963-64	1964-65	1965-66	1966-67
Number of factories . . . . .	1,404	1,438	1,517	1,614	1,713
Number of persons employed . . . . .	55,692	59,416	65,233	67,582	70,480
Salaries and wages paid . . . . . \$'000	123,113	135,806	159,359	174,616	189,970
Value of power, fuel, etc., used . . . . .	6,153	6,841	7,473	7,550	8,227
Value of materials used . . . . .	232,140	263,668	321,409	332,239	366,486
Value of production . . . . .	201,809	229,536	260,268	298,176	324,254
Total value of output . . . . .	440,103	500,045	589,151	637,966	698,966
Value of land and buildings . . . . .	103,325	110,908	124,575	131,455	147,874
Value of plant and machinery . . . . .	57,486	62,233	68,796	75,592	79,580
Horsepower of engines ordinarily in use . . . . .	134,043	142,213	153,438	158,915	169,999

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

The railway and tramway workshops, which form an important part of Class 4, are owned chiefly by State governments and local authorities. *Workshops (thirteen in 1966-67) controlled by non-public bodies are not included in the figures below.*

**TRAMCARS AND RAILWAY ROLLING STOCK(a)  
AUSTRALIA(b), 1962-63 TO 1966-67**

	1962-63	1963-64	1964-65	1965-66	1966-67
Number of factories . . . . .	122	119	120	120	120
Number of persons employed . . . . .	34,653	33,689	32,215	31,534	30,703
Salaries and wages paid . . . . . \$'000	70,663	73,267	75,783	77,405	81,290
Value of power, fuel, etc., used . . . . .	2,144	2,162	2,089	2,141	2,054
Value of materials used . . . . .	39,371	39,622	40,785	44,280	46,522
Value of production . . . . .	85,495	92,435	91,899	94,815	100,003
Total value of output . . . . .	127,009	134,219	134,773	141,236	148,578
Value of land and buildings . . . . .	29,357	29,372	29,353	30,254	30,497
Value of plant and machinery . . . . .	37,166	38,456	39,704	39,509	39,907
Horsepower of engines ordinarily in use . . . . .	116,027	114,456	116,445	116,701	112,964

(a) Government and local authority only.  
Territory.

(b) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

**MOTOR VEHICLES—CONSTRUCTION, ASSEMBLY, REPAIRS, ETC.  
AUSTRALIA, 1966-67**

	Construction and assembly	Repairs	Motor bodies (a)	Motor access- ories	Total
Number of factories . . . . .	51	12,079	2,733	364	15,227
Number of persons employed . . . . .	24,807	73,880	38,202	19,113	156,002
Salaries and wages paid . . . . . \$'000	74,407	157,414	100,499	52,474	384,794
Value of power, fuel, etc., used . . . . .	5,766	4,851	4,181	3,319	18,117
Value of materials used . . . . .	154,856	174,603	242,299	89,186	660,944
Value of production . . . . .	119,999	250,405	161,797	86,184	618,385
Total value of output . . . . .	280,620	429,860	408,277	178,688	1,297,446
Value of land and buildings . . . . .	90,998	230,718	110,337	42,713	474,766
Value of plant and machinery . . . . .	76,572	34,845	77,721	41,104	230,241
Horsepower of engines ordinarily in use . . . . .	112,841	91,182	114,276	76,305	394,604

(a) Includes motor body repairing, panel beating, duco spraying, etc.

**MOTOR VEHICLES—CONSTRUCTION, ASSEMBLY, REPAIRS, ETC.  
AUSTRALIA(a), 1962-63 TO 1966-67**

	1962-63	1963-64	1964-65	1965-66	1966-67
Number of factories . . . . .	13,623	13,866	14,466	14,857	15,227
Number of persons employed . . . . .	135,579	143,657	152,477	153,542	156,002
Salaries and wages paid . . . . . \$'000	281,091	309,204	350,388	356,558	384,794
Value of power, fuel, etc., used . . . . .	13,783	15,187	16,547	16,864	18,117
Value of materials used . . . . .	491,384	568,697	606,172	620,557	660,944
Value of production . . . . .	448,107	494,412	548,985	577,335	618,385
Total value of output . . . . .	953,273	1,078,296	1,171,704	1,214,757	1,297,446
Value of land and buildings . . . . .	321,872	352,610	413,075	450,030	474,766
Value of plant and machinery . . . . .	158,471	172,256	204,133	223,810	230,241
Horsepower of engines ordinarily in use . . . . .	310,518	325,925	359,693	392,829	394,604

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

The table below includes government factories as well as those owned privately and by municipal authorities.

**SHIP AND BOAT BUILDING AND REPAIRING, MARINE ENGINEERING  
AUSTRALIA(a), 1962-63 TO 1966-67**

	1962-63	1963-64	1964-65	1965-66	1966-67
Number of factories . . . . .	335	346	378	379	388
Number of persons employed . . . . .	14,218	14,253	14,439	15,299	16,809
Salaries and wages paid . . . . . \$'000	33,366	35,043	37,952	43,865	50,062
Value of power, fuel, etc., used . . . . . "	873	901	949	1,092	1,116
Value of materials used . . . . . "	28,106	31,645	28,169	31,446	50,523
Value of production . . . . . "	40,397	40,272	44,640	52,237	64,364
Total value of output . . . . . "	69,375	72,817	73,758	84,774	116,002
Value of land and buildings . . . . . "	13,308	13,865	15,288	18,199	20,219
Value of plant and machinery . . . . . "	11,258	11,745	13,324	15,914	17,641
Horsepower of engines ordinarily in use . . . . .	77,691	81,291	82,891	86,120	88,067

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

**AGRICULTURAL MACHINES AND IMPLEMENTS  
AUSTRALIA(a), 1962-63 TO 1966-67**

	1962-63 (b)	1963-64	1964-65	1965-66	1966-67
Number of factories . . . . .	531	556	615	671	725
Number of persons employed . . . . .	11,785	13,818	15,582	15,069	15,280
Salaries and wages paid . . . . . \$'000	25,610	33,117	39,347	37,316	41,867
Value of power, fuel, etc., used . . . . . "	1,633	1,940	2,150	1,825	1,917
Value of materials used . . . . . "	38,912	51,440	56,044	47,228	62,832
Value of production . . . . . "	39,632	49,702	59,172	56,027	69,753
Total value of output . . . . . "	80,177	103,082	117,366	105,080	134,502
Value of land and buildings . . . . . "	20,132	23,064	26,783	29,071	30,533
Value of plant and machinery . . . . . "	11,441	13,245	15,203	17,126	18,120
Horsepower of engines ordinarily in use . . . . .	43,226	46,606	47,125	51,642	53,020

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory. (b) Excludes Tasmania. See Plant, equipment and machinery (including machine tools), page 1112.

**NON-FERROUS METALS—ROLLING AND EXTRUSION  
AUSTRALIA(a), 1962-63 TO 1966-67**

	1962-63	1963-64	1964-65	1965-66	1966-67
Number of factories . . . . .	30	30	26	28	30
Number of persons employed . . . . .	6,751	6,983	7,420	7,362	7,773
Salaries and wages paid . . . . . \$'000	17,850	20,293	22,318	23,322	25,583
Value of power, fuel, etc., used . . . . . "	3,162	3,689	4,089	4,401	4,611
Value of materials used . . . . . "	86,981	104,550	145,175	150,456	166,273
Value of production . . . . . "	35,734	41,399	45,021	56,567	56,407
Total value of output . . . . . "	125,878	149,637	194,285	211,424	227,291
Value of land and buildings . . . . . "	20,022	21,531	24,035	24,468	25,278
Value of plant and machinery . . . . . "	39,739	45,932	61,413	63,622	64,083
Horsepower of engines ordinarily in use . . . . .	90,942	132,763	131,979	139,714	146,286

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

**NON-FERROUS METALS—FOUNDING, CASTING, ETC.: AUSTRALIA(a), 1962-63 TO 1966-67**

	1962-63	1963-64	1964-65	1965-66	1966-67
Number of factories . . . . .	462	461	473	482	479
Number of persons employed . . . . .	10,467	11,180	12,264	12,070	12,276
Salaries and wages paid . . . . . \$'000	22,613	25,389	30,175	30,189	32,268
Value of power, fuel, etc., used . . . . .	1,964	2,100	2,363	2,234	2,395
Value of materials used . . . . .	46,702	53,556	65,581	64,246	66,481
Value of production . . . . .	40,913	49,276	58,727	57,231	63,389
Total value of output . . . . .	89,579	104,932	126,671	123,710	132,266
Value of land and buildings . . . . .	19,654	21,150	24,104	25,679	28,399
Value of plant and machinery . . . . .	14,617	15,163	16,001	18,763	19,804
Horsepower of engines ordinarily in use . . . . .	36,561	38,729	41,295	44,300	46,528

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

**SHEET METAL WORKING, PRESSING AND STAMPING: AUSTRALIA(a), 1962-63 TO 1966-67**

	1962-63	1963-64	1964-65	1965-66	1966-67
Number of factories . . . . .	1,156	1,181	1,232	1,254	1,270
Number of persons employed . . . . .	27,924	29,551	31,444	32,962	33,243
Salaries and wages paid . . . . . \$'000	59,854	66,877	76,289	83,550	89,026
Value of power, fuel, etc., used . . . . .	3,543	3,718	4,040	4,281	4,398
Value of materials used . . . . .	139,767	156,346	185,318	193,094	208,368
Value of production . . . . .	113,707	123,360	139,261	148,347	165,125
Total value of output . . . . .	257,017	283,425	328,619	345,722	377,891
Value of land and buildings . . . . .	59,812	65,804	69,981	74,650	79,793
Value of plant and machinery . . . . .	40,461	44,779	46,213	50,356	51,158
Horsepower of engines ordinarily in use . . . . .	84,487	89,116	94,436	101,694	106,402

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

**PIPES, TUBES AND FITTINGS—FERROUS: AUSTRALIA(a), 1962-63 TO 1966-67**

	1962-63	1963-64	1964-65	1965-66	1966-67
Number of factories . . . . .	58	58	56	58	61
Number of persons employed . . . . .	8,784	9,138	9,627	9,630	9,611
Salaries and wages paid . . . . . \$'000	22,394	24,495	28,329	28,950	30,812
Value of power, fuel, etc., used . . . . .	3,213	3,425	3,315	3,228	3,311
Value of materials used . . . . .	54,775	60,047	71,829	67,589	75,073
Value of production . . . . .	38,751	45,258	54,241	53,865	59,323
Total value of output . . . . .	96,738	108,730	129,384	124,682	137,707
Value of land and buildings . . . . .	17,593	17,921	17,697	18,330	19,209
Value of plant and machinery . . . . .	19,579	22,330	21,114	20,851	22,152
Horsepower of engines ordinarily in use . . . . .	56,219	60,447	67,991	67,410	76,522

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

**WIRE AND WIRE WORKING (INCLUDING NAILS): AUSTRALIA(a), 1962-63 TO 1966-67**

	1962-63	1963-64	1964-65	1965-66	1966-67
Number of factories . . . . .	289	298	305	313	317
Number of persons employed . . . . .	10,377	10,433	10,776	10,901	11,037
Salaries and wages paid . . . . . \$'000	23,820	24,959	27,599	28,045	30,918
Value of power, fuel, etc., used . . . . .	1,888	2,033	2,131	2,132	2,391
Value of materials used . . . . .	80,581	92,097	102,344	95,994	107,952
Value of production . . . . .	43,909	46,710	53,102	53,799	59,053
Total value of output . . . . .	126,379	140,840	157,577	151,924	169,395
Value of land and buildings . . . . .	21,200	21,743	24,365	28,858	31,744
Value of plant and machinery . . . . .	16,168	15,770	17,384	20,634	22,619
Horsepower of engines ordinarily in use . . . . .	43,818	42,624	44,154	51,303	52,789

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

**WIRELESS AND AMPLIFYING APPARATUS: AUSTRALIA(a), 1962-63 TO 1966-67**

	1962-63	1963-64	1964-65	1965-66	1966-67
Number of factories . . . . .	330	355	391	406	416
Number of persons employed . . . . .	16,586	16,907	18,359	17,683	18,167
Salaries and wages paid . . . . . \$'000	33,240	35,772	40,265	39,812	43,351
Value of power, fuel, etc., used . . . . .	1,315	1,321	1,355	1,388	1,470
Value of materials used . . . . .	78,940	78,847	84,546	78,849	82,309
Value of production . . . . .	54,437	56,834	63,333	65,150	69,183
Total value of output . . . . .	134,692	137,002	149,233	145,387	152,962
Value of land and buildings . . . . .	24,104	23,883	25,865	28,000	32,159
Value of plant and machinery . . . . .	13,266	12,888	12,854	13,027	14,880
Horsepower of engines ordinarily in use . . . . .	15,216	14,720	15,316	16,038	16,825

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

The growing of cotton is treated in some detail in the chapter Rural Industry. The production of raw cotton is supplemented by imports from overseas, chiefly (in 1966-67) from the United States of America, Uganda, Mexico, Brazil, Pakistan, and Peru.

**COTTON SPINNING AND WEAVING: AUSTRALIA(a), 1962-63 TO 1966-67**

	1962-63	1963-64	1964-65	1965-66	1966-67
Number of factories . . . . .	88	85	80	78	70
Number of persons employed . . . . .	9,313	9,869	10,270	10,110	9,744
Salaries and wages paid . . . . . \$'000	17,262	19,187	21,447	22,060	22,996
Value of power, fuel, etc., used . . . . .	2,267	2,549	2,545	2,622	2,604
Value of materials used . . . . .	41,635	46,619	48,512	47,840	51,199
Value of production . . . . .	33,521	38,193	42,554	43,401	47,193
Total value of output . . . . .	77,423	87,362	93,611	93,863	100,996
Value of land and buildings . . . . .	28,860	32,264	29,966	24,424	25,534
Value of plant and machinery . . . . .	24,382	24,402	23,434	22,776	22,607
Horsepower of engines ordinarily in use . . . . .	41,581	43,752	42,422	42,007	42,370

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

**WOOL CARDING, SPINNING AND WEAVING: AUSTRALIA(a), 1962-63 TO 1966-67**

	1962-63	1963-64	1964-65	1965-66	1966-67
Number of factories . . . . .	134	129	131	124	118
Number of persons employed . . . . .	21,131	20,061	20,397	19,642	18,337
Salaries and wages paid . . . . . \$'000	36,461	35,477	38,778	38,289	38,160
Value of power, fuel, etc., used . . . . .	3,014	2,873	2,942	2,995	2,930
Value of materials used . . . . .	97,027	107,378	103,138	99,743	96,395
Value of production . . . . .	58,652	55,799	59,103	57,684	62,704
Total value of output . . . . .	158,693	166,051	165,183	160,422	162,029
Value of land and buildings . . . . .	23,150	23,326	24,210	25,654	25,583
Value of plant and machinery . . . . .	27,440	26,550	29,550	29,090	29,686
Horsepower of engines ordinarily in use . . . . .	71,354	71,318	71,180	68,341	70,686

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

**HOSIERY AND OTHER KNITTED GOODS: AUSTRALIA(a), 1962-63 TO 1966-67**

	1962-63	1963-64	1964-65	1965-66	1966-67
Number of factories . . . . .	625	607	602	592	573
Number of persons employed . . . . .	24,627	25,471	25,593	25,559	25,043
Salaries and wages paid . . . . . \$'000	40,646	42,834	46,267	48,343	51,172
Value of power, fuel, etc., used . . . . . "	1,614	1,691	1,753	1,829	1,945
Value of materials used . . . . . "	92,517	98,422	107,819	108,939	117,194
Value of production . . . . . "	76,180	83,674	91,207	93,348	98,155
Total value of output . . . . . "	170,311	183,788	200,778	204,115	217,294
Value of land and buildings . . . . . "	31,499	32,685	34,218	37,029	38,319
Value of plant and machinery . . . . . "	22,753	24,370	25,996	29,793	29,352
Horsepower of engines ordinarily in use . . . . .	23,106	24,344	25,344	26,872	27,130

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

**RAYON, ACRYLICS AND OTHER SYNTHETIC FIBRES: AUSTRALIA(a), 1962-63 TO 1966-67**

	1962-63	1963-64	1964-65	1965-66	1966-67
Number of factories . . . . .	45	43	38	40	39
Number of persons employed . . . . .	4,337	4,527	4,104	4,562	4,843
Salaries and wages paid . . . . . \$'000	9,079	9,825	9,212	10,329	12,139
Value of power, fuel, etc., used . . . . . "	1,143	1,236	1,192	1,338	1,408
Value of materials used . . . . . "	25,733	27,483	27,561	32,065	38,885
Value of production . . . . . "	16,089	18,191	19,161	20,957	21,769
Total value of output . . . . . "	42,965	46,910	47,914	54,359	62,062
Value of land and buildings . . . . . "	8,596	8,711	7,854	8,737	9,651
Value of plant and machinery . . . . . "	9,141	8,688	7,255	10,137	12,233
Horsepower of engines ordinarily in use . . . . .	14,202	14,279	25,981	27,861	18,884

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

**ROPE AND CORDAGE: AUSTRALIA(a), 1962-63 TO 1966-67**

	1962-63	1963-64	1964-65	1965-66	1966-67
Number of factories . . . . .	26	25	25	25	25
Number of persons employed . . . . .	2,308	2,404	2,462	2,247	2,230
Salaries and wages paid . . . . . \$'000	4,861	5,118	5,873	5,435	5,856
Value of power, fuel, etc., used . . . . . "	369	396	425	362	410
Value of materials used . . . . . "	9,590	11,911	13,409	10,510	11,371
Value of production . . . . . "	9,504	9,577	11,008	9,261	11,448
Total value of output . . . . . "	19,463	21,884	24,841	20,133	23,228
Value of land and buildings . . . . . "	5,508	5,492	5,642	5,686	5,622
Value of plant and machinery . . . . . "	3,568	3,600	3,885	3,916	3,602
Horsepower of engines ordinarily in use . . . . .	15,240	15,407	13,032	16,557	15,748

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

**WOOLSCOURING AND FELLMONGERY: AUSTRALIA(a), 1962-63 TO 1966-67**

	1962-63	1963-64	1964-65	1965-66	1966-67
Number of factories . . . . .	56	54	56	53	51
Number of persons employed . . . . .	2,847	2,570	2,387	2,340	2,154
Salaries and wages paid . . . . . \$'000	6,594	6,152	6,389	6,420	6,381
Value of power, fuel, etc., used . . . . . "	1,238	1,212	1,205	1,195	1,184
Value of materials used . . . . . "	31,928	35,621	31,404	28,789	27,761
Value of production . . . . . "	9,271	8,545	8,929	8,879	9,047
Total value of output . . . . . "	42,437	45,378	41,538	38,863	37,992
Value of land and buildings . . . . . "	5,687	6,082	6,558	6,408	6,288
Value of plant and machinery . . . . . "	3,069	2,993	3,383	3,110	3,393
Horsepower of engines ordinarily in use . . . . .	17,544	18,089	17,939	16,715	19,914

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

**TANNING, CURRYING AND LEATHER DRESSING: AUSTRALIA(a), 1962-63 TO 1966-67**

	1962-63	1963-64	1964-65	1965-66	1966-67
Number of factories . . . . .	102	102	102	102	96
Number of persons employed . . . . .	4,219	4,298	4,277	4,012	3,721
Salaries and wages paid . . . . . \$'000	9,473	9,910	10,828	10,242	10,015
Value of power, fuel, etc., used . . . . .	1,001	1,021	1,045	988	948
Value of materials used . . . . .	25,156	23,881	23,785	26,134	25,847
Value of production . . . . .	16,228	17,165	16,576	16,323	16,127
Total value of output . . . . .	42,386	42,066	41,407	43,445	42,922
Value of land and buildings . . . . .	7,329	8,205	8,295	8,096	8,173
Value of plant and machinery . . . . .	4,531	4,761	5,138	5,232	4,957
Horsepower of engines ordinarily in use . . . . .	27,598	29,598	30,199	31,518	30,454

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

**LEATHER GOODS (INCLUDING SADDLERY AND BELTING)  
AUSTRALIA(a), 1962-63 TO 1966-67**

	1962-63	1963-64	1964-65	1965-66	1966-67
Number of factories . . . . .	386	383	378	374	364
Number of persons employed . . . . .	4,519	4,646	4,677	4,719	4,735
Salaries and wages paid . . . . . \$'000	6,950	7,260	7,877	8,245	8,875
Value of power, fuel, etc., used . . . . .	148	161	141	144	156
Value of materials used . . . . .	13,151	14,083	15,190	16,277	16,957
Value of production . . . . .	12,336	12,854	14,259	15,173	16,112
Total value of output . . . . .	25,635	27,097	29,590	31,593	33,224
Value of land and buildings . . . . .	6,885	7,238	7,934	9,146	9,181
Value of plant and machinery . . . . .	1,484	1,572	1,542	1,741	1,846
Horsepower of engines ordinarily in use . . . . .	3,387	3,716	3,001	3,635	4,412

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

**TAILORING AND READY-MADE CLOTHING: AUSTRALIA(a), 1962-63 TO 1966-67**

	1962-63	1963-64	1964-65	1965-66	1966-67
Number of factories . . . . .	1,847	1,892	1,879	1,805	1,670
Number of persons employed . . . . .	33,234	34,188	35,092	35,529	34,213
Salaries and wages paid . . . . . \$'000	48,543	51,126	55,926	58,884	61,132
Value of power, fuel, etc., used . . . . .	1,026	1,059	1,089	1,104	1,073
Value of materials used . . . . .	88,153	92,343	100,238	103,389	104,910
Value of production . . . . .	80,043	86,803	95,711	102,855	105,515
Total value of output . . . . .	169,223	180,206	197,037	207,348	211,498
Value of land and buildings . . . . .	35,586	38,214	41,397	43,810	41,747
Value of plant and machinery . . . . .	7,032	7,406	8,255	8,819	9,123
Horsepower of engines ordinarily in use . . . . .	12,939	13,348	13,515	14,293	14,066

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

**DRESSMAKING AND MILLINERY: AUSTRALIA(a), 1962-63 TO 1966-67**

	1962-63	1963-64	1964-65	1965-66	1966-67
Number of factories . . . . .	1,189	1,124	1,146	1,181	1,281
Number of persons employed . . . . .	15,093	14,930	15,041	15,618	17,626
Salaries and wages paid . . . . . \$'000	20,373	21,188	22,577	24,387	29,788
Value of power, fuel, etc., used . . . . .	420	439	447	486	596
Value of materials used . . . . .	26,055	28,285	29,595	29,478	36,832
Value of production . . . . .	33,394	34,240	36,771	38,837	48,786
Total value of output . . . . .	59,869	62,964	66,812	68,801	86,214
Value of land and buildings . . . . .	18,231	19,232	21,018	22,980	26,934
Value of plant and machinery . . . . .	2,365	2,742	2,813	3,136	3,939
Horsepower of engines ordinarily in use . . . . .	4,831	4,955	5,628	6,141	6,965

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.



## SHIRTS, COLLARS AND UNDERCLOTHING: AUSTRALIA(a), 1962-63 TO 1966-67

	1962-63	1963-64	1964-65	1965-66	1966-67
Number of factories . . . . .	351	329	337	333	334
Number of persons employed . . . . .	13,304	13,271	13,823	14,719	14,470
Salaries and wages paid . . . . . \$'000	17,967	18,312	20,725	23,525	24,357
Value of power, fuel, etc., used . . . . .	333	335	362	386	405
Value of materials used . . . . .	32,604	34,453	35,748	35,780	38,841
Value of production . . . . .	29,113	29,720	32,602	36,888	36,326
Total value of output . . . . .	62,050	64,507	68,712	73,054	75,573
Value of land and buildings . . . . .	10,328	11,086	12,209	13,493	14,757
Value of plant and machinery . . . . .	2,705	2,942	3,469	3,818	4,124
Horsepower of engines ordinarily in use . . . . .	5,649	5,928	6,188	6,557	6,904

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

## FOUNDATION GARMENTS: AUSTRALIA(a), 1962-63 TO 1966-67

	1962-63	1963-64	1964-65	1965-66	1966-67
Number of factories . . . . .	64	62	64	65	59
Number of persons employed . . . . .	4,012	3,948	4,176	4,492	4,553
Salaries and wages paid . . . . . \$'000	5,569	5,616	6,457	6,969	7,824
Value of power, fuel, etc., used . . . . .	102	104	105	112	112
Value of materials used . . . . .	11,628	13,057	14,658	15,739	17,814
Value of production . . . . .	10,931	12,428	13,994	14,909	16,354
Total value of output . . . . .	22,661	25,589	28,757	30,760	34,280
Value of land and buildings . . . . .	4,595	4,918	5,411	5,227	5,311
Value of plant and machinery . . . . .	1,380	1,414	1,665	1,762	1,634
Horsepower of engines ordinarily in use . . . . .	1,987	2,082	2,353	2,336	2,652

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

The table below refers to boot and shoe factories as distinct from those devoted to repairing, except in Tasmania, where it has been necessary to include details of boot and shoe repairing in order to avoid disclosure of confidential information for that State. Factories engaged in the manufacture of sand-shoes, goloshes and gum, etc., boots of rubber are not included here, but are classified under Rubber Goods, see page 1128.

## BOOTS AND SHOES: AUSTRALIA(a), 1962-63 TO 1966-67

	1962-63(b)	1963-64	1964-65	1965-66	1966-67
Number of factories . . . . .	439	393	398	394	386
Number of persons employed . . . . .	20,502	21,030	20,779	20,072	20,009
Salaries and wages paid . . . . . \$'000	34,898	36,459	38,372	37,507	40,055
Value of power, fuel, etc., used . . . . .	656	686	724	743	798
Value of materials used . . . . .	61,165	63,347	63,931	60,849	66,629
Value of production . . . . .	54,821	58,342	58,738	61,523	66,104
Total value of output . . . . .	116,642	122,375	123,393	123,114	133,532
Value of land and buildings . . . . .	14,238	16,243	17,057	18,229	19,261
Value of plant and machinery . . . . .	14,097	16,077	18,805	19,258	20,619
Horsepower of engines ordinarily in use . . . . .	15,351	15,594	15,394	16,117	15,658

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

(b) Includes details of boot and shoe repairing in Tasmania.

**FLOUR-MILLING: AUSTRALIA(a), 1962-63 TO 1966-67**

	1962-63	1963-64	1964-65	1965-66	1966-67
Number of factories . . . . .	118	114	108	107	102
Number of persons employed . . . . .	4,219	4,512	4,253	4,152	3,861
Salaries and wages paid . . . . . \$'000	9,680	10,560	10,736	10,934	10,977
Value of power, fuel, etc., used . . . . .	1,873	2,028	1,964	1,880	1,865
Value of materials used . . . . .	120,792	132,713	124,974	122,433	122,294
Value of production . . . . .	23,910	27,962	29,210	30,184	31,122
Total value of output . . . . .	146,575	162,703	156,148	154,497	155,281
Value of land and buildings . . . . .	15,769	18,024	17,615	18,272	17,964
Value of plant and machinery . . . . .	11,696	13,065	13,069	13,506	13,294
Horsepower of engines ordinarily in use . . . . .	47,393	54,256	54,450	56,970	51,638

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

**OTHER GRAIN MILLS(a): AUSTRALIA(b), 1962-63 TO 1966-67**

	1962-63	1963-64	1964-65	1965-66	1966-67
Number of factories . . . . .	244	254	271	269	283
Number of persons employed . . . . .	5,289	5,322	5,774	5,979	6,302
Salaries and wages paid . . . . . \$'000	10,954	11,495	13,116	14,586	16,823
Value of power, fuel, etc., used . . . . .	2,164	2,227	2,383	2,609	2,950
Value of materials used . . . . .	69,965	77,154	93,800	106,972	113,289
Value of production . . . . .	32,399	35,718	41,504	45,401	48,239
Total value of output . . . . .	104,528	115,100	137,687	154,983	164,478
Value of land and buildings . . . . .	13,959	15,464	16,885	18,694	21,220
Value of plant and machinery . . . . .	14,821	15,378	17,772	18,400	22,039
Horsepower of engines ordinarily in use . . . . .	51,610	53,849	59,279	63,492	70,603

(a) Excludes corn crushing mills.

(b) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

The table below contains information regarding establishments in which the manufacture of bread, cakes, etc. was carried on. Since the details refer only to establishments coming within the definition of a factory as explained at the beginning of this chapter, the table does not give complete details of the industry, as a large number of bakeries, etc. not coming within the definition are excluded.

**BAKERIES (INCLUDING CAKES AND PASTRY): AUSTRALIA(a), 1962-63 TO 1966-67**

	1962-63	1963-64	1964-65	1965-66	1966-67
Number of factories . . . . .	3,779	3,689	3,681	3,580	3,481
Number of persons employed . . . . .	21,061	21,627	22,447	22,950	23,346
Salaries and wages paid . . . . . \$'000	33,708	36,163	40,162	42,875	47,010
Value of power, fuel, etc., used . . . . .	5,479	5,636	5,904	6,075	6,168
Value of materials used . . . . .	100,009	104,820	113,476	118,707	121,347
Value of production . . . . .	83,058	86,550	93,901	108,346	112,837
Total value of output . . . . .	188,546	197,005	213,280	233,128	240,353
Value of land and buildings . . . . .	58,474	61,898	67,902	71,946	75,378
Value of plant and machinery . . . . .	37,407	37,903	40,277	40,473	39,788
Horsepower of engines ordinarily in use . . . . .	37,589	40,175	43,209	44,947	45,615

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

## BISCUITS: AUSTRALIA(a), 1962-63 TO 1966-67

	1962-63	1963-64	1964-65	1965-66	1966-67
Number of factories . . . . .	52	53	53	56	55
Number of persons employed . . . . .	6,199	6,262	6,474	6,716	6,843
Salaries and wages paid . . . . . \$'000	11,237	11,696	13,159	13,677	15,107
Value of power, fuel, etc., used . . . . .	1,145	1,171	1,242	1,317	1,377
Value of materials used . . . . .	26,052	27,483	29,714	32,546	35,072
Value of production . . . . .	20,960	21,628	24,910	26,368	26,955
Total value of output . . . . .	48,157	50,281	55,867	60,231	63,404
Value of land and buildings . . . . .	11,411	11,278	12,926	14,404	14,410
Value of plant and machinery . . . . .	8,462	8,868	8,422	10,180	10,850
Horsepower of engines ordinarily in use . . . . .	13,443	16,381	16,791	17,395	18,831

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

Sugar-cane is grown in New South Wales and Queensland, and particulars of area, yield, etc., are given in detail in the chapter Rural Industry. The products of the sugar-mills are raw sugar and molasses, the former being sent to the refineries in different parts of Australia for further treatment. In 1966-67 there were two sugar refineries in Queensland and one in each of New South Wales, Victoria, South Australia, and Western Australia.

## SUGAR MILLS: NEW SOUTH WALES AND QUEENSLAND, 1962-63 TO 1966-67

	1962-63	1963-64	1964-65	1965-66	1966-67
New South Wales—					
Number of factories . . . . .	3	3	3	3	3
Number of persons employed . . . . .	261	247	283	328	330
Queensland—					
Number of factories . . . . .	31	31	31	31	31
Number of persons employed . . . . .	6,387	6,981	7,924	7,008	6,758

## CONFECTIONERY: AUSTRALIA(a), 1962-63 TO 1966-67

	1962-63	1963-64	1964-65	1965-66	1966-67
Number of factories . . . . .	189	189	187	180	175
Number of persons employed . . . . .	8,015	8,156	8,301	8,590	8,663
Salaries and wages paid . . . . . \$'000	14,555	15,185	16,685	18,037	19,371
Value of power, fuel, etc., used . . . . .	1,542	1,596	1,613	1,653	1,719
Value of materials used . . . . .	46,426	49,470	53,864	53,414	60,573
Value of production . . . . .	31,604	32,371	33,984	38,303	39,779
Total value of output . . . . .	79,572	83,437	89,461	93,371	102,071
Value of land and buildings . . . . .	17,264	17,459	18,334	20,232	22,369
Value of plant and machinery . . . . .	16,954	17,780	19,095	19,776	21,085
Horsepower of engines ordinarily in use . . . . .	42,665	43,165	41,806	43,790	48,076

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

**JAM, FRUIT AND VEGETABLE CANNING, PICKLES, SAUCES, VINEGAR  
AUSTRALIA(a), 1962-63 TO 1966-67**

	1962-63	1963-64	1964-65	1965-66	1966-67
Number of factories . . . . .	170	167	161	160	156
Number of persons employed . . . . .	11,897	12,397	12,672	13,573	13,473
Salaries and wages paid . . . . . \$'000	24,152	25,961	29,281	31,989	35,202
Value of power, fuel, etc., used . . . . .	2,412	2,609	2,868	3,167	3,329
Value of materials used . . . . .	95,297	103,551	116,182	134,813	141,964
Value of production . . . . .	55,764	60,924	66,754	74,873	80,787
Total value of output . . . . .	153,473	167,084	185,805	212,852	226,080
Value of land and buildings . . . . .	29,840	32,105	34,415	39,166	42,181
Value of plant and machinery . . . . .	26,458	30,011	33,473	40,649	43,552
Horsepower of engines ordinarily in use . . . . .	48,574	53,024	54,139	59,306	63,006

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

Bacon and ham and other pig products are dealt with more fully in the chapter Rural Industry.

**BACON-CURING: AUSTRALIA(a), 1962-63 TO 1966-67**

	1962-63	1963-64	1964-65	1965-66	1966-67
Number of factories . . . . .	87	85	79	81	76
Number of persons employed . . . . .	4,675	4,865	5,098	5,419	5,569
Salaries and wages paid . . . . . \$'000	9,315	9,924	11,101	12,371	13,440
Value of power, fuel, etc., used . . . . .	1,043	1,113	1,151	1,198	1,370
Value of materials used . . . . .	61,989	67,841	74,997	80,060	85,356
Value of production . . . . .	19,563	19,155	22,982	29,124	30,747
Total value of output . . . . .	82,595	88,109	99,129	110,381	117,472
Value of land and buildings . . . . .	8,546	8,750	8,997	9,894	10,415
Value of plant and machinery . . . . .	5,455	5,919	6,190	6,951	7,752
Horsepower of engines ordinarily in use . . . . .	18,236	18,152	18,396	20,141	20,640

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

The butter, cheese and condensed milk industries are dealt with more fully in the chapter Rural Industry.

**BUTTER, CHEESE AND CONDENSED AND PROCESSED MILK  
AUSTRALIA(a), 1962-63 TO 1966-67**

	1962-63	1963-64	1964-65	1965-66	1966-67
Number of factories . . . . .	348	347	344	337	328
Number of persons employed . . . . .	11,320	11,510	11,505	11,454	11,650
Salaries and wages paid . . . . . \$'000	24,883	26,314	27,680	28,810	31,445
Value of power, fuel, etc., used . . . . .	5,961	6,138	6,364	6,500	6,988
Value of materials used . . . . .	226,691	244,587	261,066	262,480	286,631
Value of production . . . . .	52,424	59,236	65,028	67,970	68,535
Total value of output . . . . .	285,077	309,961	332,458	336,949	362,154
Value of land and buildings . . . . .	31,032	31,534	34,544	38,681	42,699
Value of plant and machinery . . . . .	37,797	39,361	40,445	46,398	52,842
Horsepower of engines ordinarily in use . . . . .	118,087	120,084	120,208	127,837	133,449

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

## MEAT AND FISH PRESERVING: AUSTRALIA(a), 1962-63 TO 1966-67

	1962-63	1963-64	1964-65	1965-66	1966-67
Number of factories . . . . .	159	164	173	175	223
Number of persons employed . . . . .	10,032	10,161	10,225	10,659	11,333
Salaries and wages paid . . . . . \$'000	21,917	22,923	24,993	26,916	30,137
Value of power, fuel, etc., used . . . . .	2,854	3,147	3,318	3,527	3,509
Value of materials used . . . . .	142,070	158,668	178,508	200,506	206,986
Value of production . . . . .	38,266	43,539	46,456	55,209	63,630
Total value of output . . . . .	183,190	205,353	228,283	259,243	274,125
Value of land and buildings . . . . .	20,624	21,013	26,840	28,050	32,329
Value of plant and machinery . . . . .	15,447	15,162	19,587	21,633	24,772
Horsepower of engines ordinarily in use . . . . .	53,652	56,424	54,214	60,346	66,267

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

The industries included in this group are engaged chiefly in the freezing and preserving of meat. Most abattoirs are excluded, except in Queensland and Western Australia. Works have been established at the seaports for the purpose of handling beef, lamb and mutton for export, and insulated space for the carriage of chilled and frozen produce is provided by shipping companies trading between Australia and other parts of the world. In recent years there has been considerable expansion in the canning of meat and fish. Particulars of the quantities and values of beef, mutton and lamb preserved by cold process exported from Australia over a series of years will be found in the chapter Rural Industry.

## CONDIMENTS, COFFEE, SPICES: AUSTRALIA(a), 1962-63 TO 1966-67

	1962-63	1963-64	1964-65	1965-66	1966-67
Number of factories . . . . .	260	238	239	237	241
Number of persons employed . . . . .	5,283	5,218	5,166	5,431	5,422
Salaries and wages paid . . . . . \$'000	9,805	9,975	9,983	11,669	12,650
Value of power, fuel, etc., used . . . . .	685	743	754	867	943
Value of materials used . . . . .	43,940	45,737	48,805	54,706	57,934
Value of production . . . . .	27,558	27,506	29,459	33,534	40,494
Total value of output . . . . .	72,183	73,986	79,018	89,108	99,371
Value of land and buildings . . . . .	18,519	18,766	21,091	23,165	24,299
Value of plant and machinery . . . . .	8,330	7,956	10,099	11,827	12,773
Horsepower of engines ordinarily in use . . . . .	16,811	17,088	18,590	19,500	19,355

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

## BREWERIES: AUSTRALIA(a), 1962-63 TO 1966-67

	1962-63	1963-64	1964-65	1965-66	1966-67
Number of factories . . . . .	24	24	26	26	25
Number of persons employed . . . . .	5,741	5,744	5,885	5,943	5,928
Salaries and wages paid . . . . . \$'000	14,001	14,753	15,946	16,997	18,572
Value of power, fuel, etc., used . . . . .	3,118	3,140	3,160	3,365	3,503
Value of materials used . . . . .	54,311	59,967	64,746	65,255	70,760
Value of production . . . . .	45,609	48,355	51,878	53,509	57,020
Total value of output(b) . . . . .	103,038	111,463	119,784	122,130	131,282
Value of land and buildings . . . . .	29,681	30,121	31,363	32,400	36,385
Value of plant and machinery . . . . .	30,005	30,733	32,442	33,129	36,204
Horsepower of engines ordinarily in use . . . . .	50,237	53,765	56,549	62,045	63,275

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

(b) Excludes excise duty.

**AERATED WATERS AND CORDIALS: AUSTRALIA(a), 1962-63 TO 1966-67**

	1962-63	1963-64	1964-65	1965-66	1966-67
Number of factories . . . . .	525	509	503	495	492
Number of persons employed . . . . .	5,190	5,193	5,303	5,717	5,982
Salaries and wages paid . . . . . \$'000	9,054	9,434	10,415	11,940	13,365
Value of power, fuel, etc., used . . . . .	879	936	1,020	1,062	1,161
Value of materials used . . . . .	28,058	30,985	35,693	41,257	45,898
Value of production . . . . .	26,691	27,473	31,758	33,305	37,646
Total value of output . . . . .	55,629	59,395	68,471	75,624	84,705
Value of land and buildings . . . . .	17,251	19,027	19,770	20,473	21,927
Value of plant and machinery . . . . .	11,991	12,688	13,031	14,152	15,685
Horsepower of engines ordinarily in use . . . . .	17,116	17,610	18,713	20,190	21,821

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

**WINERIES AND DISTILLERIES: AUSTRALIA(a), 1962-63 TO 1966-67**

	1962-63	1963-64	1964-65	1965-66	1966-67
Number of factories . . . . .	161	169	170	177	178
Number of persons employed . . . . .	2,084	2,204	2,344	2,408	2,488
Salaries and wages paid . . . . . \$'000	4,100	4,458	5,057	5,587	6,089
Value of power, fuel, etc., used . . . . .	772	798	907	893	937
Value of materials used . . . . .	18,271	21,431	23,988	23,377	27,988
Value of production . . . . .	9,468	11,874	15,815	15,137	19,741
Total value of output . . . . .	28,511	34,103	40,711	39,408	48,666
Value of land and buildings . . . . .	6,588	7,285	8,015	8,956	9,385
Value of plant and machinery . . . . .	7,429	7,789	8,370	8,832	9,648
Horsepower of engines ordinarily in use . . . . .	17,601	17,942	18,807	19,265	19,667

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

**TOBACCO, CIGARS AND CIGARETTES: AUSTRALIA(a), 1962-63 TO 1966-67**

	1962-63	1963-64	1964-65	1965-66	1966-67
Number of factories . . . . .	18	15	15	16	15
Number of persons employed . . . . .	4,671	4,498	4,670	4,843	4,659
Salaries and wages paid . . . . . \$'000	10,277	10,898	11,513	11,878	12,801
Value of power, fuel, etc., used . . . . .	512	508	547	615	688
Value of materials used . . . . .	78,592	78,380	81,280	77,434	81,318
Value of production . . . . .	40,377	45,233	52,482	57,426	66,070
Total value of output(b) . . . . .	119,481	124,122	134,308	135,474	148,075
Value of land and buildings . . . . .	9,280	10,003	10,424	12,448	13,299
Value of plant and machinery . . . . .	14,187	13,784	14,104	15,231	17,205
Horsepower of engines ordinarily in use . . . . .	12,033	11,955	12,596	13,188	14,418

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

(b) Excludes excise duty.

**ICE-CREAM: AUSTRALIA(a), 1962-63 TO 1966-67**

	1962-63	1963-64	1964-65	1965-66	1966-67
Number of factories . . . . .	54	53	54	56	56
Number of persons employed . . . . .	2,295	2,518	2,639	2,687	2,847
Salaries and wages paid . . . . . \$'000	4,791	5,429	6,019	6,587	6,973
Value of power, fuel, etc., used . . . . .	905	1,040	1,106	1,214	1,303
Value of materials used . . . . .	15,273	17,097	19,301	23,510	26,547
Value of production . . . . .	11,676	13,903	15,636	16,790	16,098
Total value of output . . . . .	27,854	32,040	36,043	41,514	44,048
Value of land and buildings . . . . .	9,654	11,297	13,486	13,993	14,090
Value of plant and machinery . . . . .	13,468	15,260	12,702	12,722	13,545
Horsepower of engines ordinarily in use . . . . .	18,468	20,562	21,415	24,360	26,287

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

Sawmilling is the most important industry in Class 10. Because of difficulties associated with the classifying of sawmills into forest and town mills, they have been combined in the following table, together with plywood and veneer mills. The figures exclude particulars of a small number of itinerant and travelling sawmills.

**SAWMILLS AND PLYWOOD AND VENEER MILLS  
AUSTRALIA(a), 1962-63 TO 1966-67**

	1962-63	1963-64	1964-65	1965-66	1966-67
Number of factories . . . . .	2,514	2,421	2,353	2,335	2,288
Number of persons employed . . . . .	31,993	32,202	32,271	33,104	32,147
Salaries and wages paid . . . . . \$'000	60,217	63,119	67,479	71,910	74,196
Value of power, fuel, etc., used . . . . .	5,258	5,325	5,552	5,658	5,742
Value of materials used . . . . .	146,066	156,464	166,841	169,627	174,595
Value of production . . . . .	106,431	115,903	128,319	133,222	135,576
Total value of output . . . . .	257,755	277,692	300,713	308,507	315,913
Value of land and buildings . . . . .	37,590	39,004	40,967	45,254	46,921
Value of plant and machinery . . . . .	40,573	40,111	41,964	44,677	46,099
Horsepower of engines ordinarily in use . . . . .	428,421	437,807	433,626	453,625	464,782

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

**JOINERY: AUSTRALIA(a), 1962-63 TO 1966-67**

	1962-63	1963-64	1964-65	1965-66	1966-67
Number of factories . . . . .	2,247	2,239	2,320	2,329	2,381
Number of persons employed . . . . .	17,509	17,594	18,597	18,954	19,130
Salaries and wages paid . . . . . \$'000	35,340	36,705	40,956	43,172	46,462
Value of power, fuel, etc., used . . . . .	965	969	1,062	1,089	1,132
Value of materials used . . . . .	64,092	70,156	78,939	81,768	87,660
Value of production . . . . .	55,761	59,291	67,506	69,344	76,939
Total value of output . . . . .	120,818	130,416	147,507	152,201	165,730
Value of land and buildings . . . . .	30,543	32,757	37,356	40,473	44,661
Value of plant and machinery . . . . .	10,200	10,811	11,352	12,036	12,936
Horsepower of engines ordinarily in use . . . . .	89,459	89,578	93,636	96,683	100,239

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

**CABINET AND FURNITURE MAKING AND UPHOLSTERY  
AUSTRALIA(a), 1962-63 TO 1966-67**

	1962-63	1963-64	1964-65	1965-66	1966-67
Number of factories . . . . .	1,625	1,638	1,639	1,624	1,641
Number of persons employed . . . . .	15,726	15,948	16,361	16,630	16,932
Salaries and wages paid . . . . . \$'000	29,395	30,874	34,047	36,254	38,683
Value of power, fuel, etc., used . . . . .	777	830	869	914	943
Value of materials used . . . . .	56,241	61,061	67,330	67,146	69,338
Value of production . . . . .	48,738	52,312	58,816	63,298	68,418
Total value of output . . . . .	105,755	114,204	127,014	131,359	138,700
Value of land and buildings . . . . .	29,309	30,906	34,730	37,032	40,257
Value of plant and machinery . . . . .	6,982	7,716	8,029	8,839	9,335
Horsepower of engines ordinarily in use . . . . .	45,641	46,599	47,136	52,932	55,079

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

These following industries constitute the principal manufactures in Class 11. The establishments covered in the tables following include those engaged in the lithographic printing, bookbinding, paper ruling, and linotyping, and Government printing works.

## NEWSPAPERS AND PERIODICALS: AUSTRALIA(a), 1962-63 TO 1966-67

	1962-63	1963-64	1964-65	1965-66	1966-67
Number of factories . . . . .	415	411	413	407	408
Number of persons employed . . . . .	15,500	16,052	17,287	17,476	17,734
Salaries and wages paid . . . . . \$'000	38,140	40,225	46,120	48,516	53,366
Value of power, fuel, etc., used . . . . .	1,392	1,481	1,587	1,646	1,784
Value of materials used . . . . .	58,153	61,446	66,240	67,181	70,189
Value of production . . . . .	70,385	74,132	83,292	88,401	99,270
Total value of output . . . . .	129,930	137,059	151,119	157,228	171,242
Value of land and buildings . . . . .	34,396	39,053	42,958	45,093	46,506
Value of plant and machinery . . . . .	32,400	37,403	42,588	44,263	46,996
Horsepower of engines ordinarily in use . . . . .	44,094	44,029	48,021	49,985	53,053

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

GOVERNMENT AND GENERAL PRINTING WORKS  
AUSTRALIA(a), 1962-63 TO 1966-67

	1962-63	1963-64	1964-65	1965-66	1966-67
Number of factories . . . . .	1,738	1,780	1,875	1,904	1,960
Number of persons employed . . . . .	30,614	31,637	33,222	34,747	34,988
Salaries and wages paid . . . . . \$'000	64,592	69,623	78,133	85,444	90,418
Value of power, fuel, etc., used . . . . .	2,058	2,227	2,504	2,761	2,821
Value of materials used . . . . .	82,395	89,280	98,703	105,269	108,008
Value of production . . . . .	117,270	124,881	138,981	153,535	162,365
Total value of output . . . . .	201,723	216,388	240,188	261,564	273,195
Value of land and buildings . . . . .	61,046	67,550	79,610	84,829	89,279
Value of plant and machinery . . . . .	50,504	54,510	60,855	65,295	66,415
Horsepower of engines ordinarily in use . . . . .	52,182	54,491	58,731	61,942	62,427

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

## MANUFACTURED STATIONERY: AUSTRALIA(a), 1962-63 TO 1966-67

	1962-63	1963-64	1964-65	1965-66	1966-67
Number of factories . . . . .	150	148	142	144	147
Number of persons employed . . . . .	5,436	5,563	5,870	6,134	6,279
Salaries and wages paid . . . . . \$'000	10,946	11,746	13,077	14,445	15,470
Value of power, fuel, etc., used . . . . .	465	524	560	561	603
Value of materials used . . . . .	33,299	37,028	39,299	41,283	43,888
Value of production . . . . .	26,818	30,272	34,597	38,655	41,841
Total value of output . . . . .	60,582	67,824	74,457	80,499	86,332
Value of land and buildings . . . . .	14,329	14,645	15,496	17,384	17,865
Value of plant and machinery . . . . .	10,274	10,774	10,706	12,261	13,217
Horsepower of engines ordinarily in use . . . . .	10,936	11,955	12,625	13,554	13,962

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

CARDBOARD BOXES, CARTONS AND CONTAINERS, AND PAPER BAGS  
AUSTRALIA(a), 1962-63 TO 1966-67

	1962-63	1963-64	1964-65	1965-66	1966-67
Number of factories . . . . .	243	254	250	252	259
Number of persons employed . . . . .	10,832	11,501	12,158	12,839	13,696
Salaries and wages paid . . . . . \$'000	22,236	24,543	28,027	30,121	34,343
Value of power, fuel, etc., used . . . . .	965	1,045	1,191	1,266	1,447
Value of materials used . . . . .	79,851	87,003	97,553	104,210	116,952
Value of production . . . . .	48,202	53,695	60,615	64,843	75,154
Total value of output . . . . .	129,018	141,743	159,359	170,319	193,553
Value of land and buildings . . . . .	27,081	30,764	38,002	41,304	46,573
Value of plant and machinery . . . . .	25,083	26,268	29,899	32,100	35,072
Horsepower of engines ordinarily in use . . . . .	26,217	28,154	31,661	34,834	39,343

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.



Although the paper manufacturing industry has been established in Australia for many years, it was not until the manufacture of paper pulp from indigenous timber in 1938-39 that any marked development occurred. The number of factories operating in 1966-67 comprised four in New South Wales, ten in Victoria, two in Queensland, two in South Australia, one in Western Australia, and four in Tasmania. In Tasmania, newsprint, writing and printing papers are mainly produced, and in the other States, wrappings, other papers and boards. Mills producing pulp from eucalypt timber are operating in Victoria and Tasmania, while in South Australia pulp is being produced from locally-grown softwoods.

**PAPER MAKING(a): AUSTRALIA(b), 1962-63 TO 1966-67**

	1962-63	1963-64	1964-65	1965-66	1966-67
Number of factories . . . . .	24	26	25	25	23
Number of persons employed . . . . .	8,678	9,205	9,411	9,782	10,087
Salaries and wages paid . . . . . \$'000	24,694	28,011	31,000	32,780	36,293
Value of power, fuel, etc., used . . . . .	9,305	9,944	10,763	11,589	13,115
Value of materials used . . . . .	59,800	66,555	76,704	81,786	87,647
Value of production . . . . .	60,409	66,195	74,466	75,050	80,351
Total value of output . . . . .	129,514	142,695	161,932	168,425	181,114
Value of land and buildings . . . . .	34,336	34,310	35,915	44,985	46,286
Value of plant and machinery . . . . .	73,911	73,352	78,842	92,452	105,982
Horsepower of engines ordinarily in use . . . . .	256,291	256,769	270,526	286,522	298,765

(a) Includes pulp mills.

(b) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

**RUBBER GOODS: AUSTRALIA(a), 1962-63 TO 1966-67**

	1962-63	1963-64	1964-65	1965-66	1966-67
Number of factories . . . . .	117	119	120	125	125
Number of persons employed . . . . .	15,702	16,944	17,414	17,071	16,837
Salaries and wages paid . . . . . \$'000	37,482	41,181	46,199	46,082	47,942
Value of power, fuel, etc., used . . . . .	5,112	5,354	5,419	5,563	5,787
Value of materials used . . . . .	86,020	93,452	101,143	99,857	99,824
Value of production . . . . .	61,433	67,037	69,095	70,289	76,052
Total value of output . . . . .	152,565	165,843	175,658	175,709	181,662
Value of land and buildings . . . . .	20,687	32,160	33,002	38,682	43,939
Value of plant and machinery . . . . .	23,196	30,688	34,864	47,304	53,293
Horsepower of engines ordinarily in use . . . . .	140,956	151,918	163,700	181,284	197,188

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

**TYRE RETREADING AND REPAIRING: AUSTRALIA(a), 1962-63 TO 1966-67**

	1962-63	1963-64	1964-65	1965-66	1966-67
Number of factories . . . . .	542	555	585	586	560
Number of persons employed . . . . .	3,214	3,317	3,399	3,345	3,361
Salaries and wages paid . . . . . \$'000	6,434	6,823	7,412	7,856	8,249
Value of power, fuel, etc., used . . . . .	897	930	967	988	1,051
Value of materials used . . . . .	14,505	15,903	18,107	18,579	19,995
Value of production . . . . .	16,889	18,667	19,961	19,919	23,417
Total value of output . . . . .	32,291	35,500	39,035	39,485	44,464
Value of land and buildings . . . . .	16,721	18,434	19,319	20,114	20,332
Value of plant and machinery . . . . .	5,359	5,844	6,344	6,890	6,988
Horsepower of engines ordinarily in use . . . . .	13,865	14,406	15,681	16,191	17,876

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

## PLASTIC MOULDING AND PRODUCTS: AUSTRALIA(a), 1962-63 TO 1966-67

	1962-63	1963-64	1964-65	1965-66	1966-67
Number of factories . . . . .	430	440	485	505	541
Number of persons employed . . . . .	11,801	12,668	14,157	14,517	15,833
Salaries and wages paid . . . . . \$'000	25,083	27,905	33,770	35,426	41,371
Value of power, fuel, etc., used . . . . .	2,257	2,530	2,985	3,170	3,755
Value of materials used . . . . .	57,598	63,489	75,722	76,957	91,691
Value of production . . . . .	48,499	57,641	66,818	68,464	84,248
Total value of output . . . . .	108,354	123,660	145,526	148,591	179,694
Value of land and buildings . . . . .	23,321	25,485	29,954	34,174	40,870
Value of plant and machinery . . . . .	25,397	28,965	32,843	36,559	40,451
Horsepower of engines ordinarily in use . . . . .	54,576	58,759	66,918	75,451	85,077

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

Further information on the following subject is also shown in the chapter Electric Power Generation and Distribution.

Particulars of the types of engines and generators installed in electric light and power works and their rated horse-power are given on page 1091.

## ELECTRIC LIGHT AND POWER WORKS: AUSTRALIA(a), 1962-63 TO 1966-67

	1962-63	1963-64	1964-65	1965-66	1966-67
Number of factories . . . . .	275	269	258	253	244
Number of persons employed . . . . .	12,272	12,162	12,457	12,600	13,085
Salaries and wages paid . . . . . \$'000	32,007	33,235	36,283	38,879	41,352
Value of power, fuel, etc., used . . . . .	81,642	85,708	88,590	94,151	98,169
Value of materials used . . . . .	10,386	11,492	16,139	17,348	20,176
Value of production . . . . .	179,113	194,019	206,233	220,237	237,385
Total value of output . . . . .	271,141	291,219	310,962	331,736	355,731
Value of land and buildings . . . . .	499,901	497,126	537,430	583,694	638,486
Value of plant and machinery . . . . .	613,244	622,087	652,376	711,382	879,465
Generators installed—kilowatt capacity '000 kW . . . . .	7,499	7,983	8,498	9,396	11,051

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

## GAS WORKS: AUSTRALIA(a), 1962-63 TO 1966-67

	1962-63	1963-64	1964-65	1965-66	1966-67
Number of factories . . . . .	87	87	89	87	86
Number of persons employed . . . . .	3,561	3,449	3,272	3,055	2,991
Salaries and wages paid . . . . . \$'000	9,288	9,157	9,200	9,325	9,694
Value of power, fuel, etc., used . . . . .	5,710	5,627	5,538	5,186	5,191
Value of materials used . . . . .	26,651	26,586	26,708	27,349	26,688
Value of production . . . . .	31,740	33,289	35,018	34,089	35,686
Total value of output . . . . .	64,100	65,502	67,263	66,624	67,566
Value of land and buildings . . . . .	15,072	15,327	16,134	16,393	16,053
Value of plant and machinery . . . . .	59,382	60,559	63,697	65,864	65,089
Horsepower of engines ordinarily in use . . . . .	58,989	56,803	58,702	59,127	63,103

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.



## CHAPTER 27

### ELECTRIC POWER GENERATION AND DISTRIBUTION

This chapter is divided into three major parts: the Introduction, which deals briefly with the resources, generation and distribution, and future development of electric power in Australia; the Snowy Mountains Hydro-electric Scheme; and the origins, development, present situation and new projects of electrical systems in each Australian State and Territory.

The information contained in the chapter relates to situations existing and projects contemplated in December 1967, and may be considerably affected by changes in policy or plans, or by developments in the projects themselves. Greater descriptive and historical detail about the various systems is contained in earlier issues of the Year Book.

### INTRODUCTION

#### Distribution of population and location of power resources in Australia

The two principal centres of population and industry in Australia, the metropolitan areas of Sydney and Melbourne, make the greatest demands for electric power, and their growth has been associated with the development of large deposits of coal located relatively close to the source of demand. This, together with the fact that the major water resources are also located in the south-eastern portion of Australia, materially influences the distribution of industrial population and the location of major electric power stations. By far the most important source of energy used in the production of electric power in Australia is coal. At 30 June 1967 thermal power equipment represented 71 per cent, hydro plant 26 per cent, and internal combustion equipment 2.5 per cent of the total installed generating capacity.

Most of Australia is poorly supplied with water, only about 13 per cent receiving an annual rainfall of 30 inches or over, and these areas are confined largely to Tasmania and to the narrow coastal strip along the east coast of the mainland. The only region on the mainland of Australia high enough to receive reliable winter snowfall, and from which, therefore, reasonably constant water supplies throughout the year can be expected, is the mountain chain which stretches from the high plateaux of south-eastern New South Wales to the north-eastern highlands of Victoria. The hydro-electric potential of this area is considerable, and plans have been formulated to develop more than 4,000,000 kW by 1975. The two major construction projects in this area are the Snowy Mountains and Kiewa schemes. Other hydro-electric potential does exist on the mainland on the rivers of the coastal areas of New South Wales and Queensland, but the amount available is smaller than the potential of the Alpine region. In Tasmania, hydro-electric resources have been estimated at about 50 per cent of the total Australian hydro-electric potential. On the mainland the chief source of energy is coal; in Tasmania it is water.

#### Electric power generation and distribution

At the beginning of this century Australia's electrical undertakings were carried on mainly by private enterprise, but with some measure of governmental control designed to provide standards of safety and to define the scope and obligations of the private organisations. A trend towards public ownership commenced during the 1914-18 War and became more pronounced after the 1939-45 War. By 1961 all major generating stations supplying the public were, in varying degrees, under the control of statutory organisations constituted with the object of unifying and co-ordinating the generation and distribution of electricity supplies. There are still a large number of small private and municipal enterprises generating power for supply to country towns, although central authorities are extending supply to these places wherever practicable. In many areas it has been, and remains, the practice for central authorities to sell power in bulk to local distributing organisations which undertake reticulation.

In addition to the private, local government and statutory organisations which generate and or distribute electricity for sale, numerous firms generate power for use in their own establishments, particularly those engaged in mining pursuits remote from the main centres of population. This chapter, however, is concerned mainly with the activities of central electric stations, as the power regularly produced for such internal consumption is, in any case, a relatively small proportion of

the total power produced. The measures taken by authorities to satisfy the demand created by the post-war growth in population and building and by developments in industry and commerce are described in the following pages.

## SNOWY MOUNTAINS HYDRO-ELECTRIC SCHEME\*

### Snowy Mountains Hydro-electric Power Act 1949

In July 1949 the Commonwealth Government established the Snowy Mountains Hydro-electric Authority, and empowered it to generate electricity by means of hydro-electric works in the Snowy Mountains Area; supply electricity to the Commonwealth (i) for defence purposes, (ii) for consumption in the Australian Capital Territory; and supply to a State, or to a State Authority, electricity not required for defence purposes or for consumption in the Australian Capital Territory.

The Snowy Mountains Act is supported by a detailed agreement between the States of New South Wales and Victoria and the Commonwealth with regard to the construction and operation of the Scheme, the distribution of power and water, charges to be made for electricity, and other such matters. The Snowy Mountains Council, established under the terms of the Agreement and consisting of representatives of the Commonwealth, the Authority and the two States, directs and controls the operation and maintenance of the permanent works of the Authority and the allocation of loads to generating stations.

### Snowy Mountains Hydro-electric Scheme

The broad basis of the Snowy scheme is to transfer waters, which would otherwise flow to the sea unharnessed, from the Snowy River and its tributaries to the inland system, so that the water may be used for irrigation and to provide power. It involves two main diversions, the diversion of the Eucumbene, a tributary of the Snowy, to the Upper Tumut River, and the diversion of the main stream of the Snowy River at Island Bend and Jindabyne to the Swampy Plain River. These two diversions divide the scheme geographically into two sections, the Snowy-Tumut Development and the Snowy-Murray Development (see plate 67 opposite). For purposes of both power production and irrigation it is necessary to regulate run-off, and this will be achieved by the use of Lake Eucumbene (formed by the construction of Eucumbene Dam) and other smaller storages to control the waters of the Eucumbene, Murrumbidgee, Tooma, and Tumut Rivers of the Snowy-Tumut Development and of the Snowy and Geehi Rivers for the Snowy-Murray Development. A sectional diagram of the scheme appears on plate 68, page 1134.

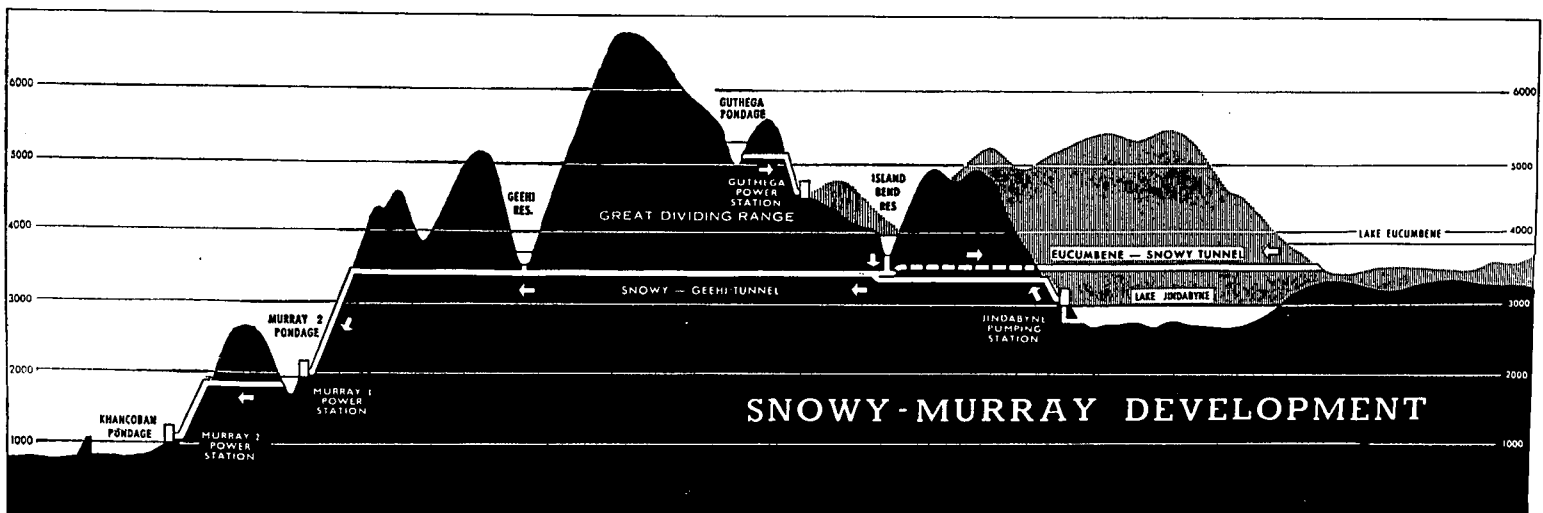
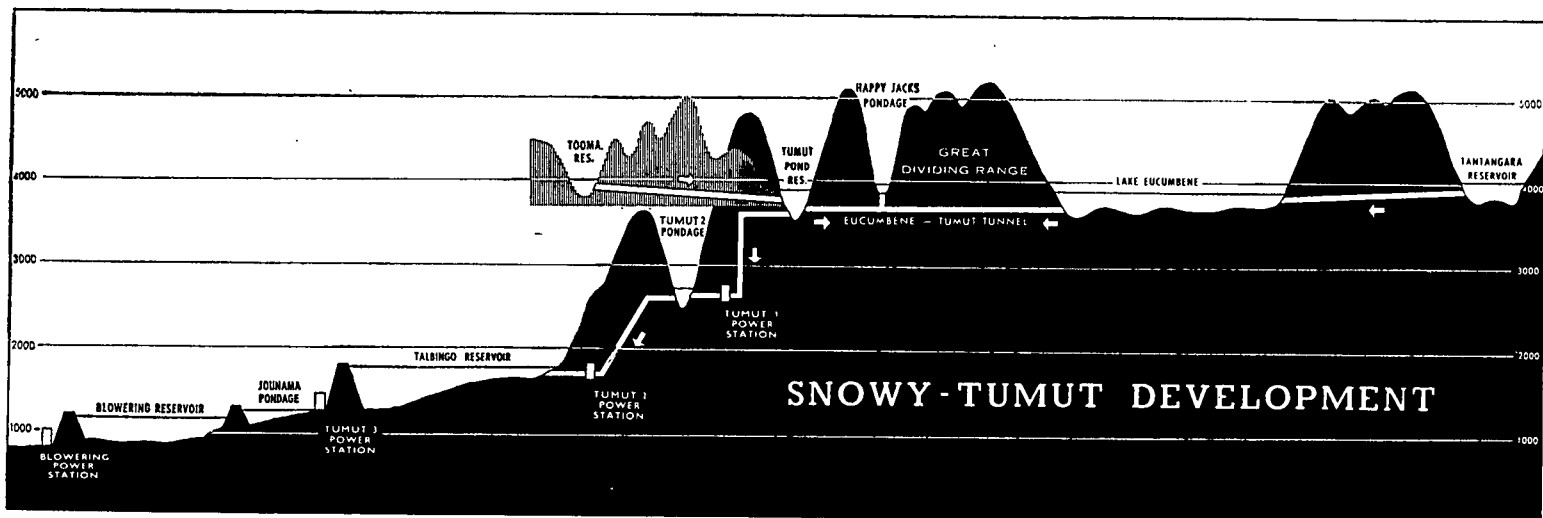
*Snowy-Tumut Development.* This development comprises works for the diversion and regulation of the waters of the Eucumbene, Upper Tooma, Upper Murrumbidgee, and Upper Tumut Rivers and their combined development through a series of power stations down the Tumut River. A major dam has been constructed on the Eucumbene River to create Lake Eucumbene, which has an ultimate usable storage of 3.5 million acre feet. The waters of the Upper Murrumbidgee River are diverted into Lake Eucumbene by a dam at Tantangara and a 10½-mile tunnel from Tantangara Reservoir. From Lake Eucumbene the water flows through a 14-mile tunnel to Tumut Pond Reservoir on the upper reaches of the Tumut River, where it joins the waters of the Tumut River itself and the waters of the Tooma River diverted to Tumut Pond Reservoir by a diversion dam and a 9-mile tunnel.

From Tumut Pond Reservoir water is conveyed by pressure tunnel to Tumut 1 underground Power Station (capacity 320,000 kW), returned to the Tumut River and then by another pressure tunnel to Tumut 2 underground Power Station (capacity 280,000 kW), thence discharging into Talbingo Reservoir, also on the Tumut River.

Tumut 3 Power Station, the largest station of the scheme (capacity 1,500,000 kW, of which 500,000 kW will be provided by pump turbines) will be constructed below Talbingo Reservoir and will discharge into Jounama Pondage on the Tumut River. This pondage will provide a downstream pumping pool and also re-regulate discharges from Tumut 3 Power Station as required. Releases from Jounama Pondage will then enter Blowering Reservoir formed by Blowering Dam. This dam is under construction by the Snowy Mountains Authority as an agent for the State of New South Wales and will provide for the regulation of power station discharges for irrigation use in the Murrumbidgee Valley. The Authority is constructing a power station at the foot of the dam to generate power from releases of water for irrigation purposes.

\* See also the chapter Water Conservation and Irrigation of this issue and special detailed article in Year Book No. 42, pp. 1103-30.





*Snowy-Murray Development.* The principal features of the Snowy-Murray Development are the diversion of the main stream of the Snowy River by tunnels, shafts, and pipelines westwards through the Great Dividing Range into the Swampy Plain River in the catchment of the Upper Murray, and the development of power on the western slopes of the Alps. The main works of the development will be as follows.

- (a) A tunnel from the Snowy River near Island Bend through the Great Dividing Range to Geehi Reservoir on the Geehi River, and two power projects between Geehi Reservoir and the Swampy Plain River near Khancoban. The power stations associated with these two power projects, Murray 1 and Murray 2, will have a combined capacity of 1,500,000 kW.
- (b) A tunnel from a small dam on the Snowy River near Island Bend to Eucumbene Dam to carry Snowy water to Lake Eucumbene for storage at times of high river flows. When river flows are lower than average, this stored water will be returned towards Island Bend and thence through the Snowy-Geehi Tunnel to Geehi Reservoir and Murray 1 and Murray 2 Power Stations.
- (c) A dam on the Snowy River near Jindabyne to store the residual flow of the Snowy and Eucumbene Rivers downstream from Island Bend and Eucumbene Dams, including the flows of major tributaries, the Crackenback and Mowamba Rivers; and the construction of a pumping plant, pipeline and tunnel to lift this water from Jindabyne Reservoir to the Snowy-Geehi Tunnel near Island Bend, where it will join the flow to the Geehi Reservoir for use through Murray 1 and Murray 2 Power Stations.

The power output of this section of the Scheme is increased by the Guthega Project 2 subsidiary hydro-electric project on the Upper Snowy River above Island Bend with a generating capacity of 60,000 kW.

#### Utilisation of power from scheme

The future electric power plants on the mainland of Australia will be predominantly thermal or *thermo-nuclear* installations, and in an electrical system in which the greater part of the energy is generated in thermal plants it is usually found that the hydro installations operate to the best advantage on peak load. However, the existing New South Wales and Victorian systems include a proportion of relatively old and less efficient installations which, for reasons of fuel economy, are also best used for the production of peak load power. Therefore, in order to utilise the potential of the Snowy Mountains Scheme most effectively, the order of development is being arranged so that the early stations operate, initially, somewhat below the peak of the system load, with a progressive change to predominantly peak load operation as construction proceeds and as the load increases in magnitude.

The Snowy Mountains Scheme is situated about midway between the principal load centres of Sydney and Melbourne and is connected to those cities by 330 kV transmission lines. It is, consequently, in a position to take advantage of the diversity in the power requirements of these two load systems, a most important factor in so far as it affects the economy of operation of the supply systems of the two States. Although most of the output from the scheme will go to the States of New South Wales and Victoria, the Commonwealth Government has the right to draw from the scheme its requirements of power and energy for the Australian Capital Territory and for defence purposes. For convenience, the Commonwealth's requirements are drawn from the New South Wales transmission network by an exchange arrangement between the Commonwealth and the Electricity Commission of New South Wales. Electricity over and above that required by the Commonwealth Government is divided between the States of New South Wales and Victoria in the ratio 2:1.

#### Progress of scheme and future programme

The scheme's first power station, Guthega, of 60,000 kW initial capacity, came into operation in February 1955. It was followed by Tumut 1, an underground power station with a capacity of 320,000 kW, in 1959, and by the 280,000 kW Tumut 2 underground Power Station in 1962. Eucumbene Dam, which provides the major regulating storage for the scheme, was completed in May 1958. Tumut Pond Dam, completed in September 1958, provides the balancing storage for the power stations of the Upper Tumut Works. The first trans-mountain diversion of water from Lake Eucumbene to the Tumut River at Tumut Pond was made possible when the 14-mile Eucumbene-Tumut Tunnel was completed in June 1959. The 10½-mile Murrumbidgee-Eucumbene Tunnel and the 9-mile Tooma-Tumut Tunnel came into operation early in 1961. Following the completion of the Upper Tumut Works, construction activity has been concentrated on the Snowy-Murray development. The first unit of this development, the Eucumbene-Snowy project which comprises Island Bend Dam and the 15-mile Eucumbene-Snowy Tunnel, commenced diverting Snowy River water to storage in Lake Eucumbene in August 1965. Completion of a 9-mile trans-mountain Snowy-Geehi Tunnel, the 7½-mile Murray 1 Pressure Tunnel, the first of the 1-mile long Pressure Pipelines, and the first two



units of the 950,000 kW Murray 1 Power Station in April 1966 allowed the first diversion of the water from the Snowy River to the Murray River in the west. All of the ten turbo-generators have now been brought into commercial operation with the opening of the Murray 1 Project in July 1967. The total installed capacity of the scheme has now reached 1,610,000 kW.

Khancoban Dam, designed to regulate power station releases before their discharge into the Murray River, was completed in February 1966. Construction is proceeding on the Murray 2 Project in the base of the open cut excavated in the bank of Khancoban Reservoir downstream of Murray 1 Project. The four units of Murray 2 Power Station totalling 550,000 kW are scheduled to come into commercial operation in the first half of 1969.

Construction is also proceeding on the Jindabyne Project. The earth and rockfill dam was completed in September 1967, and the pumping station and Jindabyne-Island Bend Tunnel will come into service by the end of 1968.

Blowering Dam on the Tumut River will also be in service towards the end of 1968, and the 80,000 kW Blowering Power Station, also under construction, will be ready for commercial operation in October 1969 when the first of the stored water in the Blowering Reservoir will be released for the irrigation season downstream on the Murrumbidgee Irrigation Areas.

Work has begun on the Tumut 3 Project with the placing of earth and rockfill for Jounama Dam. This embankment will be sufficiently complete by winter of 1968 to allow the rising waters of the Blowering Reservoir to flood the Jounama Dam Site. The remaining sections of Tumut 3 Project are planned for completion by 1974.

## STATES AND TERRITORIES

### New South Wales

In Year Book No. 39 an account was given in some detail of the origin and development of electricity generation and distribution in New South Wales. At present the following three main Acts govern electricity supply in New South Wales.

The Local Government Act, 1919, which lays down the various rights and responsibilities of local government bodies in the establishment and operation of electricity trading undertakings.

The Electricity Development Act, 1945-1965, which established the Electricity Authority of New South Wales as the body responsible for the co-ordination of electricity supply throughout the State.

The Electricity Commission Act, 1950-1965, which constituted the Electricity Commission of New South Wales as the major generating authority and not subject to the provisions of the Electricity Development Act.

#### **Electricity Commission of New South Wales and electricity supply authorities**

The main function of the Commission is the generation and transmission of electricity, which it sells in bulk to distributing authorities (mainly local government bodies) throughout a large part of the State, to the Government railways and to certain large industrial consumers. As the major generating authority, it is also responsible for the development of new power sources except in the Snowy Mountains region.

The retail sale of electricity to the public is, in general, carried out by separate electricity supply authorities. At 30 June 1967 there were 41 supply authorities throughout the State, 34 electricity county councils (consisting of groups of shire and or municipal councils), four municipal councils, 1 shire council, and 2 private franchise holders. In addition to the Electricity Commission, 2 coal companies supply electricity in bulk to retail supplying authorities. Most of the small power stations which had operated in many country centres have closed down as the main transmission network has been extended.

Over recent years there has been a distinct trend towards the consolidation of supply areas on a district basis for electricity distribution purposes. Generally, these consolidations have taken the form of a county district consisting of a number of neighbouring shire and municipal and city areas grouped only for electricity supply purposes, and administered by a county council of representatives elected by the constituent councils. Of the 224 cities, municipalities and shires in New South Wales, 215 are included in one or other of the thirty-four electricity county districts. The majority of these county districts have been constituted since 1945. The largest of the county councils is the Sydney County Council, which at 30 June 1967 was supplying 559,584 consumers in the Sydney metropolitan area.

### Electricity Authority of New South Wales

The Electricity Authority was constituted for the purposes of promoting and regulating the co-ordination, development, expansion, extension, and improvement of electricity supply throughout the State. The following are the main functions of the Authority.

*Distribution.* The approval of the Authority is required for the establishment or acquisition of an electricity trading undertaking by a local government council, for the granting or renewing by such a council of electricity franchise agreements or corresponding agreements with other councils, and for the giving or taking of bulk supplies of electricity. It also has power to formulate proposals for the establishment of county councils. In exercising these powers, the Authority is concerned mainly with seeing that distributing authorities are sufficiently strong to provide an economical, efficient and satisfactory service. Its most important activities in this regard are in investigating supply areas and in making recommendations to the Minister for the consolidation of such areas into county districts.

*Rural electrification.* The Authority administers the rural electricity subsidy scheme under which rural electrification throughout the State has progressed very rapidly (*see* page 1138).

*Safety.* The Electricity Development Act, 1945-1965 contains provisions for the making of regulations relating to most aspects of safety, and these powers are being used more and more extensively. Safety regulations now in force cover such matters as inspection of consumers' installations, licensing of electricians and electrical contractors, approval of electrical appliances, safety of linesmen, and overhead line construction.

*Generation and transmission.* The approval of the Authority is required for the establishment or extension of power stations and main transmission lines (with the exception of those of the Electricity Commission).

*Traffic route lighting.* The authority administers a Traffic Route Subsidy Scheme under which a subsidy is paid to councils for the lighting of traffic routes to a standard approved by the Authority.

### Generation and transmission

Except in the Snowy Mountains district and in one or two other areas New South Wales is lacking in major water power potential, and for the generation of electricity the State is dependent mainly on steam power stations. During the year ended 30 June 1967, coal-fired power stations generated 89.2 per cent of the State's energy requirements, hydro-electric stations 10.4 per cent and internal combustion plants 0.5 per cent. Of the 10.4 per cent generated from hydro-electric stations approximately 80 per cent was from the Snowy Mountains Scheme. This proportion will increase with the expansion of that scheme, but it is not expected that more than 15 per cent to 20 per cent of the State's power needs will be supplied from this source. The coal-fired steam power stations (and possibly atomic power stations in the future) will therefore continue to supply the greater part of requirements.

*Major generating stations.* At 30 June 1967 the major power stations of the State system of the Electricity Commission of New South Wales and their effective capacities were as follows: *Steam*—Vales Point (Lake Macquarie), 875,000 kW; Bunnerong (Sydney), 375,000 kW; Munmorah (Tuggerah Lakes), 350,000 kW; Wangi (Lake Macquarie), 330,000 kW; Tallawarra (Lake Illawarra), 320,000 kW; Wallerawang (near Lithgow), 240,000 kW; Pyrmont (Sydney), 200,000 kW; White Bay (Sydney), 172,000 kW; Balmain (Sydney), 107,000 kW; Port Kembla, 60,500 kW; Zarra Street (Newcastle), 42,500 kW; Muswellbrook, 30,000 kW; Lithgow, 27,000 kW; Tamworth, 27,000 kW; Maitland, 20,000 kW; Penrith, 20,000 kW; Liverpool, 20,000 kW; *Hydro*—Hume (near Albury), 50,000 kW; Warragamba (near Penrith), 50,000 kW; Burrinjuck (near Yass), 20,000 kW. There were also various other steam, hydro and internal combustion stations aggregating 40,000 kW. The total effective capacity of the Electricity Commission's system was 3,376,000 kW. The greater part of the Commission's generating plant is concentrated within a hundred mile radius of Sydney—the largest stations outside this area being located at Hume, Muswellbrook and Tamworth.

*Major transmission network.* The retailing of electricity to 97 per cent of the population of New South Wales is in the hands of local distributing authorities, which obtain electricity in bulk from the Commission's major State network. This network of 330 kV, 132 kV, 66 kV and some 33 kV and 22 kV transmission lines links the Commission's power stations with the load centres throughout the eastern portions of the State, extending geographically up to 400 miles inland.

At 30 June 1967 there were in service 1,011 route miles of 330 kV (including 143 miles operating for the time being at 132 kV) and 2,397 miles of 132 kV transmission lines (including 55 miles operating for the time being at 66 kV or lower). There were also in service 2,532 miles of transmission line of 66 kV and lower voltages. The installed transformer capacity at the Commission's 124 sub-stations was 11,408,150 kVA.

*Separate systems and total State installed capacity.* A number of small plants which supply isolated towns and villages have not yet been interconnected with the main network. Some local government bodies have undertaken the development of independent power stations. Of these, the more important are: the Northern Rivers County Council, which has constructed a steam power station at Koolkhan (near Grafton) with an installed capacity of 28,750 kW, and the North-West County Council, which has established a 15,000 kW steam power station on the Ashford coalfield. The aggregate effective capacity for the whole of the New South Wales systems and isolated plants was 3,538,450 kW at 30 June 1967 and the number of ultimate consumers at this date was 1,427,654.

#### **Future development**

The major new thermal stations already built and those now being developed on the coalfields will become the main base load supply sources for the State. Vales Point and Wangi, on Lake Macquarie, Wallerawang, near Lithgow, and Tallawarra, on Lake Illawarra, have been completed.

Construction of the Munmorah Power Station, located between Lakes Munmorah and Budgewoi (on the central coast), is in progress. The plant at Munmorah will ultimately comprise four 350,000 kW generating units, the first of which was commissioned in 1967, the second in 1968, and the third and fourth units will follow at yearly intervals thereafter.

During the first half of 1965 work commenced on the Liddell Power Station project in the Hunter Valley, between Singleton and Muswellbrook. The designed capacity of Liddell is 2,000,000 kW, consisting of four 500,000 kW generating units, and is the biggest thermal power station yet planned in Australia. The first unit is scheduled for commissioning in 1971, and the second, third and fourth units in 1972, 1973 and 1974 respectively. The development of the 330 kV main system is continuing.

New work in hand includes the extension of 330 kV transmission to Tamworth and the construction of major 330 kV transmission centres at Tamworth and Newcastle and later at Armidale. Plans to augment the transmission system during the next five years provide for the construction of 460 route miles of 330 kV lines 1,237 miles of 132 kV overhead lines, 35 miles of cables, and 25 new sub-stations.

#### **Hydro-electricity**

The greater part of the hydro-electric potential of New South Wales is concentrated in the Snowy Mountains area (*see* Snowy Mountains Hydro-electric Scheme, page 1132). Apart from this area, major hydro-electric stations are in operation at the Warragamba Dam (50,000 kW), Hume Dam (50,000 kW), Burrinjuck Dam (20,000 kW), and Keepit Dam (6,000 kW). The output of Warragamba Power Station depends upon the availability of water surplus to the requirements of the Sydney metropolitan area, and the output of the other stations on the release of water for irrigation. There are, in addition, four smaller hydro-electric installations in operation in various parts of the State.

#### **Rural electrification**

When the Electricity Authority of New South Wales was constituted in 1946 less than one-quarter of New South Wales farms within reasonable reach of public electricity supply systems were being served with electricity. Under a subsidy scheme approved in August 1946, local electricity suppliers receive subsidies from the Electricity Authority towards the cost of new rural lines. The amount of subsidy is based on the estimated cost of the proposed extension and the number of consumers able to be served by the new lines. The scheme was designed to encourage local electricity supply authorities to construct the more economic extensions first by fixing a limit to the cost for which suppliers could be subsidised. Originally this limit was \$500 per consumer when averaged over the cost of the whole extension, but the limit was raised to \$800 in December 1953. Some subsidy was paid on higher cost extensions, but the excess over an average of \$800 was not subsidised.

To assist supply authorities in extending supply to less populated, and thus high-cost, areas of the State the subsidy scheme was extended from May 1959 to provide for payment of increased subsidy in respect of extensions where the average capital cost per consumer lies within the range of \$1,200–\$1,600.

Between August 1946 and June 1967, applications for subsidy had been made by electricity suppliers to the Authority covering rural extensions costing \$80 million to give supply to some 59,475 farming properties and 35,770 other rural consumers and involving 58,216 miles of line. The greater part of this work had been completed at 30 June 1966. At this date the Authority was committed to the payment of \$33,668,048 in subsidies, of which \$19,665,374 had been paid.

## Victoria

In Year Book No. 39 a detailed description is given of the development of electricity generation in the cities of Melbourne, Geelong, Bendigo and Ballarat up to the time of transfer of control of electricity undertakings in those cities to the State Electricity Commission of Victoria. An account is also given of the events culminating in the establishment of the Commission in 1919, and of the early developments in the Commission's undertakings.

Constituted by the *Electricity Commissioners Act 1918*, the State Electricity Commission is a semi-governmental authority administered since 1921 by a full-time Chairman and three part-time Commissioners. The principal duty of the Commission is to co-ordinate and extend on an economic basis the supply of electricity throughout Victoria. For this purpose it is vested with power to erect, own and operate power stations and other electrical plant and installations, supply electricity retail to individual consumers or in bulk to any corporation or public institution, acquire and operate electricity undertakings, develop, own and operate brown coal open cuts and briquetting works, and develop the State's hydro-electric resources. From its own revenues, which it controls, the Commission must meet all expenditure in the operation of its power, fuel and subsidiary undertakings, provide for the statutory payment of 3 per cent of its revenue to State Consolidated Revenue, and meet depreciation and all other charges on capital funds.

The Commission is the controlling authority for all electrical undertakings in Victoria. It is responsible for the registration of electrical contractors, the licensing of electrical mechanics, the control of installation methods and material, and the testing and approval of electrical equipment and appliances. Incidental to its main operations, the Commission owns and operates the tramway systems in Ballarat and Bendigo.

### State Electricity Commission of Victoria

Since it began operating in 1919 the State Electricity Commission has expanded and co-ordinated the production and supply of electricity on a State-wide basis to the point where its system now generates almost all the electricity produced in Victoria and serves 98 per cent of the population. Development of Victoria's electricity system is based on the utilisation for both power and fuel of Victoria's extensive brown coal resources in the Latrobe Valley in eastern Gippsland, with supplementary development of the hydro-electric potential of north-eastern Victoria. Victoria is entitled to one-third of the electricity from the Snowy Mountains Hydro-electric Scheme, after the Commonwealth has taken the power it needs for its purposes. Victoria also shares with New South Wales in the electricity generated at Hume Hydro Station on the River Murray. More than 86 per cent of the State's electricity is generated from brown coal, either used in its raw state or manufactured into higher quality fuel in the form of brown coal briquettes. All the brown coal and briquette fuel is supplied by undertakings which the Commission itself owns and operates. Output of brown coal in 1966-67 from the three open cuts at Yallourn, Yallourn North and Morwell totalled 21,982,975 tons, of which 16,469,136 tons were used in the Commission's own power stations, and 5,082,326 tons were manufactured into 1,820,120 tons of brown coal briquettes, 30 per cent of the briquette output then being used for electricity production in metropolitan and provincial steam power stations. The two functions, generation of electricity and production of fuel, are closely integrated. Apart from the large proportion of brown coal and briquette fuel consumed in the power stations, the process of briquette manufacture results also in the generation of electricity, since the steam needed for processing the raw coal for briquetting is first used to operate turbo-generators.

### Electricity supply

At 30 June 1967 the number of ultimate consumers in Victoria was 1,135,613. Of these, 1,129,704 were served by the State system and 5,909 by local country undertakings. The State system supplies all the Melbourne metropolitan area and over 2,300 other centres of population.

Complete electrification of the State is now within sight. By 30 June 1967 about 955,000 of the 967,000 homes in the State and 68,312 of Victoria's 69,700 farms were supplied with electricity. State-wide electrification is now nearing completion. It is expected that fewer than 3,000 homes and 1,250 farms in remote and isolated parts will be out of reach of public supply mains. Efforts will continue to be made to supply as many of these as possible.

The Commission sells electricity retail in all areas except part of the metropolitan area, where it sells in bulk to eleven municipal undertakings which operate as local retail supply authorities under franchises granted before the Commission was established. Bulk supply is also being provided at present to several New South Wales municipalities and irrigation settlements bordering the River

Murray. The number of consumers served by the State system outside the Melbourne metropolitan area is 531,025. Of the new consumers connected to supply each year, more than two-thirds are outside the metropolitan area. New farm connections approximate 3,600 a year.

The Commission's retail consumers numbered 911,038 at 30 June 1967. Retail supply is administered through the metropolitan branch and ten extra-metropolitan branches (Barwon, Eastern Metropolitan, Gippsland, Mallee, Midland, Mid-Western, North-Eastern, Northern, South-Western and Wimmera). At 30 June 1967 there were branch and district supply offices in Melbourne and 95 other cities and towns in Victoria.

### **Electricity production, transmission and distribution**

Electricity generated in the State system or purchased by it totalled 11,209 million kWh in 1966-67, or more than 99 per cent of all Victoria's electricity for public supply. The system comprises a series of thermal and hydro-electric power stations. Inclusive of generator capacity both within the State and available to the Victorian system from outside the State, the total installed generator capacity at 30 June 1967 was 2,896,000 kW. Power stations are interconnected and feed electricity into a common pool for general supply. The major power station in this interconnected system is the brown coal burning power station at Yallourn, which alone generates over 38 per cent of Victoria's electricity. Other power stations in the interconnected system comprise two further base load brown coal burning power stations, Morwell and Hazelwood (which now has four of its planned eight 200,000 kW generating sets in service); steam stations in Melbourne (Newport, Richmond and Spencer Street), Geelong and Ballarat, and also at Red Cliffs, which has, in addition, some internal combustion plant; and hydro-electric stations at Kiewa, at Eildon, on the Rubicon and Royston Rivers near Eildon, and at Cairn Curran. All within Victoria are Commission-owned, except Spencer Street Power Station, which remains the property of the Melbourne City Council, although operated as a unit in the interconnected system. A 330 kV transmission line links the Victorian system with the Snowy Mountains undertaking, and also provides facilities for interconnection between the Victorian and New South Wales State generating systems. Also linked with the Victorian interconnected system is the hydro station at Hume Dam on the River Murray. This power station is operated by the Electricity Commission of New South Wales. Output and operating costs are shared by Victoria and New South Wales. In meeting the total demand on the system, which fluctuates throughout the day and from month to month, each group of stations in the interconnected system is assigned a predetermined function dependent upon the availability of power from each group and the economics of generation. The various stations are utilised in the combination that will meet the system load most economically at a given time.

The electrical transmission and distribution system in the State supply network at 30 June 1967 comprised 53,210 miles of power-lines, 24 terminal receiving stations, 91 main transmission sub-stations, and more than 51,000 distribution sub-stations. Main transmission is by 330 kV, 220 kV and 66 kV power lines which supply the principal distribution centres and also provide interconnection between the power stations. The 330 kV and 220 kV systems total 1,425 route miles.

### **Future development**

Major new construction is concentrated on the erection, on the brown coal fields of the Latrobe Valley, of a large brown coal burning power station (Hazelwood), which is designed to operate on raw brown coal fuel supplied by belt conveyor direct from the Morwell open cut. Hazelwood Power Station is the largest project yet undertaken by the Commission and is designed to have a capacity of 1,600,000 kW in 1971. By that year the State's power resources, including Victoria's share of the output of the Snowy scheme, will have increased by 35 per cent to 3,907,000 kW. The first of Hazelwood's eight 200,000 kW turbo-generators was commissioned in October 1964, the second generating set went into service in 1965, the third generating set in 1966, and the fourth generating set in 1967. Four other 200,000 kW sets will follow at yearly intervals. Power generated at Hazelwood Power Station is transmitted at high voltage to Melbourne metropolitan terminal stations for distribution through the State supply network. To follow the Hazelwood project a new power station—to be known as Yallourn 'W'—will be built about half a mile west of the present Yallourn Power Station. It will also operate on brown coal which will be supplied by conveyors from Yallourn open cut. Yallourn 'W' will have two 350,000 kW turbo-generators, the first to be in service in 1972 and the second in 1973.

### **Local country electricity undertakings**

At 30 June 1967 there were five independent electricity undertakings in country centres in Victoria generating and distributing their own local supply. Three of these undertakings were in the west and north-west of the State. Under the State Electricity Commission's rural electrification programme

almost all the independent local country undertakings will ultimately be acquired and absorbed into the State system. For the year 1966-67 the total production of the independent undertakings was 23 million kWh. The number of consumers at 30 June 1967 was 5,909. The operation of the independent undertakings is governed by the *Electric Light and Power Act* 1958, which is administered by the State Electricity Commission.

## Queensland

In Year Book No. 39 an account is given of the growth of electricity generation in Queensland, with particular reference to south-eastern Queensland, and of the events leading up to the establishment in 1937 of the State Electricity Commission of Queensland. In Year Book No. 53 an account is given of the post-war development and organisation of the electricity supply in Queensland.

Electricity supply in Queensland is governed by the following Acts which are administered by the Commission.

*'The State Electricity Commission Acts, 1937 to 1965.'* These Acts constituted the Commission and define its powers and duties.

*'The Electric Light and Power Acts, 1896 to 1967.'* These Acts relate to the constitution of electric authorities, except the Southern Electric Authority and the Northern Electric Authority, and define their powers and duties and the conditions under which electricity is to be supplied and used.

*'The Regional Electric Authorities Acts, 1945 to 1964.'* These Acts provide for the constitution of Regional Electricity Boards representative of the Commission and the Local Authorities within each region, and define their powers and responsibilities.

*'The Southern Electric Authority of Queensland Acts, 1952 to 1964.'* These Acts established the Southern Electric Authority and define the powers and responsibilities of the Authority.

*'The Northern Electric Authority of Queensland Acts, 1963 to 1964.'* These Acts established the Northern Electric Authority. They also define its powers and responsibilities.

*'The Electrical Workers and Contractors Acts, 1962 to 1964.'* These Acts provide for the certification of electrical workers and for the licensing of electrical contractors.

### State Electricity Commission of Queensland

The Commission commenced to function in January 1938. The Commission is the statutory authority concerned, *inter alia*, with the administration of electricity supply legislation, the general control, organisation and efficient development of the electricity supply industry in Queensland, the forward planning of such development, the control of electricity charges, the administration of regulations and rules relating to safety, the raising of capital, the provision of engineering and consulting services, the promotion of the use of electricity, particularly in manufacturing and rural industries, and the fixing of standards. In addition, it is an authority to which consumers may appeal on matters in dispute between them and their electric authorities. The Commission is also empowered to own directly and operate generating stations and transmission lines and to sell electricity in bulk, but up to the present it has not been found necessary or desirable to implement this power.

### Organisation

Regional electrification, with centralised generation and main transmission, is the predominant feature of the organisation of the electricity supply industry in Queensland. The more populous eastern part of the State is served by three major networks.

The southern network embraces the areas of supply of the Southern Electric Authority, the Brisbane City Council, the Wide Bay-Burnett Regional Electricity Board, and the Dalby Town Council. Generation and main transmission in this area are the responsibility of the Southern Electric Authority, which sells energy in bulk to the other three Authorities. The Wide Bay-Burnett Board also operates its own base load power station at Howard. The Southern Electric Authority is also responsible for the distribution of electricity to a large rural area outside metropolitan Brisbane.

The central network is within the area of supply of the Capricornia Regional Electricity Board, which is responsible for the generation, main transmission and distribution of electricity. In addition to its main interconnected system this Board operates a smaller isolated system in the western portion of its area. This small system will be integrated with the main system at an early date.

The northern network covers the areas of supply of the Cairns, Townsville, and Mackay Regional Electricity Boards. Generation and main transmission are the responsibility of the Northern Electricity Authority, and electricity is purchased in bulk for distribution by the three Regional Electricity

Boards. In addition, the Cairns Regional Electricity Board operates small internal combustion generating stations at certain isolated centres in its area, and the Townsville Regional Electricity Board supplies the western area of its region by means of a distribution system based on an internal combustion station at Hughenden.

At present there is no interconnection between these three main networks. West of the three main networks the form of organisation which has been adopted is determined by the stage of electrical development which has been reached. Immediately west of the Capricornia region the Central Western Regional Electricity Board operates with generation being progressively centralised at internal combustion stations at Longreach and Barcaldine. Other smaller regions of electricity supply are centred on Roma and Mount Isa. In addition, parts of southern Queensland are supplied by the Tenterfield Municipal Council and the North West County Council of New South Wales. In the remaining parts of Western Queensland there are a number of isolated electricity undertakings operated by Shire Councils.

The organisation of the industry in Queensland is moving progressively towards a greater integration of generating authorities so that the production of electricity can be centred to an increasing extent on larger and more efficient power stations.

#### Electricity generation, transmission and distribution

Electricity generated in the State is based primarily on black coal, 87.7 per cent of the total production during 1966-67 being derived from this fuel. Hydro-electric stations, located mainly in north Queensland, provided 10.7 per cent, and the balance of the production, 1.6 per cent, was from internal combustion plants located mainly in western Queensland, utilising oil, coal, or natural gas as fuel. Natural gas is the principal fuel used at the Roma power station. Electricity generated in Queensland in power stations in 1966-67 totalled 4,379 million kWh. At 30 June 1967 the major power stations within the State were as follows: *Steam*—Bulimba A (Brisbane), 92,500 kW; Bulimba B (Brisbane), 180,000 kW; New Farm (Brisbane), 75,000 kW; Tennyson A (Brisbane), 120,000 kW; Tennyson B (Brisbane), 120,000 kW; Swanbank A (Ipswich), 198,000 kW; Howard (near Maryborough), 37,500 kW; Rockhampton, 52,500 kW; Callide, 60,000 kW; Mackay, 12,250 kW; Townsville, 37,500 kW; *Hydro*—Kareeya (Tully Falls), 72,000 kW; Barron Gorge (near Cairns), 60,000 kW. The Mackay station also contains 3,000 kW of internal combustion plant. The total installed capacity of all Queensland generating stations was 1,259,300, which comprised 1,091,750 kW of steam plant, 135,205 kW of hydro-electric plant and 32,345 kW of internal combustion plant.

The electrical transmission and distribution systems within the State comprised 39,135 circuit miles of electric lines at 30 June 1967. The main transmission voltages are 132 kV, 110 kV, 66 kV and in certain areas 33 kV. Extensive rural electrification has been undertaken by means of the single wire earth return system. At 30 June 1967 the total number of electricity consumers was 515,000, of whom 203,000 were in metropolitan Brisbane. The total number of farming properties supplied with electricity was approximately 26,500.

#### Future development

Major new construction is concentrated on the development of four new power stations sited on coalfields. These are at Swanbank (396,000 kW and 480,000 kW) on the West Moreton coalfield near Ipswich, Callide (120,000 kW) on the Callide open-cut coalfield near Biloela, and at Collinsville (120,000 kW) on the Collinsville coalfield. These stations will supply the southern, central and northern networks, respectively. Cooling water for the Callide station is provided from a dam on Callide Creek. A dam on the Broken River will serve the Collinsville station. The water requirements of the Swanbank power station will be supplied from the Moogerah Dam. The Swanbank A station will consist of six 66,000 kW generating sets. Three of the six sets at this station had been commissioned by 30 June 1967. The fourth and fifth sets will be commissioned in 1968, with the final set scheduled for commission early in 1969. Gas turbine plants with generating capacities of 30,000 kW and 60,000 kW will be commissioned at Swanbank and Middle Ridge in 1969 and 1970, respectively. These units will be used as peak load plant. The planned ultimate capacity of Swanbank B power station is 480,000 kW. It will comprise four 120,000 kW generating sets, one of which will be commissioned annually from 1970 to 1973.

At 30 June 1967 two 30,000 kW generating sets had been commissioned at the Callide power station. A third unit was commissioned in October 1967. The final 30,000 kW set is scheduled for commissioning early in 1969. A 25,000 kW gas turbine unit was installed at Rockhampton in December 1967. At Collinsville power station, two 30,000 kW sets are planned for commissioning in 1968, with the third and fourth sets scheduled for 1970 and 1971, respectively. Investigations

are currently proceeding into the next major power station, or stations, to supply south, central and northern Queensland after the early 1970's. The economics of interconnecting the three major grids are an essential part of these investigations.

### South Australia

A general historical survey concerning the electricity supply industry in South Australia is given in Year Book No. 39, page 1186. The survey traces the development of the industry from its formation in South Australia in 1895 until the establishment of the South Australian Electricity Commission in 1943.

#### Electricity Trust of South Australia

In 1946 the assets of the Adelaide Electric Supply Co. Ltd were transferred to a newly formed public authority, the Electricity Trust of South Australia, which became responsible for unification and co-ordination of the major portion of the State's electricity supply and which took over the powers previously vested in the South Australian Electricity Commission. In addition to the powers specified in the Adelaide Electric Supply Company's Acts, 1897-1931, the Trust may supply electricity direct to consumers within a district or municipality with the approval of the local authority, and by agreement with other organisations which generate or supply electricity, arrange to inter-connect the mains of the Trust with those of other organisations, and give or receive supplies of electricity in bulk.

#### Capacity and production

Three main categories of organisations generate electric power in South Australia, namely: (a) governmental, which includes the Electricity Trust; (b) local authorities, e.g. municipal and district councils; and (c) other, including individuals and firms engaged primarily in generating power for sale, firms generating power primarily for their own use but supplying outside consumers, and firms generating power solely for their own use.

Of the total installed capacity in South Australia at 30 June 1967, the Electricity Trust operated plant with a capacity of 781,400 kW, and is the most important authority supplying electricity in the State. There were approximately 397,000 ultimate consumers of electricity in the State, of whom 381,000 were supplied directly and approximately 11,100 indirectly (i.e. through bulk supply) by the Trust. Its major steam stations are Osborne 'A' (60,000 kW), Osborne 'B' (240,000 kW), Port Augusta Playford 'A' (90,000 kW) and Playford 'B' (240,000 kW), and Torrens Island (120,000 kW).

The Trust operates two smaller power stations. The Mt Gambier station has an installed capacity of 21,800 kW and burns either wood waste or fuel oil. The other station at Port Lincoln has a 5,000 kW steam and a 4,600 kW diesel plant. Both locations are connected with the Trust's interconnected system with 132 kV lines.

No hydro-electric potential exists in South Australia. Steam generating units comprise 98 per cent of installed capacity and the balance is internal combustion equipment.

#### Leigh Creek and other new capacity

Fairly extensive deposits of low grade sub-bituminous coal are obtainable at Leigh Creek, about 360 miles north of Adelaide. Under the Electricity Trust of South Australia Act, 1946, the Trust was given authority to develop Leigh Creek coal for use in its own undertakings and also for sale to other consumers. Production from the Leigh Creek field commenced in 1944, and in the year ended 30 June 1967, 2,031,639 tons of coal were produced, practically all of which was used by the electricity undertaking at the Port Augusta Playford Power Stations, which use Leigh Creek coal exclusively.

A power station is to be constructed on Torrens Island near Adelaide, and four 120,000 kW turbo-alternators and associated boilers modified to use both natural gas or oil will be installed by 1971. The No. 1 unit consisting of 120,000 kW turbo alternator and associated boiler was placed on load for the first time in April 1967.

### Western Australia

Since 1952 the State Electricity Commission of Western Australia has generated and distributed all electric current in the Perth metropolitan area. For information on the early history of electricity supply in the metropolitan area, see Year Book No. 39, page 1189.



### State Electricity Commission of Western Australia

The State Electricity Commission of Western Australia was established by the *State Electricity Commission Act, 1945*, and, as at present constituted, consists of nine members, including the Chairman, appointed by the Governor. Four of the Commissioners are representatives of consumers, one for the metropolitan area, two for the rest of the State and one representing commercial consumers. Of the remaining five, one is the Under Treasurer of the State or his deputy, one represents employees of the Commission and three are required to be qualified engineers.

The Commission is empowered to co-ordinate all power undertakings in the State and to encourage and promote the use of electricity and other power, especially for industrial, manufacturing and rural purposes.

### General pattern of electricity supply

The State Electricity Commission gives central power station supply to the metropolitan area, an area of approximately 30,000 square miles in the South-West and Great Southern Areas, and an area extending eastward from Perth to Koolyanobbing. The policy of extending power supplies to rural holdings is continuing, and at 30 September 1967 some 8,300 such consumers were connected. A scheme known as the Northern Areas State Power Scheme is also being developed, and a depot has been established in the Geraldton area where the Commission purchases power in bulk to supply districts as far north as Northampton. It also supplies Port Headland with power which is generated by a diesel station situated in the town.

In the other areas of the State, towns are supplied by the local authority or by a concessionaire operating under an agreement with the local authority and the Commission. Power stations operated under these conditions are exclusively diesel of varying sizes.

In Kalgoorlie the large goldmines generate their own power requirements. The Kalgoorlie Town Council operates a 50-cycle diesel station to supply A.C. consumers in Kalgoorlie and Boulder. The D.C. stations of the Kalgoorlie and Boulder Town Councils will continue to operate for some time at least.

The total number of consumers at 30 June 1967 was 226,360, of whom 206,722 were supplied by the Commission.

The Commission has developed its system to provide for the rapid expansion of industry and housing, and generating plant has increased almost eight-fold in the past twenty-one years. The four major power stations in the system are interconnected with the South-West Power Station at Collie, enabling the most economical units to be used as a base load station. Continuous development of the transmission and distribution system is also being undertaken to keep pace with the growth in consumer demand, which is being maintained at a high level. The activities of the interconnected system for the year 1966-67 were as follows: plant capacity, 409,500 kW; maximum load, 401,000 kW; units generated, 1,544,000 kW; fuel used per unit (kWh) generated, 1.39 lb; coal used, 836,058 tons.

### New projects

Three of the four turbo-alternators installed at the Muja Power Station (near Collie) have been commissioned, and work on the other unit is proceeding to schedule. Contracts have been let for four 120,000 kW oil-fired units for a new station being built at Kwinana. It is expected that these units will be commissioned in 1969, 1970, 1971 and 1972.

## Tasmania

A considerable part of the water catchment in Tasmania is at high level, with a substantial natural storage available, and this has made it possible to produce energy at lower cost than elsewhere in Australia, or in most other countries. Another factor contributing to the low cost is that rainfall is distributed fairly evenly throughout the year with comparatively small yearly variations. The abundant and comparatively cheap supplies of electricity and other natural resources have attracted to Tasmania a number of important secondary industries, including large electro-chemical and metallurgical works with high load factor (in consequence of which the system load factor is also very high—70 per cent), for which energy costs constitute a large proportion of the total cost of production. The continuous power demand of these organisations when plant is in full operation aggregates 350,000 kW. For information on hydro-electric development in Tasmania prior to the establishment of the Hydro-Electric Commission in 1930, see Year Book No. 39, pages 1192-3.

### Hydro-Electric Commission

In 1929 the Government passed the *Hydro-Electric Commission Act 1929*, which established the Hydro-Electric Commission and vested in the Commission, with some minor exceptions, the right to use the waters of the State of Tasmania, and authorised it to develop and reticulate electric power for all purposes. In 1930 this corporate body took over the State hydro-electric undertaking and the business of the Hydro-Electric Department.

The total installed capacity of alternators in the various power stations operating now, under construction, or projected is as follows.

<i>Power stations</i>	<i>Water system</i>	<i>Date of entry into system (a)</i>	<i>kW</i>
Waddanana 'B'	Great Lake	1944	48,000
Tarraleah	Derwent	1938	90,000
Bolters Gorge	Derwent	1951	12,200
Tongatinah	Nive/Ouse/Little Pine	1953	125,000
Trevallyn	South Esk(b)	1955	80,000
Lake Echo	Little Pine/Ouse	1956	32,400
Wayatinah	Derwent	1957	38,250
Liapootah	Derwent	1960	83,700
Catagunya	Derwent	1962	48,000
Poatina	Great Lake	1964	250,000
Tods Corner	Arthurs Lake	1966	1,600
Meadow Bank	Derwent	1967	40,000
Cluny	Derwent	1968	21,250
Repulse	Derwent	1968	28,000
Rowallan	Mersey-Forth	1968	10,450
Lemonthyme	Mersey-Forth	1969	51,000
Devils Gate	Mersey-Forth	1969	60,000
Wilmot	Mersey-Forth	1970	30,600
Cethana	Mersey-Forth	1970	85,000
Paloona	Mersey-Forth	1971	28,000
Fisher	Mersey-Forth	1971	44,650
Bell Bay Thermal		1971	120,000
Gordon River, Stage 1	Gordon/Serpentine/Huon	1975	240,000

(a) Actual till 1968; planned dates for subsequent years. (b) Discharge from Poatina enters South Esk via tributaries.

The number of ultimate consumers at 30 June 1967 was 135,941.

### New capacity

The Hydro-Electric Commission is engaged on a construction programme comprising the Lower Derwent Power Development, the Mersey-Forth Power Development, Gordon River Power Development, Stage 1, and Bell Bay Thermal Power Station. Completion of the first-named, with dams and associated power stations Repulse, Cluny and Meadowbank, adds a further 85,000 kW to the system, and also brings to an end the exploitation of the power potential of the River Derwent and its tributaries.

The Mersey-Forth Power Development is scheduled to be completed progressively between 1968 and 1971. The essence of this development is the diversion of the flows of the Mersey and Wilmot Rivers and tributaries into the Forth River and the construction of Forth River dams. These diverted flows will be used for power generation at seven distinct power stations. The Mersey-Forth Project will add a total of 309,700 kW to the system. The first stage of the Gordon River Power Development involves the construction of a dam and a power station with a proposed instalment of 240,000 kilowatt capacity with provision for an increase to 320,000 kilowatts. An oil-fired thermal station with a single 120,000 kilowatt generator, to be built at Bell Bay on the River Tamar, is scheduled for completion by January 1971.

The Commission is conducting extensive surveys and investigation of other schemes with a view to further construction after the completion of the present programme. Investigations are continuing into the very considerable resources as yet untouched, principally in the west and south-west of the State, and it is estimated that the potential which can be developed economically should ultimately harness 2,400,000 kW to the system.

### Statistical summary

The following table shows statistics for each State and Territory separately and for Australia for the year 1966-67. Statistics of the electricity supply industry for the years 1962-63 to 1966-67 are given in the chapter Manufacturing Industry. Particulars of the Snowy Mountains scheme are included under New South Wales in the following table.

CENTRAL ELECTRIC STATIONS: STATES AND TERRITORIES, 1966-67

	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Generating stations—									
Government . . . No.	28	13	..	13	12	13	5	..	84.
Local authority . . . „	8	4	42	7	30	..	..	..	91
Companies . . . „	14	1	1	10	41	2	..	..	69
<i>Total stations</i> . . . „	50	18	43	30	83	15	5	..	244
Installed capacity of generators—									
Steam . . . '000 kW	3,416	2,098	1,092	(a)	454	..	(a)	..	7,884.
Hydro . . . „	1,561	335	135	..	2	860	..	..	2,893
Internal combustion . . . „	79	22	32	(a)	109	1	(a)	..	273.
<i>Total capacity</i> . . .	5,056	2,454	1,259	809	565	861	47	..	11,051
Persons employed(b) . . . No.	4,103	3,965	1,918	(a)	1,120	(a)	91	..	13,085
Value of output(c) . . \$'000	142,213	94,089	49,623	(a)	27,106	(a)	2,419	..	355,731
Value of production(d) . . „	104,343	63,978	23,641	(a)	15,434	(a)	1,263	..	237,385
Electricity generated(e) . . million kWh	16,722	10,712	4,625	3,402	1,903	4,119	103	(g)	41,587
Ultimate consumers(f) . . No.	1,427,654	1,135,613	515,000	397,000	226,360	135,941	7,736	30,615	3,875,919

(a) Not available for publication; included in the total for Australia. (b) Average employment in generating stations over whole year, including working proprietors. (c) Value, at generating station, of electricity produced plus certain earnings. (d) Value added in the process of generation. (e) Total generated including that generated by factories for their own use. The generation of electricity within each State takes no account of interchange of electricity between States. Furthermore, Victorian details exclude entitlements to generation from Hume Power Station and the Snowy Mountains Hydro-electric Scheme. (f) Approximate figures supplied by the electricity authority in each State. An 'ultimate consumer' is a person, business, undertaking, etc. that has contracted to receive electric power from a public or private organisation supplying this service. The number of ultimate consumers is not identical with the number of persons served with electricity because one ultimate consumer may represent three or four persons, e.g. in a household. (g) Not available. Excluded from Australian total.

### Commonwealth Territories

The electricity supply undertakings at Canberra in the Australian Capital Territory and at Darwin, Katherine, Tennant Creek, and Alice Springs in the Northern Territory are operated by the Commonwealth Government.

#### Australian Capital Territory

The supply authority is the A.C.T. Electricity Authority, which took over the functions of the Canberra Electric Supply Branch, Department of the Interior, on 1 July 1963. Supply was first made available in Canberra during 1915 and was met from local steam plant. Connection to the New South Wales interconnected system was effected in 1929, and all requirements are now taken from this system. Locally owned plant consists of 4,000 kW of diesel alternators which are retained as a standby for essential supplies. The total number of ultimate consumers at 30 June 1967 was 30,615. During the year 1966-67 the bulk electricity purchased was 377,280,000 kWh and the system maximum demand was 92,450 kW.

#### Northern Territory

At Darwin, supply was established by the Town Council in October 1934, but during April 1937 responsibility for generation and supply was transferred to the Northern Territory Administration. The Stokes Hill Power Station is now equipped with four turbo alternators with a total

capacity of 47,000 kW. Old Diesel Power Station with a capacity of approximately 5,000 kW is available as a stand-by. A 66kV transmission system is used in Darwin area. At Alice Springs the power station is equipped with a diesel generating plant of 8,000 kW total capacity. At Katherine the power station is equipped with a diesel generating plant of 1,900 kW total capacity while at Pine Creek and Elliot power is supplied by a small automatic diesel alternator of 90 kW capacity. The total number of ultimate consumers served in the Territory at 30 June 1967 was 7,736.

### Papua and New Guinea

*Papua and New Guinea Electricity Commission.* Responsibility for the operation and establishment of the electrical undertakings in Papua and New Guinea is vested in the Papua and New Guinea Electricity Commission, whose headquarters are located at Port Moresby. The Commission came into operation on 1 July 1963, and assumed the functions and responsibilities previously vested in the Electrical Undertakings Branch of the Department of Public Works. The Commission, on its own behalf, operates the public supplies in the main centres of population and, on behalf of the Administration, operates the supply in the minor centres and patrol posts, hospitals, agricultural establishments, etc., where the supply cannot be considered to be a fully commercial supply. It has also regulatory functions associated with the licensing of electricians and contractors, the control of franchise holders and the approval of appliances and electrical materials for use in the Territory.

*Generating facilities.* The Electricity Commission owns and operates thermal and hydro-electric facilities at Port Moresby and Goroka and thermal facilities at Lae, Madang, Samarai, Wewak, Rabaul, Kavieng and Kokopo, with a total installed capacity of 21.8 MW at 30 June 1967.

	<i>Hydro</i> kW	<i>Thermal</i> kW	<i>Total</i> kW
Port Moresby . . . . .	5,500	5,370	10,870
Lae . . . . .	(a)	3,300	3,300
Madang . . . . .	..	1,620	1,620
Goroka . . . . .	400	500	900
Wewak . . . . .	..	1,360	1,360
Rabaul . . . . .	..	3,000	3,000
Kavieng, Kokopo, Samarai . . . . .	..	730	730
<b>Total . . . . .</b>	<b>5,900</b>	<b>15,880</b>	<b>21,780</b>

(a) For the growing demand of Lae, a 66 kV transmission line has been constructed to enable the import of 2,000 kW of power from the hydro-electric plant of Placer Development Ltd., at Bulolo.

In addition, the Commission owns and operates the distributing systems in these centres. The total substation capacity of all the systems amounts to approximately 45,585 kVa divided up in 349 stations. The Commission maintains the generating plant and distribution systems in all minor centres, acting as an agent of, and from funds provided by, the Administration. In the financial year 1966-67, 138 centres with a total installed capacity of approximately 6.0 MW were supplied with power. The townships of Wau and Bulolo are supplied exclusively with power generated by Placer Development Ltd. The number of consumers served by the Commission at 30 June 1967 was 11,417.

*Future development.* Considerable progress has been made at the Rouna No. 2 Power Station, although delays in the civil works resulted in commissioning the first set later than originally planned. The second and third sets are to follow in March 1968. The order for the manufacture and installation of Nos 4 and 5 generators at Rouna No. 2 has been placed, and these two sets are expected to be operating in 1969. Design work has commenced regarding the raising of the Sirinumu Dam to provide water storage for the enlarged Rouna No. 2 Power Station. Construction is to be completed by early 1971.

Investigations have been completed on the proposed hydro-electric development of the Upper Ramu River, and recommendations have been submitted by the Administration to the Commonwealth Government. The recommendations include proposals for a station designed for an ultimate installed capacity of 72,000 kW for a regional supply to Lae, Madang, Kainantu, Goroka, and Mount Hagen. Some 400 miles of 66 kV and 132 kV transmission line will be required to bring power to the centres of consumption.

Pending construction of the Upper Ramu hydro-electric scheme the diesel power stations at Lae, Madang, Goroka, and Mt Hagen are being extended as necessary to meet the growing loads in these areas.

Investigations are still continuing to locate suitable sources of hydro-electric power to supply the developing area on the Gazelle Peninsula of New Britain. However, the Warangoi Scheme, which looked promising initially, now appears uneconomical because of porous bedrock. Investigations have commenced in determining the next stage in developing supply to Port Moresby. Besides further development of the Laloki River, the potential of the Musa, Angabunga, and Vanapa Rivers are being examined. The feasibility of connecting Port Moresby with the future Upper Ramu Scheme is also being considered. Several small hydro-electric schemes for remote centres are being investigated. These include a 160 kW scheme for Finschhafen and a 200 kW scheme for Wabag. At Rabaul work has commenced on the installation of a 1,200 kW diesel generating set to be commissioned late 1968. A second unit is planned for 1969. Work has also commenced on a 22,000 V line to connect Kokopo to Rabaul.

## CHAPTER 28

### EMPLOYMENT AND UNEMPLOYMENT

Further detail on subjects dealt with in this chapter is contained in the *Labour Report* and other publications of this Bureau. For subjects relating to population censuses reference should be made to the series of mimeographed and printed publications listed in the chapter Miscellaneous of this Year Book. Detailed information on employment and unemployment and the Work Force Survey is contained in the monthly mimeographed bulletin *Employment and Unemployment*. Current information is also available in the *Monthly Review of Business Statistics*, the *Digest of Current Economic Statistics*, and the *Quarterly Summary of Australian Statistics*, and preliminary estimates of civilian employment are issued in a monthly statement *Wage and Salary Earners in Civilian Employment*.

#### THE WORK FORCE

The work force comprises two categories of persons: those who are employed and those who are unemployed. In the first category are included employers, self-employed persons, wage and salary earners, and unpaid helpers. Comprehensive details for each State and Territory and for Australia as a whole in respect of persons in the work force, classified according to characteristics such as age, sex, marital status, industry, occupational status, and occupation are obtained only at a general census of population. Quarterly estimates of the civilian work force are derived from the results of surveys of a sample of households selected by area sampling methods. Estimates are at present available only for the six State capital cities combined. A summary of the information about the work force that was obtained at the population census of June 1966 is given on pages 1150-61.

#### Population censuses\*

At the 1961 and previous censuses the work force was determined as:

'Those who are engaged in an industry, business, profession, trade or service at the time of the Census (including those on long service leave, etc.) . . .'; and

' . . . those out of a job at time of the Census but who are usually engaged in an industry, business, profession, trade or service . . .'

At the 1966 census an additional set of four questions was asked in order to obtain information on the basis of which the work force could be determined more precisely. The *questions* were as follows.

16. 'Did the person have a job or business of any kind last week (even though he may have been temporarily absent from it)? ANSWER "YES" or "NO".'
17. 'Did the person do any work at all last week for payment or profit? ANSWER "YES" or "NO". Persons working without pay as a helper in a "family business" or farm and members of the clergy and of religious orders (other than purely contemplative orders) should answer "YES" to this question. Persons doing only unpaid housework should answer "NO".'
18. 'Was the person temporarily laid off by his employer without pay for the whole of last week? ANSWER "YES" or "NO".'
19. 'Did the person look for work last week? ANSWER "YES" or "NO". (Note. "Looking for work" means (i) being registered with Commonwealth Employment Service, or (ii) approaching prospective employers, or (iii) placing or answering advertisements, or (iv) writing letters of application, or (v) awaiting the result of recent applications).'

The work force includes all person for whom the answer "yes" was given to any one of these four questions, except that persons helping but not receiving wages or a salary who usually worked less than fifteen hours a week were excluded from the work force. Persons under fifteen years of age were also excluded by definition from the work force.

\* Particulars of full-blood Aborigines are not included in the tables in this section. See page 117, Chapter 7, Population.

Persons in the work force were classified into two categories: those employed and those unemployed. A person was considered to be unemployed if he answered the above questions in any one of the following ways.

Question No.	In work force—Unemployed				
16.	No	No	No	Yes	Yes
17.	No	No	No	No	No
18.	No	Yes	Yes	Yes	Yes
19.	Yes	No	Yes	No	Yes

This approach conforms closely to the recommendations of the Eighth International Conference of Labour Statisticians held in Geneva in 1954.

The net effect of the new definition is to include approximately 108,000 additional persons in the Australian work force, i.e. a proportionate increase in the Australian work force of approximately 2.3 per cent. The major factor in this change was females working part-time (sometimes for only a few hours a week) some of whom, in 1961, did not consider themselves as '... engaged in an industry, business, profession, trade or service.'

#### Occupational status

Persons in the work force were asked at the 1966 census to state occupational status in accordance with the following instructions.

'If working for wages or salary (including apprentices), write "W".

If conducting own business or profession and not at present employing others, write "O".

If conducting own business or profession and at present employing others, write "E".

If helping but not receiving wages or salary, write "H".

If looking for first job, write "F".'

The table following shows the occupational status of the population of Australia and States and Territories at the 1966 census.

#### POPULATION, BY OCCUPATIONAL STATUS: STATES AND TERRITORIES CENSUS, 30 JUNE 1966

Occupational status	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
MALES									
In work force—									
Employed—									
Employer . . . . .	83,466	67,236	44,111	23,747	21,383	8,245	815	1,388	250,391
Self-employed . . . . .	106,723	92,302	49,463	31,135	25,136	9,162	601	1,286	315,808
Employee on wage or salary . . . . .	1,058,213	777,217	379,207	259,105	195,704	87,572	12,796	27,304	2,797,118
Helper, unpaid . . . . .	4,564	3,333	2,486	1,167	994	432	26	46	13,048
Total employed . . . . .	1,252,966	940,088	475,267	315,154	243,217	105,411	14,238	30,024	3,376,365
Unemployed . . . . .	18,421	10,139	7,964	4,464	2,938	1,147	162	214	45,449
Total males in work force . . . . .	1,271,387	950,227	483,231	319,618	246,155	106,558	14,400	30,238	3,421,814
Not in work force—									
Child not at school . . . . .	211,591	167,858	94,825	57,455	48,732	22,544	2,577	6,009	611,591
Child attending school or full-time student . . . . .	463,353	376,213	187,472	130,409	97,401	44,324	3,594	12,455	1,315,221
Mainly dependent on pension or superannuation . . . . .	114,701	72,213	50,551	26,500	22,374	9,310	312	795	296,756
Of independent means . . . . .	16,937	14,602	8,948	5,189	3,626	1,287	87	124	50,800
Home duties . . . . .	..	..	..	..	..	..	..	..	..
Inmates of institutions . . . . .	15,556	10,402	5,682	3,267	3,094	1,248	69	15	39,333
Other not in work force . . . . .	30,937	22,389	13,188	6,092	5,309	2,119	469	341	80,844
Total males not in work force . . . . .	853,075	663,677	360,666	228,912	180,536	80,832	7,108	19,739	2,394,545
Total males . . . . .	2,124,462	1,613,904	843,897	548,530	426,691	187,390	21,508	49,977	5,816,359

POPULATION, BY OCCUPATIONAL STATUS: STATES AND TERRITORIES  
CENSUS, 30 JUNE 1966—*continued*

<i>Occupational status</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
<b>FEMALES</b>									
<i>In work force—</i>									
<i>Employed—</i>									
Employer . . . . .	19,774	16,747	10,517	6,228	4,700	1,759	225	271	60,221
Self-employed . . . . .	23,170	20,008	11,306	7,205	4,689	1,644	134	263	68,419
Employee on wage or salary . . . . .	474,185	374,625	149,378	111,197	79,661	35,451	4,171	12,774	1,241,442
Helper, unpaid . . . . .	12,566	8,191	5,483	2,613	2,310	940	76	138	32,317
Total employed . . . . .	529,695	419,571	176,684	127,243	91,360	39,794	4,606	13,446	1,402,399
Unemployed . . . . .	13,070	7,250	4,954	3,563	2,064	971	138	232	32,242
<i>Total females in work force . . . . .</i>	<i>542,765</i>	<i>426,821</i>	<i>181,638</i>	<i>130,806</i>	<i>93,424</i>	<i>40,765</i>	<i>4,744</i>	<i>13,678</i>	<i>1,434,641</i>
<i>Not in work force—</i>									
Child not at school . . . . .	201,150	159,767	90,204	54,372	46,195	21,474	2,504	5,763	581,429
Child attending school or full-time student . . . . .	436,426	345,855	173,526	120,284	90,728	42,103	3,427	11,377	1,223,726
Mainly dependent on pension or superannuation . . . . .	180,414	117,975	72,683	42,385	32,163	13,551	331	1,356	460,858
Of independent means . . . . .	20,568	17,544	7,951	5,359	3,402	1,540	59	196	56,619
Home duties . . . . .	688,030	508,249	278,733	181,791	137,269	61,114	4,585	13,375	1,873,146
Inmates of institutions . . . . .	15,779	11,867	5,707	3,761	3,166	1,594	13	34	41,921
Other not in work force . . . . .	24,228	17,544	9,346	4,587	3,635	1,904	262	257	61,763
<i>Total females not in work force . . . . .</i>	<i>1,566,595</i>	<i>1,178,801</i>	<i>638,150</i>	<i>412,539</i>	<i>316,558</i>	<i>143,280</i>	<i>11,181</i>	<i>32,358</i>	<i>4,299,462</i>
<i>Total females . . . . .</i>	<i>2,109,360</i>	<i>1,605,622</i>	<i>819,788</i>	<i>543,345</i>	<i>409,982</i>	<i>184,045</i>	<i>15,925</i>	<i>46,036</i>	<i>5,734,103</i>
<b>PERSONS</b>									
<i>In work force—</i>									
<i>Employed—</i>									
Employer . . . . .	103,240	83,983	54,628	29,975	26,083	10,004	1,040	1,659	310,612
Self-employed . . . . .	129,893	112,310	60,769	38,340	29,825	10,806	735	1,549	384,227
Employee on wage or salary . . . . .	1,532,398	1,151,842	528,585	370,302	275,365	123,023	16,967	40,078	4,038,560
Helper, unpaid . . . . .	17,130	11,524	7,969	3,780	3,304	1,372	102	184	45,365
Total employed . . . . .	1,782,661	1,359,659	651,951	442,397	334,577	145,205	18,844	43,470	4,778,764
Unemployed . . . . .	31,491	17,389	12,918	8,027	5,002	2,118	300	446	77,691
<i>Total in work force . . . . .</i>	<i>1,814,152</i>	<i>1,377,048</i>	<i>664,869</i>	<i>450,424</i>	<i>339,579</i>	<i>147,323</i>	<i>19,144</i>	<i>43,916</i>	<i>4,856,455</i>
<i>Not in work force—</i>									
Child not at school . . . . .	412,741	327,625	185,029	111,827	94,927	44,018	5,081	11,772	1,193,020
Child attending school or full-time student . . . . .	899,779	722,068	360,998	250,693	188,129	86,427	7,021	23,832	2,538,947
Mainly dependent on pension or superannuation . . . . .	295,115	190,188	123,234	68,885	54,537	22,861	643	2,151	757,614
Of independent means . . . . .	37,505	32,146	16,899	10,548	7,028	2,827	146	320	107,419
Home duties . . . . .	688,030	508,249	278,733	181,791	137,269	61,114	4,585	13,375	1,873,146
Inmates of institutions . . . . .	31,335	22,269	11,389	7,028	6,260	2,842	82	49	81,254
Other not in work force . . . . .	55,165	39,933	22,534	10,679	8,944	4,023	731	598	142,607
<i>Total not in work force . . . . .</i>	<i>2,419,670</i>	<i>1,842,478</i>	<i>998,816</i>	<i>641,451</i>	<i>497,094</i>	<i>224,112</i>	<i>18,289</i>	<i>52,097</i>	<i>6,694,007</i>
<i>Grand total . . . . .</i>	<i>4,233,822</i>	<i>3,219,526</i>	<i>1,663,685</i>	<i>1,091,875</i>	<i>836,673</i>	<i>371,435</i>	<i>37,433</i>	<i>96,013</i>	<i>11,550,462</i>



### Occupation and industry

The working population may be classified according to distinct concepts: (i) the *occupation*, which is personal to the individual, and (ii) the *industry*, in which the individual carries on his occupation. Thus the occupation of a person is the kind of work that he or she personally performs, while industry is defined as any single branch of productive activity, trade, or service.

The precise classification of persons in the work force according to occupation and industry is extremely difficult, but continuing efforts are made to improve the quality of the data from census to census. Consequently, the comparison of data compiled at the 1966 census with that obtained at previous censuses is influenced not only by changes in the definition and content of the work force, but also by the different responses which may have been evoked by efforts to improve the questions on the census schedule, and by some changes in coding rules designed to rectify known deficiencies in the data. Classification according to occupation and industry is difficult mainly because of the problem of conveying through a printed form the exact nature of the information required (e.g. the conceptual difference between 'occupation' and 'industry') and the consequential inadequacy of many replies.

Classification according to occupation is particularly difficult because: (a) the range of occupations is so extensive; (b) there is lack of uniformity in occupational terms, which vary between industries, locations, and States; and (c) respondents fail to give precise descriptions, especially of other members of their family, either through carelessness or ignorance of occupational designations. Classification according to industry is complicated by the development of new fields of industrial enterprise and the splitting and overlapping of previously identifiable fields.

It is proposed to undertake a detailed analysis of the industry information obtained at the 1966 census to evaluate the precision of the data and as an aid to the framing of classifications and the wording of instructions for the 1971 census.

### Industry

At the 1966 census persons in the work force were asked to state industry in accordance with the following instructions.

'State the exact branch of industry, business or service in which mainly engaged last week, using two or more words where possible. For example, "Dairy Farming", "Coal Mining", "Woollen Mills", "Retail Grocery", "Road Construction", etc. Employees should state the industry of their employer. For example, a carpenter employed by a coal mining company should state "Coal Mining". If employed by a Government Department or other public body, state also its name. For paid housekeepers and domestic servants in private households, write "P.H.".'

From the answers to this question, persons were classified according to the Bureau's *Classification of Industries*, which provides for each person to be classified according to the nature of the business in which mainly engaged, regardless of whether operated by a government authority, corporation, or individual.

### POPULATION, BY INDUSTRY: AUSTRALIA, CENSUS, 30 JUNE 1966

<i>Industry group and sub-group</i>	<i>Males</i>	<i>Females</i>	<i>Persons</i>
<b>Primary production—</b>			
Fishing . . . . .	7,719	302	8,021
Hunting and trapping . . . . .	1,032	46	1,078
Rural industries . . . . .	359,359	74,701	434,060
Forestry . . . . .	13,232	260	13,492
<i>Total, primary production . . . . .</i>	<i>381,342</i>	<i>75,309</i>	<i>456,651</i>
<b>Mining and quarrying—</b>			
Mining (including opencut mining) . . . . .	47,419	1,972	49,391
Quarrying . . . . .	6,608	344	6,952
<i>Total, mining and quarrying . . . . .</i>	<i>54,027</i>	<i>2,316</i>	<i>56,343</i>

POPULATION, BY INDUSTRY: AUSTRALIA, CENSUS, 30 JUNE 1966—*continued*

<i>Industry group and sub-group</i>	<i>Males</i>	<i>Females</i>	<i>Persons</i>
<b>Manufacturing—</b>			
Manufacture relating to cement, bricks, glass and stone . . . . .	48,570	5,342	53,912
Manufacture of products of petroleum and coal (excluding chemical and gas works) . . . . .	7,546	551	8,097
Founding, engineering and metalworking . . . . .	328,649	65,428	394,077
Manufacture, assembly and repair of ships, vehicles, parts and accessories . . . . .	162,184	14,523	176,707
Manufacture of yarns, textiles and articles thereof (excluding clothing and furnishing drapery) . . . . .	30,963	27,212	58,175
Manufacture of clothing and knitted goods (including needle-working) . . . . .	19,281	77,650	96,931
Manufacture of boots, shoes and accessories (other than rubber or plastic) . . . . .	12,295	11,464	23,759
Manufacture of food, drink and tobacco . . . . .	133,343	43,614	176,957
Sawmilling and manufacture of wood products (other than furniture) . . . . .	46,635	3,658	50,293
Manufacture of furniture and fittings (other than metal), bedding and furnishing drapery . . . . .	24,272	5,272	29,544
Manufacture of paper and paper products, printing, packaging, bookbinding and photography . . . . .	75,769	29,502	105,271
Manufacture of chemicals, dyes, explosives, paints and non-mineral oils . . . . .	42,426	14,468	56,894
Manufacture of jewellery, watchmaking, electroplating and minting . . . . .	6,868	1,939	8,807
Preparation of skins and leather; manufacture of goods of leather and leather substitutes (other than clothing or footwear) . . . . .	6,153	3,019	9,172
Manufacture of rubber goods . . . . .	18,896	4,961	23,857
Manufacture of musical, surgical and scientific instruments and apparatus . . . . .	6,166	2,799	8,965
Manufacture of plastic products (n.e.i.) . . . . .	9,711	5,733	15,444
Other manufacturing . . . . .	7,023	4,679	11,702
Manufacturing undefined . . . . .	1,827	1,734	3,561
<i>Total, manufacturing</i> . . . . .	<i>988,577</i>	<i>323,548</i>	<i>1,312,125</i>
<b>Electricity, gas, water and sanitary services (production, supply and maintenance)—</b>			
Gas and electricity . . . . .	66,995	5,584	72,579
Water supply, sewerage, etc. . . . .	31,920	1,537	33,457
<i>Total, electricity, gas, water and sanitary services</i> . . . . .	<i>98,915</i>	<i>7,121</i>	<i>106,036</i>
<b>Building and construction—</b>			
Construction and repair of buildings . . . . .	264,619	12,024	276,643
Construction works (other than buildings) . . . . .	148,959	3,027	151,986
<i>Total, building and construction</i> . . . . .	<i>413,578</i>	<i>15,051</i>	<i>428,629</i>
<b>Transport and storage—</b>			
Road transport . . . . .	117,080	11,974	129,054
Shipping . . . . .	23,187	2,387	25,574
Loading and discharging vessels . . . . .	25,367	367	25,734
Rail and air transport . . . . .	84,863	10,230	95,093
Other transport . . . . .	47	7	54
Storage . . . . .	2,279	299	2,578
<i>Total, transport and storage</i> . . . . .	<i>252,823</i>	<i>25,264</i>	<i>278,087</i>
<b>Communication</b> . . . . .	<b>80,460</b>	<b>23,189</b>	<b>103,649</b>
<b>Finance and property—</b>			
Banking . . . . .	48,481	27,139	75,620
Insurance . . . . .	30,831	25,669	56,500
Other finance and property . . . . .	28,050	20,051	48,101
<i>Total, finance and property</i> . . . . .	<i>107,362</i>	<i>72,859</i>	<i>180,221</i>

## POPULATION, BY INDUSTRY: AUSTRALIA, CENSUS, 30 JUNE 1966—continued

<i>Industry group and sub-group</i>	<i>Males</i>	<i>Females</i>	<i>Persons</i>
<b>Commerce—</b>			
Wholesale trade . . . . .	169,049	60,194	229,243
Livestock and primary produce dealing, etc. . . . .	27,021	6,654	33,675
Retail trade . . . . .	283,422	239,518	522,940
<i>Total, commerce . . . . .</i>	<i>479,492</i>	<i>306,366</i>	<i>785,858</i>
<b>Public authority (n.e.i.) and defence services—</b>			
Public authority activities (n.e.i.) . . . . .	96,848	40,794	137,642
Defence: enlisted personnel . . . . .	54,833	2,460	57,293
Defence: civilian employees . . . . .	11,730	3,388	15,118
<i>Total, public authority (n.e.i.) and defence services . . . . .</i>	<i>163,411</i>	<i>46,642</i>	<i>210,053</i>
<b>Community and business services (including professional)—</b>			
Law, order and public safety . . . . .	39,144	16,103	55,247
Religion and social welfare . . . . .	17,768	18,774	36,542
Health, hospitals, etc. . . . .	50,682	141,739	192,421
Education . . . . .	81,286	109,386	190,672
Other community and business services (including professional)	42,085	30,015	72,100
<i>Total, community and business services . . . . .</i>	<i>230,965</i>	<i>316,017</i>	<i>546,982</i>
<b>Amusement, hotels and other accommodation, cafes, personal service, etc.—</b>			
Amusement, sport and recreation . . . . .	36,718	18,119	54,837
Private domestic service . . . . .	5,789	27,829	33,618
Hotels, boarding houses and other accommodation and restaurants . . . . .	54,209	83,086	137,295
Other personal services . . . . .	28,986	40,133	69,119
<i>Total, amusement, hotels and other accommodation, cafes, personal service, etc. . . . .</i>	<i>125,702</i>	<i>169,167</i>	<i>294,869</i>
Other industries . . . . .	92	35	127
Industry inadequately described or not stated . . . . .	45,068	51,757	96,825
<i>Total in work force . . . . .</i>	<i>3,421,814</i>	<i>1,434,641</i>	<i>4,856,455</i>
Not in work force . . . . .	2,394,545	4,299,462	6,694,007
<b>Grand total . . . . .</b>	<b>5,816,359</b>	<b>5,734,103</b>	<b>11,550,462</b>

## WORK FORCE, BY INDUSTRY: STATES AND TERRITORIES, CENSUS, 30 JUNE 1966

Industry (major group)	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
MALES									
Primary production . . .	114,297	92,791	81,482	38,885	36,964	15,054	1,319	550	381,342
Mining and quarrying . .	22,605	4,799	10,981	3,070	8,021	3,245	1,231	75	54,027
Manufacturing . . .	390,122	311,680	104,303	100,795	50,545	27,109	1,039	2,984	988,577
Electricity, gas, water and sanitary services (pro- duction, supply and maintenance) . . .	36,257	31,416	10,393	10,805	5,508	3,743	335	458	98,915
Building and construction .	149,334	104,783	66,092	36,919	33,886	13,956	3,029	5,579	413,578
Transport and storage . .	96,318	62,842	38,941	21,811	22,118	8,294	1,582	917	252,823
Communication . . .	28,891	23,262	11,095	7,683	5,698	2,907	353	571	80,460
Finance and property . .	42,031	30,219	14,075	9,801	7,351	2,846	204	835	107,362
Commerce . . .	174,735	135,139	70,062	44,861	36,875	14,194	939	2,687	479,492
Public authority (n.e.i.) and defence services . .	59,783	41,964	22,598	11,524	10,886	3,941	2,559	10,156	163,411
Community and business services (including pro- fessional) . . .	84,597	65,087	31,849	20,223	17,822	6,933	1,078	3,376	230,965
Amusement, hotels and other accommodation, cafes, personal service, etc. . . . .	52,038	34,444	15,771	9,796	8,175	3,242	550	1,686	125,702
Other industries . . .	32	28	15	3	7	3	..	4	92
Industry inadequately des- cribed or not stated . .	20,347	11,773	5,574	3,442	2,299	1,091	182	360	45,068
Total males in work force . . . . .	1,271,387	950,227	483,231	319,618	246,155	106,558	14,400	30,238	3,421,814
FEMALES									
Primary production . . .	22,473	19,179	16,004	8,770	6,474	2,161	185	63	75,309
Mining and quarrying . .	738	400	534	161	310	128	39	6	2,316
Manufacturing . . .	130,202	126,810	24,300	24,258	10,348	6,850	177	603	323,548
Electricity, gas, water and sanitary services (pro- duction, supply and maintenance) . . .	2,788	2,383	745	563	346	258	7	31	7,121
Building and construction .	5,578	4,093	2,109	1,515	1,181	333	62	180	15,051
Transport and storage . .	10,460	6,501	3,518	2,171	1,784	566	162	102	25,264
Communication . . .	8,450	6,576	3,342	2,200	1,341	984	79	217	23,189
Finance and property . .	30,686	20,520	8,709	6,091	4,417	1,720	121	595	72,859
Commerce . . .	114,940	81,352	42,897	31,344	24,201	8,777	803	2,052	306,366
Public authority (n.e.i.) and defence services . .	16,568	11,254	6,269	3,541	3,052	1,556	666	3,736	46,642
Community and business services (including pro- fessional) . . .	116,484	88,322	40,500	30,622	24,372	10,555	1,331	3,831	316,017
Amusement, hotels and other accommodation, cafes, personal service, etc. . . . .	62,412	46,077	25,832	14,703	12,373	5,037	885	1,848	169,167
Other industries . . .	14	8	6	3	1	1	..	2	35
Industry inadequately des- cribed or not stated . .	20,972	13,346	6,873	4,864	3,224	1,839	227	412	51,757
Total females in work force . . . . .	542,765	426,821	181,638	130,806	93,424	40,765	4,744	13,678	1,434,641

**WORK FORCE, BY INDUSTRY: STATES AND TERRITORIES, CENSUS, 30 JUNE 1966—**  
*continued*

<i>Industry (major group)</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
<b>PERSONS</b>									
Primary production . . .	136,770	111,970	97,486	47,655	43,438	17,215	1,504	613	456,651
Mining and quarrying . .	23,343	5,199	11,515	3,231	8,331	3,373	1,270	81	56,343
Manufacturing . . .	520,324	438,490	128,603	125,053	60,893	33,959	1,216	3,587	1,312,125
Electricity, gas, water and sanitary services (pro- duction, supply and maintenance) . . .	39,045	33,799	11,138	11,368	5,854	4,001	342	489	106,036
Building and construction .	154,912	108,876	68,201	38,434	35,067	14,289	3,091	5,759	428,629
Transport and storage . .	106,778	69,343	42,459	23,982	23,902	8,860	1,744	1,019	278,087
Communication . . .	37,341	29,838	14,437	9,883	7,039	3,891	432	788	103,649
Finance and property . .	72,717	50,739	22,784	15,892	11,768	4,566	325	1,430	180,221
Commerce . . .	289,675	216,491	112,959	76,205	61,076	22,971	1,742	4,739	785,858
Public authority (n.e.i.) and defence services . .	76,351	53,218	28,867	15,065	13,938	5,497	3,225	13,892	210,053
Community and business services (including profes- sional) . . .	201,081	153,409	72,349	50,845	42,194	17,488	2,409	7,207	546,982
Amusement, hotels and other accommodation, cafes, personal service, etc. . . . .	114,450	80,521	41,603	24,499	20,548	8,279	1,435	3,534	294,869
Other industries . . .	46	36	21	6	8	4	..	6	127
Industry inadequately des- cribed or not stated . .	41,319	25,119	12,447	8,306	5,523	2,930	409	772	96,825
<b>Total persons in work force . . . . .</b>	<b>1,814,152</b>	<b>1,377,048</b>	<b>664,869</b>	<b>450,424</b>	<b>339,579</b>	<b>147,323</b>	<b>19,144</b>	<b>43,916</b>	<b>4,856,455</b>

**PROPORTION OF THE WORK FORCE IN EACH INDUSTRY GROUP: AUSTRALIA**  
**CENSUS, 30 JUNE 1966**  
**(Per cent)**

<i>Industry (major group)</i>	<i>Males</i>	<i>Females</i>	<i>Persons</i>
Primary production . . . . .	11.14	5.25	9.40
Mining and quarrying . . . . .	1.58	0.16	1.16
Manufacturing . . . . .	28.89	22.55	27.02
Electricity, gas, water and sanitary services (production, supply and maintenance) . . . . .	2.89	0.50	2.18
Building and construction . . . . .	12.09	1.05	8.83
Transport and storage . . . . .	7.39	1.76	5.73
Communication . . . . .	2.35	1.62	2.13
Finance and property . . . . .	3.14	5.08	3.71
Commerce . . . . .	14.01	21.35	16.18
Public authority (n.e.i.) and defence services . . . . .	4.78	3.25	4.33
Community and business services (including professional) . . . . .	6.75	22.03	11.26
Amusement, hotels and other accommodation, cafes, personal service, etc. . . . .	3.67	11.79	6.07
Other industries . . . . .	0.00	0.00	0.00
Industry inadequately described or not stated . . . . .	1.32	3.61	1.99
<b>Total work force . . . . .</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>

**Industry and occupational status**

Males and females in the work force at the 1966 census are classified in the following table according to industry and occupational status. Only the major industry groups are shown; particulars for each sub-group are available in the mimeographed 1966 Census Bulletin No. 9.6, *Population: By Industry and Occupational Status, Australia* and in the corresponding bulletin for each State and Territory.

**WORK FORCE, BY INDUSTRY AND OCCUPATIONAL STATUS: AUSTRALIA, CENSUS  
30 JUNE 1966**

X

Industry (major group)	Employed				Total	Un- employed	Total in the work force
	Employer	Self- employed	Employee (on wage or salary)	Helper (not on wage or salary)			
MALES							
Primary production . . . . .	74,684	156,171	138,337	8,085	377,277	4,065	381,342
Mining and quarrying . . . . .	500	1,600	51,424	66	53,590	437	54,027
Manufacturing . . . . .	26,073	20,629	934,120	820	981,642	6,935	988,577
Electricity, gas, water and sanitary services (production, supply and maintenance) . . . . .	275	232	97,968	75	98,550	365	98,915
Building and construction . . . . .	33,649	39,479	334,191	447	407,766	5,812	413,578
Transport and storage . . . . .	11,906	25,700	213,040	251	250,897	1,926	252,823
Communication . . . . .	5	5	80,163	46	80,214	246	80,460
Finance and property . . . . .	4,358	6,633	95,895	142	107,028	334	107,362
Commerce . . . . .	56,144	39,978	379,170	957	476,249	3,243	479,492
Public authority (n.e.i.) and defence services . . . . .	..	..	162,990	3	162,993	418	163,411
Community and business services (in- cluding professional) . . . . .	22,658	7,734	198,531	1,223	230,146	819	230,965
Amusement, hotels and other accommo- dation, cafes, personal service, etc. . . . .	19,374	16,289	88,029	552	124,244	1,458	125,702
Other industries . . . . .	6	15	67	..	88	4	92
Industry inadequately described or not stated . . . . .	764	1,343	23,193	381	25,681	19,387	45,068
Total males in work force . . . . .	250,391	315,808	2,797,118	13,048	3,376,365	45,449	3,421,814
FEMALES							
Primary production . . . . .	12,747	21,747	24,274	16,108	74,876	433	75,309
Mining and quarrying . . . . .	40	54	2,193	19	2,306	10	2,316
Manufacturing . . . . .	5,333	5,056	308,952	1,151	320,492	3,056	323,548
Electricity, gas, water and sanitary services (production, supply and maintenance) . . . . .	31	10	7,039	10	7,090	31	7,121
Building and construction . . . . .	2,296	846	11,253	566	14,961	90	15,051
Transport and storage . . . . .	1,431	1,321	21,878	468	25,098	166	25,264
Communication . . . . .	2	4	22,957	49	23,012	177	23,189
Finance and property . . . . .	674	1,474	70,125	225	72,498	361	72,859
Commerce . . . . .	21,367	20,330	257,748	4,332	303,777	2,589	306,366
Public authority (n.e.i.) and defence services . . . . .	..	..	46,365	4	46,369	273	46,642
Community and business services (in- cluding professional) . . . . .	2,929	5,389	301,888	3,236	313,442	2,575	316,017
Amusement, hotels and other accommo- dation, cafes, personal service, etc. . . . .	12,835	11,067	139,833	3,001	166,736	2,431	169,167
Other industries . . . . .	..	2	26	..	28	7	35
Industry inadequately described or not stated . . . . .	536	1,119	26,911	3,148	31,714	20,043	51,757
Total females in work force . . . . .	60,221	68,419	1,241,442	32,317	1,402,399	32,242	1,434,641
PERSONS							
Primary production . . . . .	87,431	177,918	162,611	24,193	452,153	4,498	456,651
Mining and quarrying . . . . .	540	1,654	53,617	85	55,896	447	56,343
Manufacturing . . . . .	31,406	25,685	1,243,072	1,971	1,302,134	9,991	1,312,125
Electricity, gas, water and sanitary services (production, supply and maintenance) . . . . .	306	242	105,007	85	105,640	396	106,036
Building and construction . . . . .	35,945	40,325	345,444	1,013	422,727	5,902	428,629
Transport and storage . . . . .	13,337	27,021	234,918	719	275,995	2,092	278,087
Communication . . . . .	2	9	103,120	95	103,226	423	103,649
Finance and property . . . . .	5,032	8,107	166,020	367	179,526	695	180,221
Commerce . . . . .	77,511	60,308	636,918	5,289	780,026	5,832	785,858
Public authority (n.e.i.) and defence services . . . . .	..	..	209,355	7	209,362	691	210,053
Community and business services (in- cluding professional) . . . . .	25,587	13,123	500,419	4,459	543,588	3,394	546,982
Amusement, hotels and other accommo- dation, cafes, personal service, etc. . . . .	32,209	27,356	227,862	3,553	290,980	3,889	294,869
Other industries . . . . .	6	17	93	..	116	11	127
Industry inadequately described or not stated . . . . .	1,300	2,462	50,104	3,529	57,395	39,430	96,825
Total persons in work force . . . . .	310,612	384,227	4,038,560	45,365	4,778,764	77,691	4,856,455

**Occupation**

At the 1966 Census persons in the work force were asked to state occupation in accordance with the following instructions.

'State in precise (or award) terms the person's main occupation last week, using where possible two or more words. For example, "Builder's Labourer", "Dairy Farm Hand", "Clothing Machinist", "Wood Machinist", "Motor Mechanic", "Electrical Fitter", "Coal Wheeler", "Dairy Farmer", etc. Employees of Government Departments or Authorities should be described by their official designation, such as "District Employment Officer", "Shire Clerk", etc., and not by such terms as "Public Servant", etc.'

**POPULATION, BY OCCUPATION: AUSTRALIA, CENSUS, 30 JUNE 1966**

<i>Occupation major group and minor group</i>	<i>Males</i>	<i>Females</i>	<i>Persons</i>
<b>Professional, technical and related workers—</b>			
Architects, engineers and surveyors . . . . .	31,560	197	31,757
Chemists, physicists, geologists and other physical scientists . . . . .	9,230	902	10,132
Biologists, veterinarians, agronomists and related scientists . . . . .	4,178	384	4,562
Medical practitioners and dentists . . . . .	15,491	1,673	17,164
Nurses . . . . .	4,563	72,674	77,237
Professional medical workers, n.e.c. . . . .	8,744	5,700	14,444
Teachers . . . . .	59,325	75,591	134,916
Clergy and related members of religious orders . . . . .	12,573	3,767	16,340
Law professionals . . . . .	7,694	377	8,071
Artists, entertainers, writers and related workers . . . . .	16,964	8,881	25,845
Draftsmen and technicians, n.e.c. . . . .	58,981	11,088	70,069
Other professional, technical and related workers . . . . .	31,901	8,137	40,038
<i>Total professional, etc., workers . . . . .</i>	<i>261,204</i>	<i>189,371</i>	<i>450,575</i>
<b>Administrative, executive and managerial workers—</b>			
Administrators and executive officials, government, n.e.c. . . . .	11,952	175	12,127
Employers, workers on own account, directors, managers, n.e.c. . . . .	256,115	36,397	292,512
<i>Total administrative, etc., workers . . . . .</i>	<i>268,067</i>	<i>36,572</i>	<i>304,639</i>
<b>Clerical workers—</b>			
Book-keepers and cashiers . . . . .	35,994	35,327	71,321
Stenographers and typists . . . . .	..	162,806	162,806
Other clerical workers . . . . .	249,295	230,126	479,421
<i>Total clerical workers . . . . .</i>	<i>285,289</i>	<i>428,259</i>	<i>713,548</i>
<b>Sales workers—</b>			
Insurance, real estate salesmen, auctioneers and valuers . . . . .	22,079	1,515	23,594
Commercial travellers and manufacturers' agents . . . . .	47,239	1,514	48,753
Proprietors and shopkeepers working on own account, n.e.c., retail and wholesale trade, salesmen, shop assistants and related workers . . . . .	126,967	176,153	303,120
<i>Total sales workers . . . . .</i>	<i>196,285</i>	<i>179,182</i>	<i>375,467</i>
<b>Farmers, fishermen, hunters, timber getters and related workers—</b>			
Farmers and farm managers . . . . .	240,876	31,419	272,295
Farm workers, including farm foremen, n.e.c. . . . .	134,084	39,522	173,606
Wool classers . . . . .	2,406	..	2,406
Hunters and trappers . . . . .	1,185	..	1,185
Fishermen and related workers . . . . .	7,190	172	7,362
Timber getters and other forestry workers . . . . .	12,135	62	12,197
<i>Total farmers, fishermen, etc. . . . .</i>	<i>397,876</i>	<i>71,175</i>	<i>469,051</i>
<b>Miners, quarrymen and related workers—</b>			
Miners and quarrymen . . . . .	27,744	48	27,792
Well drillers and related workers . . . . .	1,656	..	1,656
Mineral treaters . . . . .	2,416	..	2,416
<i>Total miners, quarrymen, etc. . . . .</i>	<i>31,816</i>	<i>48</i>	<i>31,864</i>

## POPULATION, BY OCCUPATION: AUSTRALIA, CENSUS, 30 JUNE 1966—continued

<i>Occupation major group and minor group</i>	<i>Males</i>	<i>Females</i>	<i>Persons</i>
<b>Workers in transport and communication occupations—</b>			
Deck officers, engineer officers and pilots, ship . . . . .	4,164	8	4,172
Deck and engine room hands, ship, barge, crews and boatmen . . . . .	9,723	24	9,747
Aircraft pilots, navigators and flight engineers . . . . .	2,664	24	2,688
Drivers and firemen, railway . . . . .	13,629	..	13,629
Drivers, road transport . . . . .	166,889	3,186	170,075
Guards and conductors, railway . . . . .	4,290	..	4,290
Inspectors, supervisors, traffic controllers and despatchers, transport . . . . .	21,692	963	22,655
Telephone, telegraph and related telecommunication operators . . . . .	3,513	23,808	27,321
Postmasters, postmen and messengers . . . . .	24,811	4,768	29,579
Workers in transport and communication occupations, n.e.c. . . . .	8,666	1,287	9,953
<i>Total workers in transport, etc.</i> . . . . .	<i>260,041</i>	<i>34,068</i>	<i>294,109</i>
<b>Craftsmen, production-process workers and labourers, n.e.c.—</b>			
Spinners, weavers, knitters, dyers and related workers . . . . .	17,595	21,694	39,289
Tailors, cutters, furriers and related workers . . . . .	18,611	76,614	95,225
Leather cutters, lasters and sewers (except gloves and garments) and related workers . . . . .	12,072	11,235	23,307
Furnacemen, rollers, drawers, moulders and related metal making and treating workers . . . . .	19,834	..	19,834
Precision instrument makers, watchmakers, jewellers and related workers . . . . .	15,638	812	16,450
Toolmakers, machinists, plumbers, welders, platers and related workers . . . . .	368,084	2,990	371,074
Electricians and related electric and electronics workers . . . . .	116,593	1,328	117,921
Metal makers, metal workers and electrical production-process workers, n.e.c. . . . .	63,271	33,054	96,325
Carpenters, joiners, cabinetmakers and related workers . . . . .	136,487	2,075	138,562
Painters and decorators . . . . .	50,791	673	51,464
Bricklayers, plasterers and construction workers, n.e.c. . . . .	88,965	150	89,115
Compositors, pressmen, engravers, bookbinders and related workers . . . . .	33,404	8,278	41,682
Potters, kilnmen, glass and clay formers and related workers . . . . .	10,953	1,716	12,669
Millers, bakers, brewmasters and related food and beverage workers . . . . .	85,048	17,757	102,805
Chemical and related process workers . . . . .	20,471	4,556	25,027
Tobacco preparers and tobacco product makers . . . . .	945	1,397	2,342
Craftsmen and production-process workers, n.e.c. . . . .	28,668	16,663	45,331
Packers, labellers and related workers . . . . .	9,896	20,882	30,778
Stationary engine, excavating, lifting equipment operators and related workers . . . . .	69,748	197	69,945
Freight handlers, including waterside workers . . . . .	103,243	2,659	105,902
Labourers, n.e.c. . . . .	224,912	3,379	228,291
<i>Total craftsmen, etc.</i> . . . . .	<i>1,495,229</i>	<i>228,109</i>	<i>1,723,338</i>
<b>Service, sport and recreation workers—</b>			
Fire brigade men, policemen, protective service and related workers . . . . .	36,205	609	36,814
Housekeepers, cooks, maids and related workers . . . . .	17,722	104,186	121,908
Waiters, bartenders . . . . .	13,887	28,089	41,976
Building caretakers, cleaners . . . . .	30,950	32,371	63,321
Barbers, hairdressers, beauticians and related workers . . . . .	9,690	20,215	29,905
Launderers, dry cleaners and pressers . . . . .	6,488	13,912	20,400
Athletes, sportsmen and related workers . . . . .	3,317	503	3,820
Photographers and related camera operators . . . . .	3,264	892	4,156
Embalmers and undertakers . . . . .	898	46	944
Service, sport, recreation workers, n.e.c. . . . .	18,467	19,267	37,734
<i>Total service, sport, etc., workers</i> . . . . .	<i>140,888</i>	<i>220,090</i>	<i>360,978</i>
Members of armed services . . . . .	54,833	2,460	57,293
Occupation inadequately described or not stated . . . . .	30,286	45,307	75,593
<i>Total in work force</i> . . . . .	<i>3,421,814</i>	<i>1,434,641</i>	<i>4,856,455</i>
Not in work force . . . . .	2,394,545	4,299,462	6,694,007
<b>Grand total</b> . . . . .	<b>5,816,359</b>	<b>5,734,103</b>	<b>11,550,462</b>



## WORK FORCE, BY OCCUPATION: STATES AND TERRITORIES, CENSUS, 30 JUNE 1966

<i>Occupation (major group)</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
<b>MALES</b>									
Professional, technical and related workers . . .	97,698	76,622	31,023	23,832	17,937	7,841	1,288	4,963	261,204
Administrative, executive and managerial workers . . .	101,071	79,071	35,046	24,280	17,703	7,363	1,084	2,449	268,067
Clerical workers . . .	106,967	80,828	37,140	25,422	20,307	8,156	1,046	5,423	285,289
Sales workers . . .	73,839	57,441	27,836	17,374	12,862	5,429	264	1,240	196,285
Farmers, fishermen, hunters, timber getters and related workers . . .	120,358	98,123	82,696	40,727	38,385	15,431	1,237	919	397,876
Miners, quarrymen and related workers . . .	14,220	2,390	6,162	1,744	4,709	1,885	641	65	31,816
Workers in transport and communication occupations . . .	98,832	66,693	40,278	23,274	20,382	8,071	1,156	1,355	260,041
Craftsmen, production-process workers and labourers, n.e.c. . .	565,173	428,265	193,784	145,420	100,081	47,343	5,564	9,599	1,495,229
Service, sport and recreation workers . . .	56,975	38,505	17,991	11,611	9,747	3,823	785	1,451	140,888
Members of armed services . . .	23,181	14,528	7,161	3,431	2,368	353	1,182	2,629	54,833
Occupation inadequately described or not stated . . .	13,073	7,761	4,114	2,503	1,674	863	153	145	30,286
<b>Total males in work force . . .</b>	<b>1,271,387</b>	<b>950,227</b>	<b>483,231</b>	<b>319,618</b>	<b>246,155</b>	<b>106,558</b>	<b>14,400</b>	<b>30,238</b>	<b>3,421,814</b>
<b>FEMALES</b>									
Professional, technical and related workers . . .	69,197	54,301	23,873	18,652	13,327	6,718	890	2,413	189,371
Administrative, executive and managerial workers . . .	14,481	10,584	4,913	3,093	2,115	893	168	325	36,572
Clerical workers . . .	170,200	122,898	53,859	36,000	27,193	10,614	1,361	6,134	428,259
Sales workers . . .	65,064	48,045	24,790	19,161	14,385	5,815	550	1,372	179,182
Farmers, fishermen, hunters, timber getters and related workers . . .	20,811	18,728	14,949	8,421	6,081	2,020	90	75	71,175
Miners, quarrymen and related workers . . .	9	2	10	26	1	..	..	..	48
Workers in transport and communication occupations . . .	13,501	9,352	4,350	3,046	2,315	1,044	116	344	34,068
Craftsmen, production-process workers and labourers, n.e.c. . .	90,107	93,502	16,584	15,802	6,648	5,039	95	332	228,109
Service, sport and recreation workers . . .	80,683	57,103	31,862	21,986	18,295	6,854	1,174	2,133	220,090
Members of armed services . . .	858	725	291	168	84	26	100	208	2,460
Occupation inadequately described or not stated . . .	17,854	11,581	6,157	4,451	2,980	1,742	200	342	45,307
<b>Total females in work force . . .</b>	<b>542,765</b>	<b>426,821</b>	<b>181,638</b>	<b>130,806</b>	<b>93,424</b>	<b>40,765</b>	<b>4,744</b>	<b>13,678</b>	<b>1,434,641</b>
<b>PERSONS</b>									
Professional, technical and related workers . . .	166,895	130,923	54,896	42,484	31,264	14,559	2,178	7,376	450,575
Administrative, executive and managerial workers . . .	115,552	89,655	39,959	27,373	19,818	8,256	1,252	2,774	304,639
Clerical workers . . .	277,167	203,726	90,999	61,422	47,500	18,770	2,407	11,557	713,548
Sales workers . . .	138,903	105,486	52,626	36,535	27,247	11,244	814	2,612	375,467
Farmers, fishermen, hunters, timber getters and related workers . . .	141,169	116,851	97,645	49,148	44,466	17,451	1,327	994	469,051
Miners, quarrymen and related workers . . .	14,229	2,392	6,172	1,770	4,710	1,885	641	65	31,864
Workers in transport and communication occupations . . .	112,333	76,045	44,628	26,320	22,697	9,115	1,272	1,699	294,109
Craftsmen, production-process workers and labourers, n.e.c. . .	655,280	521,767	210,368	161,222	106,729	52,382	5,659	9,931	1,723,338
Service, sport and recreation workers . . .	137,658	95,608	49,853	33,597	28,042	10,677	1,959	3,584	360,978
Members of armed services . . .	24,039	15,253	7,452	3,599	2,452	379	1,282	2,837	57,293
Occupation inadequately described or not stated . . .	30,927	19,342	10,271	6,954	4,654	2,605	353	487	75,593
<b>Total persons in work force . . .</b>	<b>1,814,152</b>	<b>1,377,048</b>	<b>664,869</b>	<b>450,424</b>	<b>339,579</b>	<b>147,323</b>	<b>19,144</b>	<b>43,916</b>	<b>4,856,455</b>

**PROPORTION OF THE WORK FORCE IN EACH OCCUPATION GROUP: AUSTRALIA**  
**CENSUS, 30 JUNE 1966**  
 (Per cent)

<i>Occupation (major group)</i>	<i>Males</i>	<i>Females</i>	<i>Persons</i>
Professional, technical and related workers . . . . .	7.63	13.20	9.28
Administrative, executive and managerial workers . . . . .	7.83	2.55	6.27
Clerical workers . . . . .	8.34	29.85	14.69
Sales workers . . . . .	5.74	12.49	7.73
Farmers, fishermen, hunters, timber getters and related workers .	11.63	4.96	9.66
Miners, quarrymen and related workers . . . . .	0.93	0.00	0.66
Workers in transport and communication occupations . . . . .	7.60	2.37	6.06
Craftsmen, production-process workers and labourers, n.e.c. . .	43.70	15.90	35.49
Service, sport, and recreation workers . . . . .	4.12	15.34	7.43
Members of armed services . . . . .	1.60	0.17	1.18
Occupation inadequately described or not stated . . . . .	0.89	3.16	1.56
<b>Total work force . . . . .</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>

**Married women in the work force**

**MARRIED WOMEN IN THE WORK FORCE, BY AGE**  
**AUSTRALIA, CENSUS, 30 JUNE 1966**

		<i>Proportion of married women in each age group to—</i>	
<i>Age last birthday (years)</i>	<i>Number(a)</i>	<i>Total females of that age group in the work force</i>	<i>Total married women(a) in that age group</i>
		<i>per cent</i>	<i>per cent</i>
15-19 . . . . .	12,437	3.91	29.83
20-24 . . . . .	92,933	37.81	37.54
25-29 . . . . .	83,949	67.26	26.78
30-34 . . . . .	83,594	78.84	27.62
35-39 . . . . .	108,207	82.41	32.27
40-44 . . . . .	117,472	81.55	34.68
45-49 . . . . .	94,908	76.57	32.76
50-54 . . . . .	71,545	68.91	27.65
55-59 . . . . .	41,517	57.21	21.09
60-64 . . . . .	16,176	44.58	11.70
65 and over . . . . .	7,984	28.43	3.94
<b>Total . . . . .</b>	<b>730,722</b>	<b>50.93</b>	<b>27.41</b>

(a) Includes women married but permanently separated, legally or otherwise.

## The population survey

The population survey is the general title given to the household sample survey carried out in February, May, August, and November of each year in all States and Territories. Emphasis in the survey is placed on the collection of data on demographic and work force characteristics, the principal survey component being referred to as the work force survey. The remaining part of the population survey consists of supplementary collections which are carried out from time to time in conjunction with the work force survey. The results of surveys of multiple jobholding and of leavers from schools, universities, etc. are given in the following pages. The population survey was instituted in November 1960 in the six State capital cities and was subsequently extended to include non-metropolitan areas. About 37,000 households, representing one per cent of all households, are selected by area sampling methods and enumerated each quarter, the information being obtained by carefully chosen and specially trained interviewers during a four-week period on each occasion.

The work force survey covers all persons fifteen years of age and over, except members of the permanent armed forces, national servicemen enlisted in the Regular Army Supplement, and certain diplomatic personnel customarily excluded from the census and estimated populations. Each person included in the survey is classified to a work force category or as not in the work force on the basis of his actual activity during a specified week, his activity during that week being determined from answers to a set of questions specially designed for the purpose.

To date, work force survey estimates have been published only for the total of the six State capital cities; a summary of the results was given in the previous issue of the Year Book, and more detailed tables have been published in *Employment and Unemployment*. It is intended that estimates of the total Australian work force for each quarter from February 1964 be published in the near future. Calculation of these estimates is dependent on the use of revised benchmark data derived from the 1966 population census, and when this chapter was sent for press the work was not sufficiently advanced to enable Australian estimates to be included.

## Surveys of multiple jobholding

Surveys of the nature and extent of multiple jobholding in Australia were conducted during November 1965, August 1966, and August 1967. A multi-stage area sample of households (inclusive of hotels, hospitals and other non-private dwellings) was used. The surveys covered all employed civilians aged fifteen years and over (fourteen years and over in November 1965), other than certain diplomatic personnel customarily excluded from the census and estimated populations.

For the purpose of these surveys, employed persons are defined as those who, during the survey week:

- (a) did any work for pay, profit, commission or payment in kind, in a job or business, or on a farm (the category includes employees, employers and workers on own account), or
- (b) worked fifteen hours or more without pay in a family business (or farm) owned and operated by a member of the same household, or
- (c) had a job, business or farm, but were not at work because of illness, accident, leave or holiday, industrial dispute or because of production holdup due to bad weather, plant breakdown, etc.

The numbers of multiple jobholders shown in the following tables do not include persons who were described as employers or self-employed in two businesses (including farms). They comprise only those persons who were employed in at least one of their jobs as a wage or salary earner or as an unpaid family helper. For the purpose of the survey a second job did not exclude such occupations as those of professional sportsmen, part-time musicians, paid coaches and the like. Persons who by the very nature of their employment worked for more than one employer, e.g. domestics, odd-job men, baby-sitters, etc. were not counted as multiple jobholders unless they also held another job of a different kind, nor were those who worked for more than one employer solely by reason of changing jobs during the survey week.

Further details of the results of these surveys may be found in the mimeographed bulletins *Survey of Multiple Jobholding, November 1965*; *Survey of Multiple Jobholding, August 1966*; and *Survey of Multiple Jobholding, August 1967*.

## Occupational status

**PERSONS WITH MORE THAN ONE JOB(a): OCCUPATIONAL STATUS IN MAIN  
AND SECOND JOBS, BY SEX, AUSTRALIA, AUGUST 1966 AND AUGUST 1967  
(\*000)**

		Occupational status in second job					
Occupational status in main job(b)	Date	Employer or self-employed		Wage or salary earner(c)		Total	
		Males	Females	Males	Females	Males	Females
PERSONS WHO ACTUALLY WORKED IN A SECOND JOB IN SURVEY WEEK							
Employer or self-employed	Aug. 1966	..	..	10.7	*	10.7	*
	Aug. 1967	..	..	10.0	*	10.0	*
Wage or salary earner(c)	Aug. 1966	31.5	*	65.4	13.8	97.0	15.7
	Aug. 1967	29.1	*	64.4	14.2	93.5	16.2
Total	Aug. 1966	31.5	*	76.1	15.7	107.6	17.6
	Aug. 1967	29.1	*	74.4	15.2	103.5	17.2

**ALL PERSONS WHO HELD A SECOND JOB IN SURVEY WEEK**

Employer or self-employed .	Aug. 1966	..	..	13.3	*	13.3	*
	Aug. 1967	..	..	12.7	*	12.7	*
Wage or salary earner(c) .	Aug. 1966	39.4	*	74.5	15.8	113.9	18.6
	Aug. 1967	36.0	*	75.7	15.9	111.7	18.2
Total . . . . .	Aug. 1966	39.4	*	87.7	18.0	127.1	20.9
	Aug. 1967	36.0	*	88.4	17.1	124.4	19.5

(a) Comprises only those civilians aged 15 years and over who were employed in at least one of their jobs as a wage or salary earner or as an unpaid family helper. See note (c). (b) The main job is the job at which most hours were worked during survey week or, where no hours were worked or the hours were equal, the job considered by the respondent to be the main job. (c) Includes a small number of unpaid family helpers.

\* Estimates less than 5,000 are not published because they would be subject to sampling variability too high for most practical purposes. Although figures for these small components can be derived, undue significance should not be attached to them.

## Distribution by States

**PERSONS WITH MORE THAN ONE JOB(a): STATES, AUGUST 1966 AND AUGUST 1967  
(\*000)**

	Date	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	Aust. (b)
Persons who actually worked in a second job in survey week	Aug. 1966	44.4	33.5	10.1	18.1	10.7	5.7	125.2
	Aug. 1967	43.2	29.7	14.4	16.0	10.5	*	120.7
All persons who held a second job in survey week	Aug. 1966	53.0	38.0	14.3	20.7	12.7	6.5	148.0
	Aug. 1967	52.4	34.3	17.7	17.8	13.6	*	143.9

(a) Comprises only those civilians aged 15 years and over who were employed in at least one of their jobs as a wage or salary earner or as an unpaid family helper. (b) Includes the Northern Territory and the Australian Capital Territory.

\* Estimates less than 5,000 are not published because they would be subject to sampling variability too high for most practical purposes. Although figures for these small components can be derived, undue significance should not be attached to them.

NOTE. The numbers of females are too small to show in the detail given above. In New South Wales, female multiple jobholders numbered 7,700 in August 1967 and 8,400 in August 1966. The number in Victoria in both years was about 5,000.

## Industry group of main and second job

**PERSONS WITH MORE THAN ONE JOB(a): INDUSTRY GROUP OF MAIN  
AND SECOND JOBS, AUSTRALIA, AUGUST 1966 AND AUGUST 1967**  
(\*000)

Industry group	Persons who actually worked in a second job in survey week				All persons who held a second job in survey week			
	Main job(b)		Second job		Main job(b)		Second job	
	Aug. 1966	Aug. 1967	Aug. 1966	Aug. 1967	Aug. 1966	Aug. 1967	Aug. 1966	Aug. 1967
Primary production . . . . .	15.2	12.6	23.7	21.6	21.4	17.9	29.9	26.9
Manufacturing . . . . .	31.8	28.1	9.6	10.1	36.0	32.2	12.0	13.7
Building and construction . . . . .	9.4	9.3	5.2	5.1	10.9	9.9	6.0	6.9
Transport and communication . . . . .	8.7	7.7	7.3	7.2	9.7	9.7	8.3	8.3
Commerce . . . . .	19.4	22.3	17.0	14.3	23.2	26.2	20.1	16.0
Public authority (n.e.i.), and com- munity and business services . . . . .	23.0	21.0	19.8	19.5	26.1	25.1	22.5	23.3
Amusement, hotels, cafés, person- al service, etc. . . . .	6.8	8.0	40.7	40.2	8.1	9.7	46.7	45.5
Other industries(c) . . . . .	10.8	11.7	*	*	12.5	13.0	*	*
<b>Total . . . . .</b>	<b>125.2</b>	<b>120.7</b>	<b>125.2</b>	<b>120.7</b>	<b>148.0</b>	<b>143.9</b>	<b>148.0</b>	<b>143.9</b>

(a) Comprises only those civilians aged 15 years and over who were employed in at least one of their jobs as a wage or salary earner or as an unpaid family helper. (b) The main job is the job at which most hours were worked during the survey week or, where no hours were worked or the hours were equal, the job considered by the respondent to be the main job. (c) Comprises mining and quarrying; electricity, gas, water and sanitary services; finance and property.

\* Estimates less than 5,000 are not published because they would be subject to sampling variability too high for most practical purposes. Although figures for these small components can be derived, undue significance should not be attached to them.

### Surveys of leavers from schools, universities or other educational institutions

Surveys using a multi-stage area sample of households (inclusive of hotels, hospitals and other non-private dwellings) were carried out on an Australia-wide basis in February of each year from 1964 to 1968. Figures from the 1968 survey are not yet available.

The survey questions were designed to distinguish persons who had attended full time at a school, university or other educational institution at some time in the previous year and, among such persons, to identify those who were intending to return to full-time education and those who were not returning to full-time education, the latter being described in this section as 'leavers'.

Estimates shown in the following tables relate to the total population of Australia within the age range fifteen to twenty-four years, with the exception of members of the permanent armed forces, national servicemen enlisted in the Regular Army Supplement, and certain diplomatic personnel customarily excluded from census and estimated populations.

Persons who were patients in hospitals and sanatoriums, or inmates of gaols, reformatories, etc. and for whom, for the purpose of the survey, the institution was regarded as their dwelling, although included in the survey, were not asked the particular questions on attendance at schools, etc. Persons who were reported as permanently unable to work were also not asked these questions. An estimate of the total number of such persons, for whom no information on attendance, etc. can be given, is shown in the first table in this section.

The 'leavers', i.e. the persons who had attended full time at a school, university, etc. at some time in the previous year and who were not returning to full-time education, were asked to indicate when they had ceased full-time education. All persons were asked questions about their occupational status and those in the work force were further questioned about occupation and industry. Although many persons who were intending to return to full-time education were in the work force at the time of the surveys, their numbers would not give a useful indication of the extent of vacation working, because of the timing of the surveys.

For further details reference should be made to the mimeographed bulletins *Survey of Leavers from Schools, Universities or Other Educational Institutions*.

## Attendance or non-attendance at school, university, etc.

**CIVILIANS AGED 15 TO 24 YEARS(a), BY ATTENDANCE OR NON-ATTENDANCE FULL-TIME AT A SCHOOL, UNIVERSITY, ETC. IN THE PREVIOUS YEAR: AUSTRALIA, FEBRUARY 1965 TO 1967**  
(<sup>'000</sup>)

	February 1965		February 1966		February 1967	
	Males	Females	Males	Females	Males	Females
Attended school, university, etc. full time in the previous year(b)—						
Returning to full-time education . . . . .	168.3	119.4	174.7	124.7	192.1	140.1
Not returning to full-time education ('leavers') . . . . .	83.3	79.6	88.7	84.8	85.0	82.4
Total who attended school, etc. . . . .	251.5	199.0	263.3	209.5	277.1	222.5
Did not attend school, university, etc. full time in previous year(b) . . . . .	644.7	668.2	668.6	692.5	679.8	719.6
In hospitals, etc.(c) . . . . .	9.0	6.3	11.7	8.1	11.9	6.6
Total persons aged 15 to 24 years . . . . .	905.2	873.5	943.6	910.1	968.8	948.8

(a) At the time of the survey. (b) Excludes some patients in hospitals and sanatoriums and some inmates of gaols, reformatories, etc. at the time of the survey, and persons permanently unable to work. (c) Estimated numbers of persons within the scope of the survey for whom the hospital, sanatorium, gaol, reformatory, etc. was regarded as their dwelling and persons who were reported as permanently unable to work. Particulars of attendance at schools, etc. were not obtained in respect of such persons.

## Occupational status of 'leavers'

**'LEAVERS'(a)(b), BY OCCUPATIONAL STATUS: AUSTRALIA**  
**FEBRUARY 1965 TO 1967**  
(<sup>'000</sup>)

Occupational status	February 1965		February 1966		February 1967	
	Males	Females	Males	Females	Males	Females
In the work force—						
Employed(c) . . . . .	75.5	60.5	77.7	64.2	71.3	63.6
Unemployed . . . . .	*	9.7	8.0	11.2	8.6	11.1
Total in the work force . . . . .	80.2	70.2	85.7	75.3	79.9	74.6
Not in the work force . . . . .	*	9.4	*	9.5	5.1	7.8
Total 'leavers'(a)(b) . . . . .	83.3	79.6	88.7	84.8	85.0	82.4

(a) Persons aged 15 to 24 years inclusive at the time of the survey who had attended school, university, etc. full-time during the previous year and who were not returning to full-time education. (b) See notes (b) and (c) to previous table. (c) Includes wage and salary earners, employers, self-employed persons, and unpaid family helpers.

\* Estimates of less than 5,000 are not published because they would be subject to sampling variability too high for most practical purposes. Although figures for these small components can be derived, undue significance should not be attached to them.

## Distribution of 'leavers' by States

**'LEAVERS'(a)(b), BY STATES, FEBRUARY 1965 TO 1967**  
(<sup>'000</sup>)

State	February 1965		February 1966		February 1967	
	Males	Females	Males	Females	Males	Females
New South Wales . . . . .	30.1	29.1	32.1	32.4	29.7	27.2
Victoria . . . . .	21.2	20.3	24.0	22.4	24.3	23.1
Queensland . . . . .	13.9	11.6	11.3	11.9	12.2	13.6
South Australia . . . . .	9.3	7.3	10.3	9.1	7.9	8.9
Western Australia . . . . .	5.9	6.7	6.8	6.2	6.8	5.9
Tasmania . . . . .	*	*	*	*	*	*
Australia(c) . . . . .	83.3	79.6	88.7	84.8	85.0	82.4

(a) Persons aged 15 to 24 years inclusive at the time of the survey who had attended school, university, etc. full-time during the previous year and who were not returning to full-time education. (b) See notes (b) and (c) to first table on page. (c) Includes the Northern Territory and the Australian Capital Territory.

\* Estimates of less than 5,000 are not published because they would be subject to sampling variability too high for most practical purposes. Although figures for these small components can be derived, undue significance should not be attached to them.

## Time of leaving of 'leavers'

**'LEAVERS'(a)(b), BY AGE GROUP AND BY TIME OF LEAVING  
FEBRUARY 1965 TO 1967  
(<sup>'000</sup>)**

Time of leaving	February 1965		February 1966		February 1967	
	Males	Females	Males	Females	Males	Females
<b>PERSONS AGED 15 TO 19 YEARS</b>						
Previous January-June . . .	6.3	8.6	7.2	7.3	6.0	7.1
Previous July-October . . .	9.8	11.9	8.1	11.7	7.2	10.7
Previous November . . .	15.7	13.7	19.2	19.1	21.6	21.5
Previous December(c) . . .	46.8	42.3	47.7	44.8	41.8	39.3
<b>Total(a) (b) . . .</b>	<b>78.6</b>	<b>76.6</b>	<b>82.2</b>	<b>82.9</b>	<b>76.6</b>	<b>78.7</b>
<b>PERSONS AGED 15 TO 24 YEARS</b>						
Previous January-June . . .	6.5	8.8	7.5	7.3	6.7	7.3
Previous July-October . . .	10.1	11.9	8.7	12.0	7.6	11.3
Previous November . . .	17.3	14.9	20.8	19.7	25.2	22.8
Previous December(c) . . .	49.3	44.0	51.6	45.8	45.5	41.0
<b>Total(a) (b) . . .</b>	<b>83.3</b>	<b>79.6</b>	<b>88.7</b>	<b>84.8</b>	<b>85.0</b>	<b>82.4</b>

(a) Persons aged 15 to 24 years inclusive at the time of the survey who had attended school, university, etc. full-time during the previous year and who were not returning to full-time education. (b) See notes (b) and (c) to the first table on page 1165. (c) Includes a small number of persons who left school, university, etc. in January or February of the following year.

### WAGE AND SALARY EARNERS IN EMPLOYMENT

The series contained in this section, except those relating to government employees and defence forces, are based on comprehensive data (referred to herein as 'benchmarks') derived for the purpose from the population census of June 1961. From July 1961 to date the figures shown are estimates designed to measure month-to-month changes in the sector of employment to which the benchmarks relate. The series will be revised in the light of the 1966 population census results. Between population censuses the employment data are obtained from three main sources, namely (a) current pay-roll tax returns; (b) current returns from government bodies; and (c) some other direct current records of employment (e.g. for hospitals). The total of recorded employment is supplemented each month by estimates of changes in the number of wage and salary earners not covered by the foregoing collections. The series relate only to wage and salary earners. They therefore exclude employers, self-employed persons and unpaid helpers. Also excluded, because of the inadequacy of current data, are employees in rural industry and in private domestic service.

Current data supplied by reporting enterprises or establishments generally refer to persons on the pay-roll for the last pay-period in each month. Persons who are on paid leave or who work during part of the pay-period and are unemployed or on strike during the rest of the period are generally counted as employed. Those not shown on employers' pay-rolls because they are on leave without pay, on strike, or stood down for the entire period are excluded.

Pay-roll tax returns are lodged at present by all employers paying more than \$400 a week in wages (other than certain Commonwealth Government bodies, religious and benevolent institutions, public hospitals, and other similar organisations specifically exempted under the *Pay-roll Tax Assessment Act 1941-1967*).

The level of the estimates in this section is affected by the exclusion of many employees from the 1961 census benchmarks (see page 1167); nevertheless, they measure reasonably well the short-term trends in employment in the defined field. However, they may be less reliable for longer-term measurement. There are conceptual differences between benchmark and pay-roll data, and changes in such factors as labour turnover, multiple jobholding, and part-time working affect the trend over longer periods.

The benchmark figures were derived from particulars recorded for individuals on population census schedules, while the estimated monthly figures are derived mainly from reports supplied by employers, relating to enterprises or establishments. Because the two sources differ in some cases in scope and in the reporting of industry, the industry dissection of the benchmark totals was adjusted to conform as closely as possible to an enterprise-establishment reporting basis. The industry classification used throughout the series is that of the population census of June 1961.

At the 1961 population census those persons who were not stated to be engaged in an industry, business, profession, trade, or service were required to be described as students, pensioners, engaged in home duties, etc., and were automatically classified as not being in the work force. It is believed that many persons—particularly married women—classified themselves according to their main or usual activity or status (e.g. home duties) and overlooked the part-time or casual employment that they had at the time of the census. Had the census questions been designed to obtain particulars of each person's actual activity during a specified period (as the 1966 population census work force questions were), so that all employees who did any paid work at all, or who had a job, would have been included, these persons would have been counted in the total of employed wage and salary earners.

The scope of the current monthly series is similar to and subject to the same limitations as that of the population census benchmarks. For this reason the totals shown in this section for Australia, for States and Territories, and for industries do not necessarily represent, at any point of time, the total numbers of wage and salary earners employed full-time or part-time in those areas or industries. Instead, they represent the estimated numbers of persons who would have been counted as wage and salary earners at a population census in which the concepts and definitions were the same as those of the 1961 census. The concepts and definitions adopted at the 1966 population census conformed closely to the recommendations of the Eighth International Conference of Labour Statisticians, all persons who did any paid work for an employer or who had a job as an employee from which they were temporarily absent being classified as employed wage and salary earners. Census figures have been published in a series of mimeographed bulletins which show particulars of the occupational status and industry of the population in each State and Territory at June 1966. The figures therein for wage and salary earners classified by industry are not comparable with those in this section, because they are based on different work force concepts and definitions and on a different method of allocating persons to industries. Furthermore, the figures in this section are still based on June 1961 benchmarks.

The table below gives a comparison, at June 1966, of the estimated number of employed wage and salary earners (excluding defence forces and employees in rural industry and private domestic service), compiled on the current basis, and figures from the population census. In adjusting the census figures to exclude the categories of persons excluded from the estimates, allowance has been made for persons whose industry was either inadequately described or not stated.

#### WAGE AND SALARY EARNERS IN CIVILIAN EMPLOYMENT STATES AND TERRITORIES, JUNE 1966

EXCLUDING DEFENCE FORCES AND EMPLOYEES IN RURAL INDUSTRY AND PRIVATE DOMESTIC SERVICE  
(<sup>'000</sup>)

	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T. (a)	Aust.
<b>Males—</b>									
1. Estimates(b)	996.2	733.4	336.6	242.1	180.7	81.1	10.5	26.0	2,606.6
2. Population census(c)	989.2	735.3	341.0	243.1	179.9	81.6	10.7	26.5	2,607.2
3. Difference (1-2)	7.0	-1.9	-4.4	-1.0	0.8	-0.5	-0.2	-0.5	-0.6
<b>Females—</b>									
1. Estimates(b)	426.7	328.4	128.9	97.7	68.0	29.8	3.6	13.1	1,096.2
2. Population census(c)	456.3	360.8	139.5	105.9	76.0	33.7	3.9	13.2	1,189.3
3. Difference (1-2)	-29.6	-32.4	-10.6	-8.2	-8.0	-3.9	-0.3	-0.1	-93.1

(a) Includes persons employed in the Australian Capital Territory who reside in adjoining areas. (b) Based on 1961 population census benchmarks. (c) Not comparable with 1961 population census results; see above.

A new series of estimates for June 1966 and subsequent months will be published as soon as possible. This series will be based on 1966 census benchmarks and will therefore be at a higher level over all than the present series (see table above). In due course the estimates for periods prior to the census of June 1966 will be revised, but on a basis comparable with that of the 1961 census benchmarks, the information needed to revise these benchmarks on the 1966 census basis not being available.



**Total civilian employees and defence forces****WAGE AND SALARY EARNERS IN EMPLOYMENT, BY SEX: AUSTRALIA  
JUNE 1961 TO JUNE 1968(a)**EXCLUDING EMPLOYEES IN RURAL INDUSTRY AND PRIVATE DOMESTIC SERVICE  
(<sup>'000</sup>)

	June 1961	June 1964	June 1965	June 1966	June 1967	June 1968
<b>Males—</b>						
<b>Civilian employees—</b>						
Private . . . .	1,594.6	1,762.3	1,834.7	1,861.5	1,878.4	1,934.6
Government(b) . . . .	669.7	707.0	718.4	745.1	756.9	779.8
Total . . . .	2,264.3	2,469.3	2,553.1	2,606.6	2,635.3	2,714.4
Defence forces(c) . . . .	44.3	49.6	52.5	64.2	74.8	78.1
<b>Total males . . . .</b>	<b>2,308.6</b>	<b>2,518.9</b>	<b>2,605.6</b>	<b>2,670.8</b>	<b>2,710.1</b>	<b>2,792.5</b>
<b>Females—</b>						
<b>Civilian employees—</b>						
Private . . . .	714.5	815.1	863.2	894.4	927.1	964.3
Government(b) . . . .	154.4	176.3	187.8	201.8	212.7	224.2
Total . . . .	868.9	991.4	1,051.0	1,096.2	1,139.8	1,188.5
Defence forces(c) . . . .	1.8	2.2	2.2	2.5	2.5	2.7
<b>Total females . . . .</b>	<b>870.7</b>	<b>993.6</b>	<b>1,053.2</b>	<b>1,098.7</b>	<b>1,142.3</b>	<b>1,191.2</b>
<b>Persons—</b>						
<b>Civilian employees—</b>						
Private . . . .	2,309.1	2,577.4	2,697.9	2,755.9	2,805.6	2,899.0
Government(b) . . . .	824.1	883.3	906.2	946.9	969.5	1,003.9
Total . . . .	3,133.2	3,460.7	3,604.1	3,702.8	3,775.1	3,902.9
Defence forces(c) . . . .	46.1	51.8	54.7	66.6	77.3	80.8
<b>Total persons . . . .</b>	<b>3,179.3</b>	<b>3,512.5</b>	<b>3,658.8</b>	<b>3,769.4</b>	<b>3,852.4</b>	<b>3,983.7</b>

(a) Figures for periods subsequent to June 1961 are being revised; see pages 1166-7. (b) Includes employees, within Australia, of government authorities (Commonwealth, State, local, and semi-government) on services such as railways, tramways, banks, post office, air transport, education (including universities), broadcasting, television, police, public works, factories and munitions establishments, departmental hospitals and institutions, migrant hostels, etc., as well as administrative employees. See pages 1171-2. (c) Permanent defence forces in Australia and overseas. From June 1966 the figures include national servicemen enlisted in the Regular Army Supplement.

## Civilian employees

**WAGE AND SALARY EARNERS IN CIVILIAN EMPLOYMENT**  
**BY INDUSTRY GROUP AND SEX: AUSTRALIA, JUNE 1961 TO JUNE 1968(a)**  
 EXCLUDING DEFENCE FORCES AND EMPLOYEES IN RURAL INDUSTRY AND PRIVATE DOMESTIC SERVICE  
 ('000)

<i>Industry group</i>	<i>June 1961</i>	<i>June 1964</i>	<i>June 1965</i>	<i>June 1966</i>	<i>June 1967</i>	<i>June 1968</i>
<b>MALES</b>						
Mining and quarrying . . . . .	48.2	46.4	47.7	50.3	51.4	54.0
Manufacturing(b) . . . . .	821.6	920.9	952.2	955.2	965.9	987.1
Electricity, gas, water, and sanitary services . . . . .	88.5	93.4	94.6	97.7	99.6	101.5
Building and construction . . . . .	274.8	290.0	299.0	310.1	299.0	310.0
Transport and storage . . . . .	190.4	192.5	197.9	201.8	201.9	206.2
Communication . . . . .	75.2	78.1	79.3	81.1	84.2	87.0
Finance and property . . . . .	80.4	92.1	96.9	101.7	105.4	109.3
Retail trade . . . . .	191.3	210.8	215.8	216.5	218.0	222.3
Wholesale and other commerce . . . . .	161.4	170.5	177.1	179.6	180.4	184.1
Public authority activities (n.e.i.) . . . . .	95.0	105.7	110.1	116.5	122.5	128.2
Health, hospitals, etc. . . . .	31.0	35.3	36.2	37.2	38.4	39.7
Education . . . . .	57.1	69.5	73.3	77.6	80.5	85.6
Amusement, hotels, cafés, personal service, etc. . . . .	70.1	78.2	83.2	87.9	92.0	97.7
Other(c) . . . . .	79.3	86.0	89.9	93.5	96.2	101.9
<i>Total . . . . .</i>	<i>2,264.3</i>	<i>2,469.3</i>	<i>2,553.1</i>	<i>2,606.6</i>	<i>2,635.3</i>	<i>2,714.4</i>
<b>FEMALES</b>						
Mining and quarrying . . . . .	1.4	1.7	1.8	2.0	2.4	2.6
Manufacturing(b) . . . . .	233.5	277.6	293.8	297.1	305.5	313.2
Electricity, gas, water, and sanitary services . . . . .	6.2	6.5	7.0	7.4	7.4	7.6
Building and construction . . . . .	4.9	5.8	6.6	7.1	7.5	8.2
Transport and storage . . . . .	17.0	18.1	19.4	21.0	21.7	22.7
Communication . . . . .	18.3	19.3	20.6	21.5	22.7	23.0
Finance and property . . . . .	54.2	60.0	63.6	67.5	70.1	73.1
Retail trade . . . . .	150.7	169.5	177.6	184.2	191.9	197.2
Wholesale and other commerce . . . . .	49.2	52.1	55.5	58.1	59.0	61.1
Public authority activities (n.e.i.) . . . . .	34.6	39.1	42.0	46.2	49.4	51.9
Health, hospitals, etc. . . . .	102.6	117.6	124.3	129.2	133.4	139.6
Education . . . . .	73.7	87.9	92.1	98.6	104.4	112.3
Amusement, hotels, cafés, personal service, etc. . . . .	78.8	86.0	93.5	100.0	105.5	113.1
Other(c) . . . . .	43.9	50.3	53.2	56.1	59.1	62.8
<i>Total . . . . .</i>	<i>868.9</i>	<i>991.4</i>	<i>1,051.0</i>	<i>1,096.2</i>	<i>1,139.8</i>	<i>1,188.5</i>

For footnotes see page 1170.

**WAGE AND SALARY EARNERS IN CIVILIAN EMPLOYMENT  
BY INDUSTRY GROUP AND SEX: AUSTRALIA, JUNE 1961 TO JUNE 1968(a)—continued**  
EXCLUDING DEFENCE FORCES AND EMPLOYEES IN RURAL INDUSTRY AND PRIVATE DOMESTIC SERVICE  
(<sup>'000</sup>)

<i>Industry group</i>	<i>June 1961</i>	<i>June 1964</i>	<i>June 1965</i>	<i>June 1966</i>	<i>June 1967</i>	<i>June 1968</i>
<b>PERSONS</b>						
Mining and quarrying . . . . .	49.6	48.1	49.4	52.3	53.8	56.7
Manufacturing(b) . . . . .	1,055.1	1,198.5	1,246.1	1,252.3	1,271.4	1,300.2
Electricity, gas, water, and sanitary services . . . . .	94.7	99.9	101.6	105.1	106.9	109.1
Building and construction . . . . .	279.7	295.8	305.6	317.2	306.5	318.2
Transport and storage . . . . .	207.4	210.6	217.3	222.8	223.6	228.9
Communication . . . . .	93.5	97.4	99.9	102.6	106.9	110.0
Finance and property . . . . .	134.6	152.1	160.4	169.1	175.5	182.5
Retail trade . . . . .	342.0	380.3	393.4	400.7	409.9	419.5
Wholesale and other commerce . . . . .	210.6	222.6	232.6	237.8	239.5	245.2
Public authority activities (n.e.i.) . . . . .	129.6	144.8	152.1	162.7	172.0	180.1
Health, hospitals, etc. . . . .	133.6	152.9	160.5	166.4	171.7	179.3
Education . . . . .	130.7	157.4	165.4	176.2	184.9	197.9
Amusement, hotels, cafés, personal service, etc. . . . .	148.9	164.2	176.7	187.8	197.5	210.8
Other(c) . . . . .	123.2	136.3	143.2	149.6	155.2	164.6
<b>Total . . . . .</b>	<b>3,133.2</b>	<b>3,460.7</b>	<b>3,604.1</b>	<b>3,702.8</b>	<b>3,775.1</b>	<b>3,902.9</b>

(a) Figures for periods subsequent to June 1961 are being revised; see pages 1166-7. (b) As well as employees engaged directly in manufacturing activity, these figures include the employees of manufacturing enterprises or establishments who are engaged in selling and distribution, etc. (c) Comprises forestry, fishing and trapping; law, order and public safety; religion and social welfare; and other community and business services.

**WAGE AND SALARY EARNERS IN CIVILIAN EMPLOYMENT, BY SEX  
STATES AND TERRITORIES, JUNE 1961 TO JUNE 1968(a)**  
EXCLUDING DEFENCE FORCES AND EMPLOYEES IN RURAL INDUSTRY AND PRIVATE DOMESTIC SERVICE  
(<sup>'000</sup>)

<i>June—</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T. (b)</i>	<i>Aust.</i>
<b>MALES</b>									
1961 . . . . .	876.5	643.6	291.7	207.5	148.5	73.2	7.3	16.0	2,264.3
1964 . . . . .	947.7	702.8	316.8	229.4	164.3	77.4	8.9	21.9	2,469.3
1965 . . . . .	976.9	723.5	329.1	239.9	171.5	78.4	9.5	24.2	2,553.1
1966 . . . . .	996.2	733.4	336.6	242.1	180.7	81.1	10.5	26.0	2,606.6
1967 . . . . .	1,006.4	744.8	335.2	243.2	183.9	82.7	11.6	27.4	2,635.3
1968 . . . . .	1,031.4	763.1	345.0	250.0	198.1	84.3	13.1	29.4	2,714.4

For footnotes see next page.

**WAGE AND SALARY EARNERS IN CIVILIAN EMPLOYMENT, BY SEX**  
**STATES AND TERRITORIES, JUNE 1961 TO JUNE 1968—continued**  
**EXCLUDING DEFENCE FORCES AND EMPLOYEES IN RURAL INDUSTRY AND PRIVATE DOMESTIC SERVICE**  
**('000)**

June—	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T. (b)	Aust.
<b>FEMALES</b>									
1961 . . .	343.6	266.2	102.1	72.3	51.2	24.9	2.3	6.3	868.9
1964 . . .	390.7	300.6	115.5	86.0	58.5	27.1	3.0	10.0	991.4
1965 . . .	412.6	316.3	123.1	93.4	62.7	28.1	3.2	11.5	1,051.0
1966 . . .	426.7	328.4	128.9	97.7	68.0	29.8	3.6	13.1	1,096.2
1967 . . .	443.4	340.9	133.9	99.7	72.4	30.9	4.1	14.4	1,139.8
1968 . . .	460.3	350.9	139.9	106.0	78.7	31.9	4.8	16.0	1,188.5
<b>PERSONS</b>									
1961 . . .	1,220.1	909.8	393.8	279.8	199.7	98.1	9.6	22.3	3,133.2
1964 . . .	1,338.4	1,003.3	432.3	315.5	222.9	104.5	11.9	31.9	3,460.7
1965 . . .	1,389.5	1,039.8	452.2	333.3	234.2	106.5	12.7	35.7	3,604.1
1966 . . .	1,422.9	1,061.8	465.5	339.8	248.7	110.9	14.1	39.1	3,702.8
1967 . . .	1,449.8	1,085.7	469.1	342.9	256.3	113.6	15.7	41.8	3,775.1
1968 . . .	1,491.7	1,114.0	484.9	356.0	276.8	116.2	17.9	45.4	3,902.9

(a) Figures for periods subsequent to June 1961 are being revised; see pages 1166-7. (b) Includes persons employed in the Australian Capital Territory who reside in adjoining areas.

**Government employees**

The numbers of civilian employees of Commonwealth, State and local government authorities in each State and Territory at June 1968 are shown in the following table. These include employees within Australia of government authorities on services such as railways, tramways, banks, post office, air transport, education (including universities), broadcasting, television, police, public works, factories and munitions establishments, departmental hospitals and institutions, migrant hostels, etc., as well as administrative employees.

**CIVILIAN EMPLOYEES OF GOVERNMENT AUTHORITIES, BY SEX**  
**STATES AND TERRITORIES, JUNE 1968**  
**('000)**

State or Territory	Commonwealth Government(a)			State Government(a)			Local Government			Total(a)		
	Males	Fe- males	Per- sons	Males	Fe- males	Per- sons	Males	Fe- males	Per- sons	Males	Fe- males	Per- sons
New South Wales . . .	78.2	23.7	101.9	157.3	51.3	208.5	44.9	5.4	50.3	280.3	80.4	360.7
Victoria . . .	64.1	19.3	83.4	121.6	36.8	158.4	17.8	2.5	20.3	203.6	58.6	262.2
Queensland . . .	23.3	6.7	30.0	68.1	17.2	85.3	17.9	1.4	19.3	109.3	25.3	134.6
South Australia . . .	22.3	5.3	27.7	47.7	18.5	66.2	4.5	0.6	5.1	74.5	24.4	98.9
Western Australia . . .	13.2	3.6	16.8	43.9	12.7	56.6	5.3	0.7	6.0	62.4	17.0	79.3
Tasmania . . .	5.0	1.5	6.5	18.6	5.3	23.9	2.3	0.3	2.6	25.9	7.1	33.0
Northern Territory . . .	5.7	2.1	7.9	..	..	..	0.1	..	0.1	5.8	2.2	8.0
Australian Capital Territory . . .	17.9	9.2	27.1	..	..	..	..	..	..	17.9	9.2	27.1
<b>Australia . . .</b>	<b>229.8</b>	<b>71.6</b>	<b>301.4</b>	<b>457.2</b>	<b>141.8</b>	<b>598.9</b>	<b>92.8</b>	<b>10.8</b>	<b>103.6</b>	<b>779.8</b>	<b>224.2</b>	<b>1,003.9</b>

(a) Includes semi-government authorities. See explanation above.

**CIVILIAN EMPLOYEES OF GOVERNMENT AUTHORITIES, BY SEX: AUSTRALIA  
JUNE 1961 TO JUNE 1968  
( '000)**

June—	Commonwealth Government(a)			State Government(a)			Local Government			Total(a)		
	Males	Fe- males	Per- sons	Males	Fe- males	Per- sons	Males	Fe- males	Per- sons	Males	Fe- males	Per- sons
1961	182.0	49.7	231.7	411.5	96.9	508.4	76.2	7.8	84.0	669.7	154.4	824.1
1964	195.9	54.4	250.3	428.9	113.2	542.1	82.2	8.7	90.9	707.0	176.3	883.3
1965	203.3	59.4	262.8	430.9	119.2	550.1	84.2	9.2	93.4	718.4	187.8	906.2
1966	213.3	64.7	278.0	442.3	127.4	569.8	89.5	9.7	99.1	745.1	201.8	946.9
1967	222.6	68.8	291.4	445.6	133.5	579.1	88.7	10.4	99.1	756.9	212.7	969.5
1968	229.8	71.6	301.4	457.2	141.8	598.9	92.8	10.8	103.6	779.8	224.2	1,003.9

(a) Includes semi-government authorities. See explanation on page 1171.

### COMMONWEALTH EMPLOYMENT SERVICE

Statutory warrant for the Commonwealth Employment Service (C.E.S.) is to be found in the *Re-establishment and Employment Act 1945-1966* (sections 47 and 48). In brief, the main functions of the C.E.S. are to assist people seeking employment to obtain positions best suited to their training, experience, abilities, and qualifications; and to assist employers seeking labour to obtain employees best suited to their needs. The organisation and functions of the C.E.S. conform to the provisions of the Employment Service Convention, 1948, of the International Labour Organisation, which was ratified by Australia in December 1949. In addition, C.E.S. practices accord substantially with the provisions of the I.L.O. Employment Service Recommendation, 1948.

The C.E.S. functions on a decentralised basis within the Employment and Industrial Services Division of the Department of Labour and National Service. The Central Office is in Melbourne and there is a Regional Office in the capital city of each State. There are 152 District Employment Offices and Branch Offices in suburban and the larger provincial centres and 322 agents in the smaller country centres. The District Employment Offices and Branch Offices are distributed as follows: New South Wales, 54; Victoria, 37; Queensland, 26; South Australia, 14; Western Australia, 14; Tasmania, 4; Northern Territory, 2; Australian Capital Territory, 1.

Specialised facilities are provided for young people, persons with physical and mental handicaps, ex-members of the defence forces, national service dischargees, migrants, rural workers, and persons with professional and technical qualifications. The C.E.S. provides vocational guidance free of charge in all States and has a staff of qualified psychologists for this function. Guidance is available to any person, but is provided particularly for young people, ex-servicemen and the handicapped. In New South Wales the C.E.S. provides vocational guidance to adults, including ex-servicemen and the handicapped, while the State Department of Labour and Industry provides a vocational guidance service within the school system and for young persons leaving school.

All applicants for unemployment benefits under the *Social Services Act 1947-1967* must register at a District Office or agency of the C.E.S., which is responsible for certifying whether or not suitable employment can be offered to them. The C.E.S. is responsible for placing in employment migrant workers sponsored by the Commonwealth under the Commonwealth Nomination and similar schemes. This includes arranging for them to move to their initial employment and for their admission, if necessary, to Commonwealth migrant hostels. Assistance in obtaining employment is provided to other migrants as required. From the inception of the various free and assisted schemes, including the Displaced Persons Scheme, to the end of June 1968, about 252,000 British and European migrant workers had been placed in initial employment by the C.E.S. Since 1951 it has been responsible for recruiting Australian experts for overseas service under the Colombo Plan and the United Nations Expanded Programme of Technical Assistance (now replaced by the U.N. Development Programme). The principal spheres in which experts have been supplied are agriculture, education, engineering, geology, health, and economic and scientific research and development.

In association with placement activities, regular surveys of the labour market are carried out and detailed information is supplied to interested Commonwealth and State Government departments and instrumentalities and to the public. Employers, employees and other interested persons are advised on labour availability and employment opportunities in various occupations and areas and on other matters concerning employment.

The Service completed its twenty-second year of operation in May 1968. During 1967 there were 1,035,585 applicants who registered for employment, of whom 711,195 were referred to employers and 421,653 placed in employment. New vacancies notified numbered 602,209.

**Persons registered for employment**

The following table shows the number of persons who claimed, when registering for employment with the Commonwealth Employment Service, that they were not employed and who were recorded as unplaced. The figures include those persons who were referred to employers and those who may have obtained employment without notifying the C.E.S. They include persons in receipt of unemployment benefit (*see* the chapter Welfare Services).

**PERSONS REGISTERED FOR EMPLOYMENT WITH  
COMMONWEALTH EMPLOYMENT SERVICE: STATES, JUNE 1964 TO JUNE 1968**

(Source: Department of Labour and National Service)

<i>Month(a)</i>	<i>N.S.W. (b)</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.(c)</i>	<i>W.A.</i>	<i>Tas.</i>	<i>Aust.</i>
1964—June . . .	18,400	10,137	7,558	4,339	5,141	2,968	48,543
1965—June . . .	15,670	8,771	8,360	3,533	3,576	2,235	42,145
1966—June . . .	22,837	14,026	9,735	7,357	3,370	1,695	59,020
1967—June . . .	24,957	16,152	13,025	8,484	3,757	2,116	68,491
1967—July . . .	24,527	16,257	10,476	8,463	3,446	2,216	65,385
August . . .	22,493	15,352	8,602	8,046	3,142	2,153	59,788
September . . .	19,901	14,672	7,171	6,949	2,411	2,096	53,200
October . . .	18,847	12,995	6,723	6,091	2,240	1,738	48,634
November . . .	24,068	15,288	12,432	6,244	3,029	1,961	63,022
December . . .	24,252	23,930	18,195	10,304	3,844	3,064	83,589
1968—January . . .	29,024	25,665	21,625	11,366	5,360	3,173	96,213
February . . .	24,776	20,852	17,659	9,006	4,466	2,390	79,149
March . . .	21,595	19,227	14,972	8,308	3,626	1,635	69,363
April . . .	20,795	19,582	13,347	8,118	3,430	1,714	66,986
May . . .	20,949	19,850	12,767	8,192	3,666	1,922	67,346
June . . .	20,808	19,595	10,252	8,359	4,151	2,088	65,253

(a) Generally at Friday nearest end of month. (b) Includes Australian Capital Territory. (c) Includes Northern Territory.

**Job vacancies**

The following table shows the number of vacancies registered with the Commonwealth Employment Service. The figures refer to vacancies which employers claimed were available immediately or would be available by the end of the following calendar month.

**VACANCIES REGISTERED WITH COMMONWEALTH EMPLOYMENT SERVICE  
STATES, JUNE 1964 TO JUNE 1968**

(Source: Department of Labour and National Service)

<i>Month(a)</i>	<i>N.S.W. (b)</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.(c)</i>	<i>W.A.</i>	<i>Tas.</i>	<i>Aust.</i>
1964—June . . .	12,090	14,141	4,540	3,425	1,143	601	35,940
1965—June . . .	15,602	17,901	3,769	4,356	2,422	639	44,689
1966—June . . .	10,734	13,751	3,239	1,507	2,965	825	33,021
1967—June . . .	10,384	11,459	2,345	1,342	2,411	1,394	29,335
1967—July . . .	10,685	10,904	2,339	1,379	2,427	1,501	29,235
August . . .	11,567	11,443	2,814	1,691	2,945	1,535	31,995
September . . .	12,361	12,146	3,219	1,885	3,621	1,787	35,019
October . . .	13,582	13,137	3,491	2,217	4,206	1,687	38,320
November . . .	15,219	13,387	3,456	2,089	4,284	2,935	41,370
December . . .	14,846	17,617	2,979	3,659	3,470	2,849	45,420
1968—January . . .	15,878	18,762	2,858	3,128	3,890	2,106	46,622
February . . .	14,335	13,460	2,603	2,076	3,803	2,119	38,396
March . . .	13,212	11,942	2,614	1,992	3,769	1,458	34,987
April . . .	12,148	10,188	2,480	1,769	3,720	1,163	31,468
May . . .	11,887	9,678	2,719	1,785	3,307	1,186	30,562
June . . .	11,416	9,411	2,605	1,591	2,630	1,069	28,722

(a) Generally at Friday nearest end of month. (b) Includes Australian Capital Territory. (c) Includes Northern Territory.

## REPUBLIC OF NAURU

The island of Nauru, formerly administered by Australia under Trusteeship Agreement with the United Nations on behalf of the joint Administering Authority of Australia, New Zealand, and the United Kingdom, became independent on 31 January 1968.

Following talks which commenced in June 1967 between representatives of the Governments of Australia, New Zealand, and the United Kingdom and the Nauruan people, the Minister for Territories announced on 1 November 1967 that the date of 31 January 1968 had been selected for Nauruan Independence subject to approval by the Nauruan Local Government Council.

The Commonwealth *Nauru Independence Act* 1967, providing *inter alia* that after the day preceding Nauru Independence Day all Acts that extend to Nauru as a Territory of the Commonwealth cease so to extend, and that on and after Nauru Independence Day Australia shall not exercise any power of legislation, administration, or jurisdiction in and over Nauru, was assented to on 10 November 1967. On 19 December 1967 the United Nations General Assembly voted unanimously for the termination of the Trusteeship Agreement upon the accession of the Republic of Nauru to independence on 31 January 1968.

Celebrations were held in Nauru on the three days 30 January to 1 February 1968 to mark independence, and were attended by representatives of the Governments of the former joint Administering Authority, by representatives of the United Nations, and by representatives of other Governments which have historical and regional ties with Nauru.

For information on the history of Nauru and a description of the island, its people, and its economy see Year Book No. 53, pages 154-7, and earlier issues.

## CHAPTER 29

### THE TERRITORIES OF AUSTRALIA

The internal Territories of Australia are the Northern Territory and the Australian Capital Territory. External Territories under the control of Australia are: Norfolk Island; the Territory of Papua (formerly British New Guinea); the Territory of New Guinea (under Trusteeship Agreement with the United Nations); the Territory of Heard and McDonald Islands; the Australian Antarctic Territory; the Territory of Cocos (Keeling) Islands; and the Territory of Christmas Island. There is also the Territory of Ashmore and Cartier Islands, deemed to form part of the Northern Territory.

Information on all except Ashmore and Cartier Islands is contained in the following pages, and details of the acquisition of all the Territories will be found on pages 5, 22, and 23 of Chapter I. More detailed statistics and additional descriptive matter are to be found in the Annual Reports of the Administrations of the various Territories and in the *Northern Territory Statistical Summary* and the *Australian Capital Territory Statistical Summary* issued by this Bureau. Statistics for the Northern Territory and the Australian Capital Territory are also included in chapters dealing with particular subjects. The Statistician, Territory of Papua and New Guinea, issues a number of publications containing statistics relative to these two Territories, separate and combined.

Responsibility for the general administration of the Territories of Norfolk Island, Papua, New Guinea, Cocos (Keeling) Islands and Christmas Island is vested with the Commonwealth Department of External Territories; for the Northern Territory (including Ashmore and Cartier Islands) and the Australian Capital Territory with the Department of the Interior; and for Antarctica and Heard and McDonald Islands with the Department of External Affairs. Matters excepted are defence and civil aviation, and, in the Northern Territory and the Australian Capital Territory, public health, justice, education (excluding Aborigines) and the provision of the basic physical services, which are the responsibility of the Department of Health, the Attorney-General's Department, the Department of Education and Science, and the Department of Works, respectively.

### THE NORTHERN TERRITORY

#### General description

##### Area

Upon the extension of New South Wales westwards to the 129th east meridian in 1825, the Northern Territory was incorporated in that colony, but in 1863 it was annexed by Royal Letters Patent to the province of South Australia. With the adjacent islands, it was transferred to the Commonwealth on 1 January 1911. The total area is 520,280 square miles.

##### Legislation and administration

On 1 January 1911 the Territory was transferred from South Australia to the Commonwealth. The terms were outlined in Year Book No. 15, page 940. For particulars of the administration up to the *Northern Territory (Administration) Act* 1931, by which it was, for the second time, placed in the hands of an Administrator, see Year Book No. 38 and earlier issues.

The *Northern Territory (Administration) Act* 1910-1968 provides for the constitution of a Legislative Council consisting of six official members, three nominated non-official members and eight elected members. (The *Northern Territory (Administration) Act* (No. 2) 1968 provides for an alteration of the composition of the Council to six official and eleven elected members from the next elections for the Council which are to be held towards the end of 1968.) A president is elected from among the non-official and elected members. The Council makes ordinances for the Territory, which must be submitted to the Administrator. The Administrator is obliged to reserve Ordinances relating to certain matters, including Crown lands and Aboriginal employment, for the Governor-General's pleasure, but in other cases has a discretionary power either to assent, withhold assent or to return the Ordinance to the Legislative Council with recommended amendments. The Governor-General has power in respect of a reserved ordinance to assent to an ordinance, withhold assent to an ordinance, withhold assent to part of an ordinance, or to recommend to the Administrator any amendments



to the laws of the Territory he considers to be desirable arising out of his consideration of the Ordinance. Money votes may be proposed in the Council only on recommendation by message of the Administrator. The Territory elects one member to the House of Representatives.

### Physiography

The Territory is within the torrid zone, with the exception of a strip about 180 miles wide which lies south of the Tropic of Capricorn.

The low flat coastline seldom reaches a height of 100 feet. Sandy beaches and mud flats, thickly fringed with mangroves, prevail. Sandstone, marl and laterite form the occasional cliffy headlands. The sea frontage of more than 1,000 miles is indented by bays and inlets and intersected by numerous rivers, many of which are navigable for considerable distances from their estuaries. The only practicable deep-water port, however, is Darwin.

Inland the country generally is devoid of conspicuous landmarks. From the coast there is a general rise southwards to the vicinity of the seventeenth or eighteenth parallel of south latitude, where the higher lands form the watershed between the rivers that flow northwards to the sea and those that form the scanty supply for the interior systems. Towards the centre of the continent the land over a wide area is of considerable elevation, and there are several mountain ranges, generally with an east and west trend.

### Climate, fauna and flora

There are two main climatic divisions, the wet season, November to April, and the dry season, May to October, with uniform and regular changes of weather. Nearly all the rainfall occurs in the summer months. Further particulars appear in Year Book No. 6, page 1116.

The ordinary types of native Australian fauna inhabit the Territory. As elsewhere on the continent, the higher *Theria* are rare, but marsupials, birds, crocodiles, fresh-water tortoises, snakes (mostly non-venomous), and frogs abound. There are many varieties of fresh-water fish and littoral *Mollusca*. Butterflies and beetles are strongly represented. The termite is a pest which is capable of serious damage to wooden buildings unless special preventive measures are taken. A species of the ant builds anthills which sometimes attain great dimensions. Mosquitoes and sandflies are very troublesome, particularly in the wet season. Some types of native fauna are protected. Buffalo formerly existed in large herds, but their number has been reduced by indiscriminate shooting. Buffalo shooting is, however, now controlled by Ordinance.

The vegetation is north Australian in type, but a number of the forms belong to the Malayan and Oceanic regions. In the coastal regions tropical vegetation grows luxuriantly to the water's edge. In the north, cypress pine, bloodwood and paper-bark timbers are now cut and milled for local building purposes. Cypress pine is resistant to termites. On the wide expanses of plain country in the interior there is little vegetation, the principal orders represented being: *Euphorbiaceae*, *Compositae*, *Convolvulaceae*, *Rubiaceae*, *Goodeniaceae*, *Leguminosae*, *Utricaceae*.

## Population

See also the chapters Population and Vital Statistics.

The estimated population of the Northern Territory at 31 December 1967, including Aborigines, was 33,189 males, 27,450 females, 60,639 persons. The Aboriginal population at the census of 30 June 1966 totalled 10,651 males, 10,468 females, 21,119 persons. All Aborigines, by virtue of the *Nationality and Citizenship Act* 1948–1966, are British subjects and Australian citizens. Northern Territory Aborigines are equal at law with all other Northern Territory residents, although a few special privileges exclusive to Aborigines have been retained. The *Social Welfare Ordinance* 1964 which repealed the *Welfare Ordinance* 1953–1963 provides for assistance without control for any person who is socially or economically in need of assistance. Reserves for Aborigines comprise an area of 94,196 square miles.

## Production

See also the chapters dealing with particular subjects.

### Land tenure

Three-sevenths of the land in the Territory is reserved or unoccupied and unreserved, the remainder, apart from a very small proportion alienated, being held under various forms of lease or licence, which are described in Year Book No. 48, pages 111–12. The following changes should, however, be noted.

*Leases to Mission Organisations* are now granted under the *Special Purpose Leases Ordinance* 1953-1965 for fixed terms or in perpetuity.

*Miscellaneous Leases* are now granted in perpetuity for purposes such as a market garden, plantation, orchard, vineyard, poultry farm, piggery, or the like.

*Darwin Town Area Leases* are granted in perpetuity for business or residential purposes, or both, in the Darwin Town Area.

The chapter Rural Industry of this issue contains statistical information concerning areas occupied under various forms of tenure.

### Agriculture

Until the 1967-68 season, commercial agricultural production was confined to vegetables and small-scale fruit production for local consumption. The introduction of grain sorghum production on a commercial basis has thrown new emphasis on the development of agriculture. Townsville lucerne seed production has grown considerably and has become an important contributor to the income of many small landholders.

Information concerning scientific surveys (commenced in 1946), conducted by the Commonwealth Scientific and Industrial Research Organization to determine more accurately the potentialities of the Northern Territory, and the resulting establishment of an agricultural research station at Katherine and experimental farms at Katherine and Berrimah (near Darwin), is given in Year Book No. 51, page 101, and in earlier issues. Information is given also on the establishment of rice research stations and investigational work carried out, and on subsequent rice crop commercial scale operations. The appointment by the Minister for Territories in 1959 of an expert committee to carry out investigations relative to agricultural settlement in the Territory and subsequent developments are also referred to.

#### NORTHERN TERRITORY: AREA AND PRODUCTION OF CROPS 1962-63 TO 1966-67

<i>Crop</i>	1962-63	1963-64	1964-65	1965-66	1966-67
AREA(a) (acres)					
Fruit—Bananas . . . . .	35	43	28	20	29
Pineapples . . . . .	11	23	19	12	17
Other . . . . .	90	83	83	78	87
<i>Total, fruit</i> . . . . .	<i>136</i>	<i>149</i>	<i>130</i>	<i>110</i>	<i>133</i>
Peanuts . . . . .	(b)	(b)	(b)	16	(b)
Sorghum for grain . . . . .	(b)	527	1,269	1,093	527
Vegetables for human consumption . . . . .	149	133	150	144	218
Other crops(c) . . . . .	1,465	1,680	2,687	2,699	2,747
<i>Grand total(a)</i> . . . . .	<i>1,750</i>	<i>2,489</i>	<i>4,236</i>	<i>4,062</i>	<i>3,625</i>
PRODUCTION					
Fruit—Bananas . . . . . bushels	1,909	2,174	2,448	1,985	1,684
Pineapples . . . . . "	778	943	1,142	990	997
Peanuts . . . . . cwt	(d)	(d)	(d)	76	(d)
Sorghum (grain) . . . . . bushels	(d)	6,210	10,693	12,018	7,533

(a) Excludes rice; details are not available for publication. (b) Not available for publication, included in Other crops. (c) Principally fodder crops. (d) Not available for publication.

### Pastoral industry

The pastoral possibilities of certain parts of the Territory were recognised at an early date, and both cattle and sheep raising have been attempted. For various reasons sheep-raising has not been very successful, but the cattle industry has progressed steadily and is continuing to expand. There is substantial potential for further expansion in the higher rainfall area of the Territory through the introduction of improved pastures and the use of superphosphate.

## NORTHERN TERRITORY: LIVESTOCK, JUNE 1963 TO 1967

30 June—	Horses	Cattle	Sheep	Pigs
1963 . . .	38,191	1,086,627	9,469	1,842
1964 . . .	38,391	1,105,161	10,023	1,806
1965 . . .	35,997	1,067,327	9,099	2,182
1966 . . .	36,719	1,031,715	8,875	2,275
1967 . . .	37,638	1,097,114	8,319	2,791

## Mining

During 1966 the value of output of the mining and quarrying industry in the Territory, excluding uranium mining, particulars of which are not available for publication, was \$13,283,000.

The mining of copper ores and concentrates continues to be the most important mining activity in terms of value of output, and accounts for more than half the Territory's total recorded production. Prior to 1956, gold minerals, first mined in 1869, accounted for most of the value of output, but from 1956 onwards gold production has remained relatively constant while copper production has increased. The bulk of the copper and gold is obtained by underground mining at Tennant Creek. The government operates a battery in this area to encourage gold mining by smaller operators. A government battery at Mount Wells, about 100 miles south-east of Darwin, also operates for the treatment of cassiterite (tin) and gold ores from that locality.

Work has begun on the development of several other large mineral deposits, and production began in 1967 of bauxite at Gove Peninsula and iron at Frances Creek and Mount Bundy. Lead-zinc deposits at McArthur River and at the Woodcutters prospect near Rum Jungle are also being investigated (see also the chapter Mineral Industry). The large scale mining of manganese ore at Groote Eylandt started in 1966. The value of manganese ore now exceeds the return from gold production.

## NORTHERN TERRITORY: MINING AND QUARRYING OPERATIONS, 1963 TO 1966

(Excluding uranium mining)

	1963	1964	1965	1966
Number of mines and quarries . . . . .	65	84	67	80
Average number of persons employed during whole year (including working proprietors) . . . . .	457	585	688	814
Salaries and wages paid(a)(b) . . . . . \$'000	1,590	2,138	2,867	3,361
Total fuel, materials, etc., used . . . . .	1,394	1,727	2,571	2,212
Value of additions and replacements to fixed assets(a) . . . . .	388	2,866	5,677	7,282
Value of output (at mine or quarry) . . . . .	6,480	7,233	8,308	13,283
Value of production(c) . . . . .	5,086	5,506	5,736	11,070

(a) Excludes mines employing less than four persons. (b) Excludes drawings by working proprietors; the amounts are net after deducting value of explosives sold to employees. (c) Value of output less cost of power, fuel and light and other materials and stores used; depreciation and maintenance costs have not been deducted.

Natural gas was discovered in the Amadeus Basin in 1964. Combined reserves at Mereenie and Palm Valley are estimated at 1,500,000 million cubic feet. Possible ways of utilisation are being investigated. Petroleum exploration is being carried out in the Northern Territory in permit areas covering some 286,000 square miles, of which over one-third is off-shore. The interest in off-shore areas is increasing, and drilling may be started in the near future.

## Forestry

In February 1966 the Commonwealth Government approved a four-year programme of forest improvement and development to preserve existing forest areas and increase possible timber resources. The programme includes increasing the rate of planting cypress pine from 350 acres a year to 1,000 acres a year by 1969-70 and also makes provision for the employment and training of Aborigines. In July 1967 the newly formed Forestry Branch of the Northern Territory Administration took over the normal State-type forestry functions from the Forestry and Timber Bureau. At the same time the Bureau established a Regional Research Station at Berrimah to carry out basic forestry research. Local production of log timber, mainly cypress pine, amounted to 1,577,610 super feet in 1965-66, but this was insufficient to meet local requirements, and about 4,973,000 super feet of sawn timber was imported from the States and overseas. During 1967-68 interested companies were issued with feasibility study licences to permit them to conduct pre-investment feasibility studies into the possibility of establishing wood chip industries in the Northern Territory.

**Pearl fisheries**

In 1884 mother-of-pearl shell was discovered in Darwin harbour. Since then the areas fished have extended to the various banks to seaward and along the Northern Territory coast. Because of competition from plastic materials pearling has declined in recent years, but it is hoped that the commercial production of cultured pearls will succeed in replacing the old pearling industry.

**NORTHERN TERRITORY: FISHING AND PEARLING(a), 1962-63 TO 1966-67**

	1962-63	1963-64	1964-65	1965-66	1966-67
General fisheries—					
Number of boats engaged . . . . .	30	30	28	43	60
Number of men employed . . . . .	68	54	69	120	133
Estimated live weight of fish catch '000lb . . . . .	331	269	316	376	601
Gross value of fish . . . . . \$'000	38	45	55	57	73
Pearl-shell fisheries(b)—					
Number of boats engaged . . . . .	2	2	2	3	3
Number of men employed . . . . .	22	23	22	37	36
Total take of pearl-shell . . . . . tons	51.2	4.9	5.4	8.9	16.6
Gross value of pearl-shell . . . . . \$'000	41	2	2	4	7

(a) Excludes operations of Japanese pearling fleet. (b) Season ended January.

In April 1968 seven companies were approved by the Minister for the Interior and the Minister for Primary Industry to participate in the development of prawn fishing and processing in respect of waters adjacent to the Northern Territory. Three of the companies were joint ventures involving the use of foreign vessels and foreign crews for a limited period. Conditions of the Ministers' approval include the establishment of shore prawn processing plants in the Territory, the replacement of foreign vessels and crews with Australian-built vessels and Australian crews, the location at Darwin of all the processing plants of the joint ventures, and protection, during a limited establishment period, against the development of shore processing plants on parts of the coast other than at Darwin. Provision has also been made for participation in the industry by Aborigines.

**Secondary industries**

The secondary industries that have so far been established in the Territory have been largely the service industries normally associated with a developing area, such as electrical repairs, printing, motor and marine engineering, plumbing, welding, joinery, sheet metal work, and blue metal crushing. Major industrial investments by private interests in recent years include two breweries, a bitumen plant, and a factory for the manufacture of milk products, ice cream and aerated waters.

**NORTHERN TERRITORY: FACTORIES, 1962-63 TO 1966-67**

	1962-63	1963-64	1964-65	1965-66	1966-67p
Number of factories(a) . . . . .	141	139	174	185	187
Average number employed(b)—					
Males . . . . .	878	978	1,098	1,182	1,308
Females . . . . .	89	97	112	112	115
Persons employed . . . . .	967	1,075	1,210	1,294	1,423
Salaries and wages paid(c)—					
Males . . . . . \$'000	2,146	2,628	3,298	3,666	4,146
Females . . . . . „	130	142	185	192	203
Total salaries and wages paid . . . . . „	2,275	2,770	3,483	3,859	4,349
Value of power, fuel, light, etc. used(d) . . . . .	559	735	865	856	946
Value of materials used(e) . . . . .	2,876	3,384	4,550	5,497	7,214
Value of production(f) . . . . .	4,493	4,938	6,654	7,103	7,847
Value of output(g) . . . . .	7,928	9,057	12,068	13,456	16,007
Value of land and buildings(h) . . . . .	3,304	4,586	5,668	6,101	6,482
Value of plant and machinery(h) . . . . .	6,339	6,046	6,103	5,954	6,825

(a) Any factory, workshop or mill in which four or more persons are employed or power other than hand is used. (b) The aggregate of the average number of persons employed in each factory. Includes working proprietors. Figures represent average employment over the whole year. (c) Excludes drawings by working proprietors. (d) Includes water and lubricating oil. (e) Includes also containers, etc., tools replaced and repairs to plant. (f) Value added in process of manufacture (i.e. value of output less value of materials and fuel used). (g) Value of goods produced including amounts received for repair work and other work done. (h) Depreciated or book value at end of year, including estimated value of rented premises and machinery.

**Trade, transport and communication****Trade**

No comprehensive record is kept of the trade between the States and the Territory. The following table shows the values of the principal commodities imported into and exported from the Northern Territory from or to overseas countries during the years 1962-63 to 1966-67.

**NORTHERN TERRITORY: PRINCIPAL OVERSEAS  
IMPORTS AND EXPORTS, 1962-63 TO 1966-67  
(\$'000)**

<i>Commodity</i>	<i>1962-63</i>	<i>1963-64</i>	<i>1964-65</i>	<i>1965-66</i>	<i>1966-67<sup>p</sup></i>
<b>IMPORTS</b>					
Petroleum and shale spirit—					
Aviation spirit . . . . .	184	232	143	158	277
Other (motor spirit) . . . . .	279	389	339	456	542
Aviation turbine fuel . . . . .	521	670	1,022	955	615
Other oil <sup>(a)</sup> . . . . .	293	310	487	838	893
Sulphur . . . . .	159	141	71	..	..
Portland cement . . . . .	157	174	322	410	311
Timber (undressed hardwood) . . . . .	97	151	214	334	183
Iron and steel manufactures . . . . .	(b)	(b)	(b)	832	3
Machinery and transport equipment . . . . .				922	3,914
Other articles . . . . .	695	870	1,526	691	653
<b>Total imports . . . . .</b>	<b>2,385</b>	<b>2,937</b>	<b>4,124</b>	<b>5,596</b>	<b>7,391</b>
<b>EXPORTS<sup>(c)</sup></b>					
Meats . . . . .	7	1,546	2,323	3,348	3,422
Hides and skins, raw . . . . .	153	237	123	61	227
Non-ferrous ores and concentrates . . . . .	172	..	9	173	2,682
Copper ores and concentrates . . . . .	242	78	805	2,044	1,512
Pearls . . . . .	30	180	170	179	34
Other articles . . . . .	485	433	379	593	1,082
<b>Total exports . . . . .</b>	<b>1,089</b>	<b>2,474</b>	<b>3,809</b>	<b>6,398</b>	<b>8,959</b>

<sup>(a)</sup> Includes kerosene, gas oil, diesel oil, residual oil, etc.

<sup>(b)</sup> Included in other articles.

<sup>(c)</sup> Includes domestic exports and re-exports.

**Shipping**

Shipping services to Darwin are provided from the eastern States by ships of the Australian National Line and from Western Australia by the Western Australian State Shipping Service. Oil tankers carrying supplies of aircraft fuel and other petroleum products, overseas cargo ships and other miscellaneous vessels also visit Darwin. A vessel operated from Brisbane serves settlements on the Gulf of Carpentaria, and some mission-owned boats carry cargo from Darwin to mission stations and government settlements along the coast.

**Air services**

At 30 June 1967 there were nine government aerodromes and 128 licensed aerodromes in the Territory. The overseas passenger services using the Darwin international airport are Lufthansa (Sydney to Frankfurt); Qantas/B.O.A.C. (Sydney to London); B.O.A.C. (Sydney to Hong Kong); Union de Transports Aeriens (Paris to Los Angeles via Noumea); and T.A.A. on behalf of Transportes Aereos de Timor (Darwin to Baucau). Regular inland services to Darwin, with, in some cases, intermediate stops at Territory centres, are operated by Trans-Australia Airlines and Ansett-A.N.A. (from Adelaide, Melbourne, Sydney and Brisbane), and MacRobertson-Miller Airways Ltd (from Perth and Derby). MacRobertson-Miller Airways Ltd and Connellan Airways Ltd operate a network of air services throughout the Territory, the latter company's base being at Alice Springs. The Royal Flying Doctor Service also operates aircraft, while charter services can be secured at Darwin and Alice Springs.

### **Railways**

The Commonwealth Railways Commissioner operates the Central Australia Railway from Port Augusta in South Australia to Alice Springs over a distance of 822 miles, of which about 200 are in the Northern Territory. The line is standard gauge from Port Augusta to Marree, a distance of 217 miles, and 3 ft 6 in from Marree to Alice Springs. The Commissioner also operates the North Australia Railway between Darwin and Birdum on a 3 ft 6 in gauge over a distance of 317 miles. The two inland terminals, Alice Springs and Birdum, are about 630 miles apart and are connected by road transport along the Stuart Highway. Larrimah, on the highway and 6 miles north of Birdum, is the point of trans-shipment for passengers and goods and is, at present, the effective terminal. A road-rail freight service operates between Adelaide and Darwin via Alice Springs.

### **Roads**

The Stuart Highway, 954 miles long, connects Alice Springs with Darwin and runs via Larrimah and Tennant Creek. The Barkly Highway, 403 miles long, connects Mount Isa (Queensland) with Tennant Creek and joins the Stuart Highway some 16 miles north of Tennant Creek. These highways are used for carrying various freights, including cattle, particularly to and from the railheads at Alice Springs, Larrimah and Mount Isa. The routes are used also for overland tourists and travellers from the southern States to Darwin. With the further development of the pastoral and mining industries in the Territory, road trains are now being used on both highways for the export of cattle and ore. Both roads have good water bores and communications. There are now approximately 12,000 miles of roads in the Territory of which 1,640 miles are sealed.

Work on a programme for reconstruction and development of beef cattle roads was commenced in 1961-62. To June 1967 \$29.0 million has been authorised for this work, and actual expenditure to 30 June 1967 was \$10.4 million. The transport of cattle by road is expected to increase the number, quality and value of cattle turned off.

### **Posts, telegraph, telephones and wireless**

Postal communication is maintained by road, rail and air transport between Darwin and the capital cities of Australia. In addition, vessels belonging to the Western Australian State Shipping Service provide a regular service between Fremantle and Darwin. Inland, the northern part of the Territory receives its mail via Darwin or by means of the aerial services, and the southern districts are served via Adelaide.

The overland telegraph line, covering a length of 2,230 miles, runs from Adelaide to Darwin, and links Darwin in telegraphic communication with other parts of the world. Long-distance telephone communication is established between Darwin and the capital cities of Australia, and overseas telephone communication through Sydney or Perth is also available.

Regional national broadcasting stations are situated at Darwin, Alice Springs, Tennant Creek and Katherine, and there is a commercial station at Darwin. The majority of homesteads on pastoral leases are equipped with radio transceivers operated under licence from the Postmaster-General's Department. These stations are in daily communication with Flying Doctor bases situated at Alice Springs (Northern Territory), Wyndham (Western Australia), Broken Hill (New South Wales), and Cloncurry (Queensland), and are used for transmission of radio-telegrams and other communications.

## **Education**

*See also* the chapter Education, Cultural Activities and Research.

### **Special Aborigines schools**

The social, cultural and educational background of the Aborigines has made necessary the establishment of special schools for them. This is regarded as an interim measure only, and policy is that children are transferred into general community schools as they are judged capable of handling the curriculum. From the beginning of the 1956 school year control of these schools passed from the Commonwealth Office of Education to the Welfare Branch of the Administration. Thirty-three schools had been established up to the middle of the year 1967. A special syllabus and series of readers have been prepared for use in these schools. Free mid-day meals, milk, and school clothes are supplied to the pupils. In addition to the thirty-three Administration schools, eleven schools for Aboriginal children were conducted by missions with the aid of Government subsidies. Also, four schools aided by Government subsidies had been established on pastoral properties. Twelve pre-school centres for Aboriginal children are operated by the Administration and three others are organised by the missions.

### Community schools

Schools other than the special schools in the Territory are conducted for the Commonwealth on an agreed basis of reimbursement by the South Australian Department of Education, which is represented in Darwin by a Director, Northern Territory Schools. Since February 1968 the Commonwealth Minister of Education and Science has been responsible for all community education in the Northern Territory. His Department is represented in Darwin by an officer holding the rank of Director. On 30 June 1967 there were twenty-four government schools in the Territory, with 6,687 pupils, and four non-government schools, with 1,002 pupils, providing instruction according to the South Australian curriculum. High schools have been established with classes to Leaving Certificate level at Alice Springs and matriculation level at Darwin.

All children who live more than ten miles from an established school receive an allowance of up to \$320 (\$200 plus \$120 on a graduated scale according to family income) per annum plus fare concessions if they board away from home in order to attend school. Twelve Intermediate exhibitions or ten per cent of the number of candidates, whichever is the greater, are available annually, and carry benefits of \$10. There are also book allowances ranging from \$16 to \$20 per annum for secondary students. Approximately 300 children receive correspondence education under the South Australian Correspondence School system. The radio session 'School of the Air' supplements normal correspondence instruction for certain children in isolated areas.

Fourteen pre-school centres are in operation in the Territory, with an enrolment of 803 pupils. A number of scholarships are offered each year for training as pre-school teachers.

### Theoretical training of apprentices

The recognition that technical school training is an extension of workshop training has led to the introduction of day-time classes which apprentices attend without loss of pay. Apprentices are directed by the Apprentices Board to undertake correspondence courses conducted by the Technical Correspondence School of the South Australian Education Department and the Sydney Technical College, these courses covering the work prescribed for the various trades in South Australia and New South Wales.

## Aboriginal welfare

The Commonwealth and State Governments have adopted a common policy of assimilation which seeks that all persons of Aboriginal descent will choose to attain a similar manner and standard of living to that of other Australians and live as members of a single Australian community enjoying the same rights and privileges, accepting the same responsibilities and influenced by the same hopes and loyalties as other Australians. Since the commencement of the *Social Welfare Ordinance* 1964 in September 1964, Aborigines in the Northern Territory have been equal at law with all other residents, although some special benefits have been retained for them. An intensive welfare programme to prepare Aborigines for the demands of modern living is being carried out, and fourteen Government settlements and thirteen mission stations have been established, where Aborigines are encouraged to adopt a settled way of life, and health services, particularly child welfare services, education, housing, vocational training, and employment are provided. Aborigines are also encouraged to take part in the social activities of the community.

## Finance

Details of receipts and expenditure of the Territory for the years 1962-63 to 1966-67 are shown in the table following. In this table the receipts and expenditure of the Northern Territory have been classified into a National Accounts form. The table covers transactions relating to the Northern Territory in the Commonwealth Consolidated Revenue Fund and the following trust funds: Northern Territory Government Settlements Canteens, Northern Territory Housing Commission, Northern Territory Housing Loans, and Northern Territory Transport. Details of the financial transactions of the Darwin City Council are also incorporated in the table. Revenue derived by the Commonwealth from income taxes, customs duties, etc. levied in the Northern Territory and expenditure by the Commonwealth in the Northern Territory on such items as defence, civil aviation, railways, etc., and payments to residents from the National Welfare Fund are not included.

**NORTHERN TERRITORY: RECEIPTS AND EXPENDITURE, 1962-63 TO 1966-67**  
(\\$'000)

	1962-63	1963-64	1964-65	1965-66	1966-67
<b>RECEIPTS</b>					
Taxation—					
Stamp duties . . . . .	76	42	42	53	64
Motor registration . . . . .	163	188	213	237	273
Other . . . . .	103	362	435	480	275
Interest, rent, etc. . . . .	590	694	758	1,370	943
Public enterprises income . . . . .	114	452	426	801	1,463
Net sale of local and semi-governmental securities . . . . .	326	418	392	127	44
Other receipts—					
Net charge to Commonwealth budget . . . . .	27,926	29,426	32,538	38,978	50,542
Other(a) . . . . .	22	42	—36	—165	325
<b>Total receipts . . . . .</b>	<b>29,320</b>	<b>31,624</b>	<b>34,768</b>	<b>41,882</b>	<b>53,929</b>
<b>EXPENDITURE</b>					
Net current expenditure on goods and services—					
Law, order and public safety . . . . .	272	412	460	524	591
Education . . . . .	844	972	1,223	1,472	1,641
Public health and welfare . . . . .	5,300	5,994	6,802	6,618	8,002
Other . . . . .	6,548	7,574	8,406	11,170	12,215
Capital expenditure on new assets and stocks—					
Roads . . . . .	3,714	3,720	2,950	4,539	4,745
Housing . . . . .	2,166	2,130	3,850	5,161	2,746
Other . . . . .	9,632	9,680	10,016	11,789	23,066
Net purchase of existing assets(b) . . . . .	—48	—122	—114	—328	—72
Cash benefits . . . . .	180	228	271	300	316
Subsidies . . . . .	192	264	260	360	265
Interest paid . . . . .	70	80	112	118	152
Net advances—					
Housing . . . . .	350	546	110	—141	—96
Other . . . . .	100	146	422	301	357
<b>Total expenditure . . . . .</b>	<b>29,320</b>	<b>31,624</b>	<b>34,768</b>	<b>41,882</b>	<b>53,929</b>

(a) Includes movements in cash, investments, etc. (b) Minus sign (—) denotes excess of receipts (from sales) over expenditure on, or purchases of, existing assets, including housing.

## THE AUSTRALIAN CAPITAL TERRITORY

### General description

The Commonwealth Constitution provides that the Seat of Government of the Commonwealth shall be in the State of New South Wales but distant not less than 100 miles from Sydney. After a number of alternative sites were considered, an area of 911 square miles lying approximately 200 miles south-west of Sydney was transferred to the Commonwealth as from 1 January 1911. A further 28 square miles at Jervis Bay were transferred as from 4 September 1915 to serve as a port for the Territory.

The primary responsibility for administering the Australian Capital Territory lies with the Department of the Interior, whose functions include housing, police, and municipal services. Education, public health, justice and the provision of basic physical services, including water supply, sewerage and roads, are the responsibility of the Departments of Education and Science, Health, Attorney-General's, and Works. The National Capital Development Commission has the responsibility for the planning and development of the Canberra city area.



The Australian Capital Territory Advisory Council was established in 1930. It has eight elected members and a representative from each of the Departments of Interior, Works, and Health, and the National Capital Development Commission. The Council advises the Minister for the Interior on matters affecting the Australian Capital Territory. Ordinances are submitted in draft form to the Council for advice and comment before being implemented.

At the census of 30 June 1966 the population of the Australian Capital Territory was 96,013, made up of 92,308 in the Canberra metropolitan area and 3,705 in rural areas (including Jervis Bay). The estimated population of the Territory at 31 December 1967 was 55,867 males and 52,309 females, 108,176 persons. *See also* the chapters Population and Vital Statistics.

### National Capital Development Commission

The *National Capital Development Commission Act 1957-60* provides for a Commission to undertake and carry out the planning, development and construction of the City of Canberra as the National Capital of the Commonwealth. The year 1966-67 was the ninth year of the Commission's operations. Construction work was carried out by means of agency arrangements with the Department of Works and private consultants. Details of the expenditure by the Commission in each year from 1962-63 to 1966-67 are included in the table on page 1188. Total expenditure in 1966-67 was \$41.4 million, comprising national works \$2.6m, Commonwealth offices \$5.2m, Territory works \$24.3m, land development \$6.4m, city works \$1.7m, and others \$1.2m.

The following major works were completed during 1967 by the Commission and its agents: Anzac Park West Office Building, The Treasury Building Stages 1 and 2, Forestry Research Institute, Woden Valley High School, Telopea Park High School Extensions, Macquarie Primary School, Pearce Primary School, Torrens Primary School, Mount Stromlo Water Treatment Works, Belconnen Trunk Sewer, Hindmarsh Drive Stage 1, Woden Parkway Stage 1, Airport Road, Paddy's River Road, and Commonwealth Gardens Stage 1.

Works under construction at the beginning of 1968 included the following projects: Corin Dam, Bendora gravity main, National Library, The Treasury Building Stage 3, Russell Building No. 9, Phillip Offices, Tariff Board Extensions, Barton Hostel, Dickson Traffic Centre, Aranda High School, Dickson High School Extensions, Mawson Primary School, Aranda Primary School, Cook Primary School, Parkes Place Development Stage 1, Woden Town Centre—Services, Woden Parkway Stage 2, and Belconnen Way.

### Works and services

#### Housing

Until the period following the 1939-45 War most houses and flats in Canberra were built and rented by the Department of the Interior. More recently, an increasing number of houses and flats have been built by private enterprise, and as a result the proportion of houses and flats in Canberra occupied by tenants of the Department of the Interior has fallen from 81.7 per cent of total occupied houses and flats in 1954 to 58.3 per cent in 1961 and 39.0 per cent in 1966. Although the bulk of rented accommodation is provided by public authorities and will continue thus in the foreseeable future, there has been a considerable increase in the proportion of home ownership in Canberra, since 1954. The proportion of houses and flats owned or being purchased by instalments has risen from 17.5 per cent in 1954 to 28.3 per cent in 1961 and 46.2 per cent in 1966. In June 1966, 39.7 per cent of the total occupied dwellings in Canberra were owned by the Department of the Interior, and in June 1967, 37.7 per cent. Home building activity in the Woden Valley, south-west of the former city area, has continued to expand, and at June 1967 there were 4,682 occupied dwellings in this area. *See also* the chapter Housing and Building.

#### Municipal services

Canberra has been developed as a garden city. More than three million trees and many acres of lawns have been planted since 1927. The development of new areas of parkland and the maintenance of existing tree and lawn areas is the responsibility of the Parks and Gardens Section of the Department of the Interior. Municipal services are also provided by the Department of the Interior.

At 30 June 1967, 25,557 meters were connected to the city water supply, drawn through nine service reservoirs from two storages on the Cotter River with a total capacity of nearly 3,500 million gallons. A third storage dam site is currently being developed. In 1966-67 some 5,156 million gallons of water were consumed in Canberra, and in addition the system supplied 406 million gallons to

Queanbeyan in New South Wales. Treatment works at Weston Creek dispose of Canberra sewage. At 30 June 1967, 400 miles of sewers, 6½ miles of rising sewerage mains and 421 miles of storm water drains were laid.

### Department of Works

Apart from the work it carries out for the National Capital Development Commission, the Department of Works acts as design and supervision agent for other Commonwealth departments and instrumentalities. Total expenditure during 1966-67 on all operations amounted to \$10.6 million (\$11.2 million in 1965-66), comprising: building works—housing \$36,989, other building \$4,561,856; engineering works \$1,078,691; repairs and maintenance—building \$2,251,599, engineering \$2,331,081, purchase of plant \$324,920. A number of major works in addition to those on behalf of the National Capital Development Commission were completed during 1966-67, and others were under construction at the end of that year.

## Production

*See also* the chapters dealing with particular subjects.

### Lands

Reference has been made in earlier issues of the Year Book to the general conditions of land tenure in the Territory and to the area of alienated and leased land, and the chapter Rural Industry of this issue contains statistical information on the subject. (*See also* § 1. Canberra: Fifty Years of Development, page 123 of Year Book No. 49.)

Under the *Seat of Government (Administration) Act* 1910 Crown lands in the Territory may not be sold or disposed of for any estate in freehold except in pursuance of some contract entered into before the commencement of the Act. Leases of land in the city area are granted under the *City Area Leases Ordinance* 1936-1961, and leases of other lands under the *Leases Ordinance* 1918-1958. Land is also leased for various purposes in the city area under the *Church Lands Leases Ordinance* 1924-1932 and the *Leases (Special Purposes) Ordinance* 1925-1943, while one lease under the *Church of England Lands Ordinance* 1926 has been granted for church purposes. As considerable portions of the Territory lands are not immediately required in connection with the establishment of the city, large areas have been leased for agricultural or grazing purposes.

The Commonwealth Territory at Jervis Bay, comprising about 28 square miles, was acquired from New South Wales for possible use as a port in connection with the Australian Capital Territory. A portion of the area is occupied by the Royal Australian Naval College, H.M.A.S. *Creswell*, and a Royal Australian Navy airfield. At the southern end of the Jervis Bay Territory there are a limited number of holiday leases. Apart from some experimental planting and soil conservation activities, the area is being maintained for possible Commonwealth requirements.

### Forestry

Forestry operations in the Territory were begun on Mount Stromlo in 1915. Plantings up to 1925 were chiefly decorative, but since then a much wider programme has been undertaken. In 1926 a comprehensive review was made of the Territory's potential for forest development, and a programme for the development of commercial forests was approved. Most of the better native forest has since been placed under management, and, following survey and assessment work, forestry operations, including fire-control, have been extended to 100,000 acres of eucalypt forest in the lower Cotter Catchment Area.

Afforestation work has also been undertaken, and softwood plantations (mainly *Pinus radiata*) have been established at Uriarra, Stromlo-Green Hills, Pierce's Creek, Kowen, Tidbinbilla, Jervis Bay and Boboyan. Experimental plots have been established at Jervis Bay and in the Brindabella Ranges, and soil conservation plantings made at various locations throughout the Territory. The total area of softwood plantations within the Australian Capital Territory at 30 June 1967 was 28,740 acres, of which 26,445 acres were *Pinus radiata*, the balance consisting chiefly of *Pinus ponderosa* and *Pinus nigra*, plus 655 acres at Jervis Bay, mainly *Pinus radiata* and *Pinus elliotii*.

Continued thinning operations have improved all Australian Capital Territory forests so that they now yield a wide variety of products. Board-logs and case timber form the bulk of production, but some poles, fencing timber, and pulpwood are now being produced. The yearly output from pine plantations has increased from 2,500 cubic feet in 1930-31 to 1.5 million cubic feet in 1966-67, valued at \$400,000 delivered at purchasing mills in Canberra. Hardwood log production from Jervis Bay forests during 1966-67 was 41,500 cubic feet valued at approximately \$13,400 at the

purchasers' mill. Log production was restricted to the salvage of logs from areas being prepared for plantations. Up to 30 June 1967 a total of 21.8 million cubic feet of pine logs had been cut from plantations, while hardwood production from the Australian Capital Territory, including Jervis Bay, totalled 4.3 million cubic feet.

#### Agricultural, pastoral and secondary industries

During 1966-67 the production of the more important items of the agricultural and pastoral industry was: wheat 86,577 bushels; wool 2,454,000 lb; whole milk 1,095,000 gallons; meat (carcass weight), fresh 3,720 tons. The numbers of livestock depastured at 31 March 1967 were: horses 661; cattle 13,902; sheep 280,609.

As in the Northern Territory, the secondary industries established in the Australian Capital Territory are largely the service industries associated with the growth of the Territory.

#### AUSTRALIAN CAPITAL TERRITORY: FACTORIES, 1962-63 TO 1966-67

	1962-63	1963-64	1964-65	1965-66	1966-67
Number of factories(a) . . . . .	164	170	187	217	238
Average number of employed(b)—					
Males . . . . .	2,052	2,236	2,634	2,896	2,992
Females . . . . .	404	458	593	599	639
<i>Persons employed</i> . . . . .	2,456	2,694	3,227	3,495	3,631
Salaries and wages paid(c)—					
Males . . . . . \$'000	4,776	5,666	7,854	8,819	9,306
Females . . . . . „	598	607	848	1,047	1,177
<i>Total salaries and wages paid</i> . . „	5,374	6,273	8,702	9,866	10,483
Value of power, fuel, etc., used(d) . . „	326	502	644	760	735
Value of materials used(e) . . . „	6,922	8,428	11,440	13,349	14,918
Value of production(f) . . . . „	8,367	11,097	14,060	17,418	18,860
Value of output(g) . . . . . „	15,615	20,026	26,145	31,528	34,514
Value of land and buildings(h) . . „	4,556	11,669	20,583	21,891	22,779
Value of plant and machinery(h) . . „	4,693	5,103	9,682	10,134	10,368

(a) Any factory, workshop or mill in which four or more persons are employed or power other than hand is used.  
 (b) Average over whole year; includes working proprietors. (c) Excludes amounts drawn by working proprietors.  
 (d) Includes water and lubricating oil. (e) Includes also containers, etc., tools replaced and repairs to plant.  
 (f) Value added in process of manufacture (i.e. value of output less value of materials and fuel used). (g) Value of goods produced including amounts received for repair work and other work done. (h) Depreciated or book values at end of year including estimated value of rented premises and machinery.

#### Transport and communication

Canberra is connected with the railway system of New South Wales at Queanbeyan by a line 4½ miles long. This line was opened for goods traffic on 25 May 1914 and for passenger traffic on 15 October 1923. Direct or linking services operate between Canberra and Sydney and Canberra and Melbourne. Two airlines provide several services daily each way on the Sydney-Canberra-Melbourne route. Regular motor-coach services link Canberra with towns in New South Wales, Victoria and South Australia. The total length of roads in the Territory at 30 June 1967 was: bitumen and concrete, 491 miles; gravel, 225 miles; other formed roads, 91 miles; total, 807 miles. There are three radio broadcasting stations in the Territory, 2CY and 2CN of the national broadcasting system and 2CA, a commercial station, and two television stations, ABC Channel 3 of the national broadcasting system and CTC Channel 7, a commercial station.

## Social

*See also* the chapter Education, Cultural Activities and Research.

### Education

The *Education Ordinance 1937-1966* provides for the compulsory attendance at school of children between the ages of six and fifteen years. The Commonwealth Department of Education and Science is primarily responsible for the education of children in the Australian Capital Territory. By agreement, however, the New South Wales Department of Education arranges the teaching programme in accordance with its own curriculum and provides the teaching staff. It is reimbursed for expenses incurred.

At 31 December 1967 there were eight public secondary schools in Canberra providing courses proceeding to the Higher School Certificate. Twenty-five schools provided courses for children in infants and primary classes, including one in the Jervis Bay area and three in rural districts. There were also: a school for mentally handicapped children; a school for physically handicapped children, located at Canberra Community Hospital; a school for deaf children, located at the Ainslie Public School; a therapy clinic for children with speech defects; and a clinic for educational guidance. A further three primary schools and one secondary school were scheduled to commence at the beginning of the 1968 school year.

At 31 December 1967 there were seventeen private schools in Canberra. Of these, St Edmund's Christian Brothers' College, the Catholic Girls' High Schools at Braddon and Griffith, the Daramalan College, the Canberra Grammar School (Boys), and the Canberra Church of England Girls' Grammar School provide courses leading to the Higher School Certificate. Three new schools were scheduled to commence at the beginning of the 1968 school year, one school—Marist College, Pearce—to provide courses leading to the Higher School Certificate, and two primary schools.

Thirty-six pre-school centres, including two in the Jervis Bay area and a mobile unit which visits outlying areas, provide pre-school facilities for approximately 2,500 children between the ages of three and five years.

The Canberra Technical College, which follows generally the curriculum set by the New South Wales Department of Technical Education, provides trade, post-trade, certificate, and some hobby courses. In 1967 the Technical College provided instruction in one hundred and three courses in twenty schools. Student enrolments were 5,819.

An area of about 250 acres has been set aside at Acton for the Australian National University. Provision has been made for the University to establish such research schools as may be thought desirable, including a School of Medical Research and Research Schools of Physical Sciences, Social Sciences and Pacific Studies. Provision for undergraduate studies and some post-graduate study is made by the School of General Studies.

### Health

The Canberra Community Hospital serves the population of Canberra and surrounding districts. At 30 June 1967 it had 499 beds, an honorary medical staff of 122, 15 salaried medical staff, and a nursing staff of 530. For further information *see* the chapter Public Health in this Year Book and in Year Book No. 53.

### Justice

The Australian Capital Territory has a Supreme Court and a Court of Petty Sessions. There is an Australian Capital Territory Police Force, which at the end of 1967 numbered 236, including 4 policewomen. Of the total, 122 were engaged on general duties, the traffic branch comprised 51, including the specialist water police and accident investigation squads, 37 were engaged in criminal investigation, 23 on prosecuting, 2 in caring for the Police Boys Club, and 1 in the Jervis Bay area. *See also* the chapter Public Justice.

## Finance

In the following table the receipts and expenditure of the Australian Capital Territory have been classified in a National Accounts form. The table covers transactions relating to the Australian Capital Territory in the Commonwealth Consolidated Revenue Fund and the following trust funds: Australian Capital Territory Electricity Supply (1962-63), Australian Capital Territory Forestry, Australian Capital Territory Housing, and Australian Capital Territory Transport. In addition, details of the financial transactions of the following semi-governmental authorities are also covered: Australian Capital Territory Electricity Authority (from 1963-64), Commonwealth Brickworks, National Capital Development Commission, and Canberra Theatre Trust. Revenue derived by the Commonwealth from income taxes, sales tax, etc., levied in the Australian Capital Territory and

expenditure by the Commonwealth in the Australian Capital Territory on such items as defence, civil aviation, railways, etc., and payments to residents from the National Welfare Fund are not included.

**AUSTRALIAN CAPITAL TERRITORY: RECEIPTS AND EXPENDITURE**  
1962-63 TO 1966-67

(\$'000)

	1962-63	1963-64	1964-65	1965-66	1966-67
<b>RECEIPTS</b>					
<b>Taxation—</b>					
Motor registration . . . . .	408	474	540	604	669
Liquor tax . . . . .	111	129	146	170	197
Other . . . . .	239	295	698	199	831
Interest, rent, etc. . . . .	716	868	1,256	1,631	1,963
Public enterprises income . . . . .	3,514	4,718	5,714	6,143	6,776
Net sale of semi-governmental securities . . . . .	934	768	608	225	533
<b>Other receipts—</b>					
Net charge to Commonwealth budget . . . . .	33,946	37,342	40,008	46,466	57,696
Other(a) . . . . .	-82	-660	-514	199	1,952
<b>Total receipts . . . . .</b>	<b>39,786</b>	<b>43,934</b>	<b>48,456</b>	<b>55,636</b>	<b>70,616</b>
<b>EXPENDITURE</b>					
<b>Net current expenditure on goods and services—</b>					
Law, order and public safety . . . . .	366	422	528	700	926
Education . . . . .	2,582	2,972	3,950	4,451	5,254
Public health and welfare . . . . .	1,600	1,746	2,310	2,992	3,977
Other . . . . .	3,366	4,566	5,934	6,939	7,689
<b>Capital expenditure on new assets and stocks—</b>					
Education . . . . .	3,350	3,712	3,956	4,119	4,652
Cultural and recreational facilities . . . . .	4,112	2,588	2,984	2,690	3,574
Public health and welfare . . . . .	1,608	2,148	2,584	1,950	1,090
Water supply and sewerage . . . . .	1,582	920	2,822	3,395	11,625
Roads and bridges . . . . .	5,932	5,388	6,450	10,156	9,946
Power, fuel and light . . . . .	1,084	1,256	1,346	1,675	3,188
Housing . . . . .	7,484	6,602	7,724	8,814	6,637
Other . . . . .	6,266	12,564	10,572	9,890	8,839
Net purchase of existing assets(b) . . . . .	-7,902	-11,714	-17,340	-12,326	-7,462
Cash benefits . . . . .	32	38	50	134	139
Interest paid . . . . .	140	212	186	257	260
Net advances for housing . . . . .	8,184	10,514	14,400	9,799	10,281
<b>Total expenditure . . . . .</b>	<b>39,786</b>	<b>43,934</b>	<b>48,456</b>	<b>55,636</b>	<b>70,616</b>

(a) Includes movements in cash, investments, etc. (b) Minus sign (—) denotes excess of receipts (from sales) over expenditures on, or purchases of, existing assets, including housing.

## NORFOLK ISLAND

### General description

Norfolk Island, discovered by Captain Cook in 1774, is situated in latitude 29°S., longitude 168° E. approximately. Its total area is approximately 14 square miles, the island being about 5 miles long and 3 miles wide. It is 1,035 miles from Sydney and 660 miles from Auckland. The length of the coast line is 20 miles, and its form that of an irregular ellipse. Except for a portion on the south side and the landing place at Cascade on the northern side, almost inaccessible cliffs rise from the water's edge. The climate is equable, the temperature ranging between 45° and 81°F. with a mean of 68°F. The average annual rainfall is 56 inches.

After serving as a penal station from 1788 to 1813 and from 1825 to 1855, Norfolk Island in 1856 became the home of the remaining descendants of the *Bounty* mutineers. The estimated population at 30 June 1967 was 1,509.

### Administration

In 1856 the island was created a distinct and separate settlement under the jurisdiction of New South Wales. In 1896 it was made a dependency under the Governor of that Colony, and finally, by the passage of the *Norfolk Island Act* 1913, it was accepted by the Commonwealth Parliament as a territory of Australia. It is controlled by the Minister for Territories through an Administrator. The Norfolk Island Council is established pursuant to the *Norfolk Island Act* 1957–1966 and is constituted in accordance with the provisions of the *Norfolk Island Council Ordinance* 1960–1964. The Council may consider and tender advice to the Administrator on any matter affecting the peace, order and good government of Norfolk Island, and must be consulted on certain legislative and financial matters. The Council comprises the Administrator as *ex officio* chairman and voting member and eight members elected biennially.

### Economic activity

The major economic activities of the island are the tourist trade, primary production, and Government instrumentalities.

*Primary industries.* The soil on the island is particularly fertile, the climate equable and the rainfall fairly evenly distributed except for a pronounced dry period in November. This enables a wide range of temperate and semi-tropical products to be cultivated. However, the island's comparative isolation presents trading difficulties, and production of bean seed, formerly the major export, has declined rapidly since 1962–63.

Fish abound off the island. In the past a number of ventures have been formed to exploit this resource, but they have been short-lived, mainly because of the lack of a sheltered harbour. A modern whaling station was started on the island in 1955, and production commenced during the second half of 1956. Owing to a marked scarcity of whales after 1961, however, the station was closed down.

An active forestry programme is being carried out to increase the resources of Norfolk Island pine and to introduce suitable types of eucalypts.

*Tourists.* Regular sea and air services to the island are available for those who seek a quiet holiday in surroundings of beauty and historic interest. There are at present, apart from flats, ten hotels and guest houses (seven of which are licensed), and further accommodation is being built to meet the steadily increasing number of visitors.

*Government instrumentalities.* A large proportion of the population is employed by Commonwealth Government instrumentalities, namely: Department of Civil Aviation, Norfolk Island Administration, and Department of the Interior (Meteorological Branch). The bulk of the finance for the operation of these instrumentalities is supplied by the Commonwealth Government.

### Trade, transport and communication

Imports to Norfolk Island since the 1939–45 War have risen from \$65,000 in 1945–46 to \$2,822,000 in 1966–67. In 1966–67 the major proportion (\$1,804,000 or 64 per cent) came from Australia, while New Zealand and the Pacific Islands supplied \$324,800 or 11.5 per cent. Exports rose from \$18,500 in 1945–46 to \$420,000 in 1960–61, but had declined to \$267,000 by 1966–67, after whaling had ceased in 1962–63. Exports to Australia, the principal market, amounted to \$168,000, while exports to New Zealand and to Pacific Islands amounted to \$95,000. No duties are chargeable on goods imported into Australia from Norfolk Island if the goods are the produce or manufacture of Norfolk Island, shipped direct to Australia, and not goods which if manufactured or produced in Australia would be subject to excise duty.

A shipping service to the island is maintained at approximately six-week intervals from Sydney via Norfolk Island to the New Hebrides and Solomon Islands, and thence back to Brisbane and Sydney. A service linking Sydney and Noumea includes a call at Norfolk Island on the outward voyage about every three weeks. Shipping between the island and New Zealand is infrequent.

A twice-weekly passenger and air freight service between Sydney and Norfolk Island, maintained by Qantas Empire Airways Ltd, extends to New Zealand under charter to Air New Zealand Ltd.

There are approximately fifty miles of motor road on the island. As a substantial section of the population possesses private motor cars, and taxi-cab and bus services are available, transport is almost exclusively by motor vehicle.

A limited telephone service is operated during business hours with 24-hour connections to emergency services. The Overseas Telecommunications Commission provides a radio telegram service to Sydney.

**Education**

Education is free and compulsory up to the age of fifteen years. The school, which is conducted by the New South Wales Department of Education, conforms to the Australian standard of public education, ranging from kindergarten to the School Certificate examination. The teachers are provided by the New South Wales Education Department, but they are paid by the Norfolk Island Administration. The number of scholars enrolled at 30 June 1967 was 255.

**Judiciary**

The judicial system of Norfolk Island consists of a Supreme Court and a Court of Petty Sessions. The Supreme Court is the highest judicial authority in the Territory and is a superior court of record with original criminal and civil jurisdiction. The jurisdiction of this Court is exercised by one judge sitting in Court or, to the extent and in the cases provided by or under ordinance, sitting in Chambers. The jurisdiction of the Court of Petty Sessions is exercised by a Chief Magistrate or any three magistrates other than the Chief Magistrate.

**Finance**

The revenue of the Territory, together with an annual grant from the Commonwealth Government for administrative expenses, is paid to the credit of the Norfolk Island Trust Fund, and advances for administrative and developmental expenses are drawn from the account. The principal items of revenue and expenditure for the five years 1962-63 to 1966-67 were as follows.

**NORFOLK ISLAND: REVENUE AND EXPENDITURE, 1962-63 TO 1966-67**  
(£'000)

	1962-63	1963-64	1964-65	1965-66	1966-67
<b>REVENUE</b>					
Commonwealth subsidy . . . . .	64	67	67	66	66
Customs duties . . . . .	36	45	55	85	90
Sale of liquor . . . . .	26	30	34	41	53
Post office . . . . .	48	55	55	174	138
All other . . . . .	23	33	33	41	50
<b>Total revenue . . . . .</b>	<b>197</b>	<b>232</b>	<b>245</b>	<b>406</b>	<b>397</b>
<b>EXPENDITURE</b>					
Administrative . . . . .	42	46	55	72	73
Miscellaneous services . . . . .	28	20	21	22	27
Social expenditure . . . . .	44	50	68	70	97
Repairs and maintenance . . . . .	16	17	20	27	66
Capital works and services . . . . .	46	48	55	57	126
Postal services . . . . .	15	26	16	33	32
Other business undertakings . . . . .	6	12	6	9	7
<b>Total expenditure . . . . .</b>	<b>199</b>	<b>219</b>	<b>241</b>	<b>289</b>	<b>428</b>

**PAPUA AND NEW GUINEA**

The information under this heading is applicable to both the Territory of Papua and the Trust Territory of New Guinea. For details of the respective Territories *see* pages 1206 (Papua) and 1212 (New Guinea) and following pages. The sections on pages 1190-6 have been prepared by the Director of the Commonwealth Bureau of Meteorology.

**General description****Geographical position**

The Territory of Papua and New Guinea includes the Territory of Papua and the Trust Territory of New Guinea. The total area of approximately 180,000 square miles lies in the equatorial zone between latitudes 2° S. and 12° S. and longitudes 141° E. and 156° E. The Territory of Papua comprises south-east New Guinea and also the islands of the Trobriand, Woodlark, D'Entrecasteaux, and

Louisiade groups. The Trust Territory of New Guinea extends from 2° S. to 8° S. and includes north-east New Guinea (also called 'the mainland'), Bismarck Archipelago (New Britain, New Ireland, Lavongai, Admiralty Islands), and Solomon Islands (Bougainville, Buka).

### **Geographical features**

There is a high backbone mountain chain extending generally along the centre of the main island with coastal plains which widen in some areas, particularly in the Fly River Basin. The mountains, which are rugged, rise to 15,000 feet above sea level in some areas; the larger islands mostly have mountain backbones, some rising to about 10,000 feet. In many parts the highlands extend to the coast.

## **Weather and climate**

The climate, particularly the rainfall, over so wide an area as Papua and New Guinea, with its numerous islands and varying elevations, presents many variations. Generally speaking, the climate is hot and humid, except in the highlands where days are mild to warm and nights are cool. Mean temperatures vary little throughout the year, and there are no winter and summer seasons comparable to those of higher latitude.

The predominant seasonal feature of the Territory is the regular alternation between two major air-streams, the south-east trade winds and north-west monsoon. The 'southeast' season prevails approximately from May to October, and the 'northwest' season persists for a shorter period from about December to early April. Two short spells of calm weather occur between these two seasons.

### **Rainfall**

There are great spatial variations in the amount of rainfall received over the Territory of Papua and New Guinea. The variations depend mainly upon the direction and speed of the air streams. These streams are moist, requiring only a small amount of lifting for condensation of water vapour to occur. Topography therefore has a dominating influence on the rainfall distribution.

### **Average annual rainfall**

The table on page 1193 shows the average annual and monthly rainfalls for selected stations in the Territory. It may be seen that the spatial distribution of average annual rainfall varies greatly, being dependent mainly on topography in relation to prevailing winds. The annual averages vary from 39 inches at Port Moresby to 227 inches at Kikori at the head of the Gulf of Papua. There are few rainfall observing stations above 6,000 feet, so that rainfall above that height must generally be estimated. The map facing page 1216 shows the rainfall distribution over the region for the year 1967.

### **Seasonal distribution of rainfall**

Places in Papua such as Port Moresby, where the south-east trade wind does not blow directly onshore, have a dry season during May–October. Places such as Kikori have heavier rainfall during May–October because of the onshore south-east winds. In the Territory of New Guinea, where conditions are more equatorial, rainfall occurs throughout the year, but is heaviest in the November–April period at most places.

### **Variability of rainfall**

There are marked variations from year to year in annual rainfall totals throughout the Territory. At Port Moresby, for example, in forty-two years of record the annual rainfall has varied from 72 inches to 23 inches; at Daru in fifty-two years of record the annual rainfall has varied from 156 inches to 46 inches; and at Madang in thirty-eight years of record the variation has been from 180 inches to 92 inches. The table on page 1194 shows the annual rainfall at Port Moresby and Lae for the years 1946 to 1966 inclusive.

### **Heavy rainfalls**

Highest twenty-four hour rainfall registrations have included 21.60 inches at Pondo Plantation in New Britain and 17.60 inches at Cape Nelson on the east coast of the main island. Twenty-four hour falls greater than 15 inches have been recorded at a number of other stations in the Papua and New Guinea region. The highest twenty-four hour fall recorded in Australia was 36 inches at Crohamhurst, Queensland. All these registrations were for the restricted twenty-four hour period from 9 a.m. to 9 a.m. Higher falls, possibly approaching 30 inches, have probably occurred in the Territory in unrestricted periods of twenty-four consecutive hours.



### Temperature

Although the Territory has no summer and winter seasons, it has a wide range in temperature because of elevation differences. For each month the mean daily maximum temperature decreases by about 2° F. and the mean daily minimum temperature by about 4° F. for each 1,000 feet increase in elevation up to 5,000 feet.

A table on page 1194 shows temperature and humidity data for five lowland and two highland stations. Mount Hagen, elevation 5,500 feet, is the highest station for which temperature data are available. However, both day and night temperatures continue to decrease with elevation above this level.

### Average seasonal temperature distribution

In the lowland areas there is a difference in temperature pattern between the areas south of the highlands and those to the north. In the south there is a tendency for temperatures to be lower in the May–October period than in the November–April period (e.g. Samarai). In the north there is little difference throughout the year (e.g. Madang). In the highlands, temperatures are appreciably lower than in the lowlands and are slightly lower in the middle of the year than they are at the beginning of the year (e.g. Goroka). The nights are cold in the highlands throughout the year; the mean daily minimum at Mount Hagen for July is 53.6° F.

### Extreme temperatures

The highest air temperature recorded at Lae (in seventeen years of record) was 101.7° F. and the lowest was 66.3° F.; at Port Moresby (in twenty-two years of record) the highest was 97.3° F. and the lowest was 57.3° F.; at Mount Hagen (in thirteen years of record) the highest was 88.0° F. and the lowest 35.0° F. The mean daily range of temperature is about 15° F. at lowland stations and 20° F. at highland stations up to 5,000 feet elevation.

### Humidity

Humidity is high generally throughout the year. In the lowlands persistently high humidity in association with high temperatures is responsible for the human discomfort experienced. The average index of mean relative humidity for January and July is shown for selected stations in a table on page 1194. This index has been derived from the ratio of the average 9 a.m. vapour pressure to the saturation vapour pressure at the mean temperature. Being thus related to the mean temperature, this value of relative humidity is a good approximation to the daily mean.

In the lowland areas the average index of mean relative humidity (*see* table on page 1194) is in the range 75–85 per cent throughout the year. There is little variation in the index from month to month at any station. This is in contrast with northern Australian localities where the south-east winds of the dry season result in low relative humidities. For example, Darwin's average index of mean relative humidity ranges from 81 per cent in February to 62 per cent in July.

In the highland areas up to 6,000 feet elevation the average index of mean relative humidity is within the range 70–80 per cent throughout the year. The lower temperatures experienced on the highlands relative to the lowlands result in conditions being generally more comfortable in the highlands.

### Evaporation

The only evaporation data available are records for Port Moresby. These show that the mean monthly tank evaporation varies from 5.6 inches per month in the early part of the year to 6.7 inches per month in the latter part of the year. The average annual tank evaporation at Port Moresby over an eleven-year period was 73.59 inches. It is probable that evaporation is less than this value in the higher humidity areas.

### Sunshine and cloud

Mean daily sunshine hours are recorded for each month at Port Moresby, and the figures show a variation from 6.2 hours per day in February and March to 8.4 hours per day in November. The mean daily amount of sunshine at Port Moresby for the year is 7.0 hours, which is significantly less than Darwin (8.4 hours) but comparable with Brisbane (7.5 hours).

At Port Moresby the mean cloud amount varies from 5.1 eighths per day in May and June to 6.9 eighths in February; at Lae the variation is from 6.1 eighths in May and June to 7.0 eighths in March. The mean daily cloud amounts for the year at Port Moresby and Lae are 5.8 and 6.5 eighths respectively, which are high in comparison with Darwin (3.1).

### Winds

As mentioned previously the south-east trade winds prevail from May to October and the north-west monsoonal winds prevail from December to March over most of the region. However, the broad-scale wind pattern may be completely masked by the effects of local topography and land and sea breezes. The mean 9 a.m. and 3 p.m. wind speeds and prevailing directions are shown in the tables on pages 1195-6 for Port Moresby and Lae.

At Port Moresby the mean winds are stronger during the period May-November than during December-April; for example, the 3 p.m. mean wind for August is 15.4 m.p.h. and for March is 7.6 m.p.h. The winds at 3 p.m. are much stronger than at 9 a.m.; for example, for the year the 3 p.m. mean wind is 11.5 m.p.h. and the 9 a.m. mean wind is 4.1 m.p.h. The prevailing direction of the wind is south-east during May-November and north-north-west to south-west during December-April.

At Lae the winds are mainly lighter than at Port Moresby. In the period May-October the winds at Lae are lighter than in the period November-April. The winds at 3 p.m. are greater than at 9 a.m. except in February. The prevailing direction is north-west at 9 a.m. and south-east at 3 p.m. throughout the year.

### Storms and cyclones

The Papua and New Guinea region is subject to thunderstorm activity, squall lines, and local storms throughout the year. Severe thunderstorms are frequent in the mountainous areas, but also occur in coastal lowlands. The main tropical cyclone belt lies to the south of the region, but occasionally a tropical cyclone affects the region, causing loss of life and property.

### Climatological tables

The averages and extremes for a number of elements recorded at Port Moresby and Lae are given in the tables on pages 1195-6. These tables generally follow the format given for Australian capital cities included in Chapter 2 of this Year Book, the observational data being for available years of record to 1966 inclusive. Some elements included in the Australian capital city tables have been omitted from the tables for Port Moresby and Lae because of the inadequacy of observational records.

**TERRITORY OF PAPUA AND NEW GUINEA: AVERAGE MONTHLY AND ANNUAL RAINFALL  
FOR SELECTED STATIONS(a)**  
(Inches)

Station (lat., long.)	Years of record	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Bwagaoia(b) (10° 41' 152° 51')	30	9.82	12.56	10.34	11.14	11.89	9.05	7.35	8.70	9.14	10.10	10.39	8.95	119.43
Daru(b) (9° 04' 143° 12')	52	10.93	10.05	12.74	13.00	8.84	3.91	3.70	2.08	1.64	2.28	4.54	7.93	81.64
Dogura(b) (10° 00' 149° 55')	38	8.69	8.30	8.63	6.03	3.73	3.79	3.10	2.60	3.09	2.75	3.59	4.49	58.79
Gobaragere(b) (9° 50' 47° 45')	33	7.43	6.98	7.85	8.56	4.30	3.49	1.66	2.17	2.37	3.07	5.12	6.88	59.88
Gusoeta(b) (8° 32' 151° 04')	33	15.58	16.45	15.69	14.23	13.04	12.67	12.51	12.33	11.51	9.69	11.37	10.88	155.95
Itikimuma(b) (9° 25' 147° 29')	30	12.92	11.07	14.21	15.30	10.15	7.08	4.88	7.18	7.93	11.27	13.00	13.18	128.17
Kairuku(b) (8° 51' 146° 32')	33	9.20	10.35	8.64	5.33	1.69	1.92	1.15	0.67	1.65	1.66	2.44	5.88	50.58
Kerema(b) (7° 57' 145° 46')	39	9.47	8.34	10.47	11.49	16.71	16.35	13.71	14.26	13.61	11.52	8.46	7.75	142.14
Kikori(b) (7° 25' 144° 15')	39	12.05	12.95	14.10	17.40	29.35	28.14	25.48	22.16	23.74	17.07	13.19	11.50	227.13
Kokoda(b) (8° 58' 147° 43')	31	12.30	14.09	14.30	14.14	9.93	7.06	7.55	9.58	10.17	12.20	16.70	14.16	142.18
Kokopo(c) (4° 20' 152° 15')	30	8.30	7.05	9.05	6.85	4.73	5.13	6.44	6.25	3.94	4.50	6.50	9.18	77.92
Kwikila(b) (5° 44' 147° 44')	35	6.49	5.14	6.46	6.56	3.45	2.28	1.76	1.79	2.24	1.75	2.64	4.19	44.75
Lindenhafen(c) (6° 15' 150° 30')	30	6.66	5.82	6.39	11.23	22.71	31.60	41.00	43.56	31.82	19.32	11.85	7.42	239.38
Madang(c) (5° 13' 145° 47')	38	12.98	12.07	14.96	17.11	14.71	9.70	7.41	5.04	5.91	10.16	14.77	14.59	139.41
Port Moresby(b) (9° 28' 147° 09')	42	6.92	7.56	6.73	4.08	2.56	1.23	1.07	0.63	1.01	1.35	1.87	4.17	39.18
Samarai(b) (10° 37' 150° 40')	39	6.58	7.06	9.77	10.47	11.80	12.44	8.48	8.19	11.06	8.50	7.89	5.40	107.64

(a) With thirty or more years of record to 1964.

(b) Papua.

(c) New Guinea.

## RAINFALL: PORT MORESBY AND LAE, 1946 TO 1966

Year	Port Moresby (Papua)		Lae (New Guinea)	
	Amount	No. of days	Amount	No. of days
	in		in	
1946	61.79	137	(a)168.64	(a)248
1947	40.61	154	180.37	261
1948	45.82	138	179.26	267
1949	43.20	164	174.78	275
1950	47.67	137	158.51	251
1951	45.51	108	191.59	250
1952	54.88	150	165.58	274
1953	36.20	126	197.76	264
1954	46.49	118	173.70	277
1955	39.33	128	155.26	261
1956	56.60	141	122.39	233
1957	51.89	129	238.66	282
1958	46.02	107	190.02	250
1959	41.65	126	185.78	245
1960	34.17	116	167.50	260
1961	42.75	136	193.09	267
1962	43.98	133	182.84	261
1963	58.76	138	165.18	254
1964	55.02	151	163.10	244
1965	40.73	103	175.93	265
1966	41.25	116	206.19	291

(a) Incomplete for July and August.

TERRITORY OF PAPUA AND NEW GUINEA: TEMPERATURE AND RELATIVE HUMIDITY  
FOR SELECTED STATIONS

Station	Lat.	Long.	Altitude (ft)	Years of record	Temperature ° Fahr.				Relative humidity			
					Mean max. Jan.	Mean max. July	Mean min. Jan.	Mean min. July	Av. index of mean Jan. (a)	Av. index of mean July (a)	Mean 3 p.m. Jan.	Mean 3 p.m. July
Daru(b)	9° 04'	143° 12'	26	1940-1966	89.0	82.6	75.2	73.0	84	83	..	..
Goroka(c)	6° 04'	145° 24'	5,200	1952-1966	78.5	76.7	59.0	56.2	75	72	56	52
Kikori(b)	7° 25'	144° 15'	30	1917-1965	90.5	81.4	73.5	71.9	83	91	..	..
Madang(c)	5° 13'	145° 47'	14	1951-1966	86.4	85.2	73.7	72.9	85	87	76	75
Mount Hagen(c)	5° 51'	144° 09'	5,500	1953-1965	76.2	73.8	55.9	53.6	79	80	(d)65	(d)69
Samarai(b)	10° 37'	150° 40'	50	1956-1966	88.3	80.6	76.5	73.3	81	85	74	81
Wewak(c)	3° 35'	143° 40'	15	1956-1966	86.8	86.4	73.4	72.7	83	85	75	74

(a) See text, page 1192, for explanation of this index.

(b) Papua.

(c) New Guinea.

(d) 1955-65.

## CLIMATOLOGICAL DATA: PORT MORESBY (PAPUA)

(Jackson's Strip, Lat. 9° 26' S., Long. 147° 13' E., Height above M.S.L. 92 ft)

## BAROMETER, WIND, EVAPORATION AND CLOUD

Month	Bar. corrected to 32° F. mn sea level and standard gravity from 9 a.m. and 3 p.m. readings (m.bars)	Wind		Highest gust speed (mph)	Prevailing direction		Mean amount evapora- tion (in)	Mean amount of clouds, 9 a.m., 3 p.m., 9 p.m.(a)
		Average miles per hour			9 a.m.	3 p.m.		
No. of years of observations	21	5	5	15	5	5	11	17
January	1,007.1	3.4	8.3	55	NNW	SW	6.17	6.7
February	1,007.0	3.9	9.3	52	N	SW	5.14	6.9
March	1,007.4	2.6	7.6	49	N	W	5.47	6.7
April	1,008.0	1.7	7.7	40	NNW	SSE	4.92	6.2
May	1,008.5	3.3	10.8	43	SE	SSE	5.43	5.1
June	1,009.7	5.7	13.0	46	SE	SSE	5.46	5.1
July	1,009.9	6.7	14.5	46	SE	SE	5.85	5.3
August	1,009.9	5.8	15.4	47	SE	SSE	6.43	5.5
September	1,009.9	5.3	14.5	46	SE	SSE	6.67	5.5
October	1,009.1	5.3	15.0	46	SSE	SSE	7.52	5.3
November	1,008.0	2.8	12.2	38	SE	SSE	7.53	5.5
December	1,007.0	2.3	9.6	54	NNW	SW	7.00	6.1
Year { Totals							73.59	
Year { Averages	1,008.5	4.1	11.5	..	SE	SSE	..	5.8
Year { Extremes	..	..	..	55	..	..	..	..

(a) Scale 0-8.

## TEMPERATURE AND SUNSHINE

Month	Mean temperature (° Fahr.)			Extreme shade temperature (° Fahr.)		Extreme temperature (° Fahr.)	Mean daily hours of sunshine
	Mean max.	Mean min.	Mean	Highest	Lowest	Lowest on grass	
No. of years of observations	22	22	22	22	22	11	11
January	89.9	73.3	81.6	97.2 11/64	68.8 27/49	65.3 21/66	6.5
February	89.0	73.2	81.1	97.0 12/47	65.8 17/57	65.4 17/57	6.2
March	89.0	72.9	80.9	95.8 26/46	65.0 23/61	58.0 31/66	6.2
April	88.0	72.7	80.4	93.6 5/46	62.3 11/46	56.6 1/66	6.9
May	87.9	72.6	80.3	92.9 2/64	58.1 28/53	59.0 18/66	7.5
June	86.5	71.4	78.9	93.0 25/58	58.0 23/54	54.0 29/65	6.9
July	86.0	70.7	78.3	92.0 11/64	57.3 8/46	50.8 30/65	6.7
August	86.4	71.3	78.9	92.8 12/58	58.6 14/61	54.0 14/61	6.8
September	87.4	72.2	79.8	94.6 17/65	58.0 10/61	53.0 10/61	6.9
October	89.5	72.9	81.2	95.9 4/65	61.3 11/55	52.2 5/65	7.5
November	90.4	72.8	81.6	97.3 11/65	63.2 7/63	55.0 4/63	8.4
December	90.3	73.4	81.9	96.0 (a)	67.2 1/63	63.0 6/66	7.2
Year { Averages	88.4	72.5	80.4	..	..	..	7.0
Year { Extremes	..	..	..	97.3	57.3	50.8	..
				11/11/65	8/7/46	30/7/65	

(a) 4/1945 and 26/1959.

## HUMIDITY, RAINFALL AND FOG

Month	Vapour pressure mean 9 a.m. (m.bars)	Mean relative humid- ity % at 9 a.m.	Rainfall (inches)		Least monthly	Greatest in one day	Fog mean no. days
			Mean No. of days of rain	Greatest monthly			
No. of years of observations	21	21	22	22	22	22	21
January	28.0	77	5.96	16 12.69 1963	1.02 1950	2.70 12/46	3.4
February	28.5	81	8.17	18 17.08 1957	2.37 1947	5.54 14/49	3.9
March	28.3	80	7.17	18 17.42 1951	1.11 1950	4.42 16/51	7.3
April	28.8	82	7.12	15 28.65 1946	0.36 1966	12.89 12/46	7.7
May	28.2	79	2.10	8 7.35 1952	0.08 1958	3.02 18/60	7.0
June	26.5	78	1.72	7 12.33 1963	0.00 1957	8.06 5/63	3.7
July	25.2	77	0.75	6 2.75 1949	0.01 1958	1.33 1/52	2.5
August	24.9	74	1.20	7 5.43 1953	0.02 1959	1.94 22/53	2.1
September	25.5	73	1.53	7 13.53 1958	0.00 (a)	5.90 5/58	2.1
October	26.3	69	1.50	7 7.12 1948	0.06 1951	2.13 31/64	2.5
November	26.6	68	2.91	8 9.22 1952	0.00 1965	3.56 29/54	2.6
December	27.7	73	6.26	14 10.57 1954	1.02 1948	4.83 29/65	3.0
Year { Totals			46.39	131	..	..	47.8
Year { Averages	27.0	76	..	..	..	..	..
Year { Extremes	..	..	..	28.65	0.00 (b)	12.89	..
				4/1946		12/4/46	

(a) 1948 and 1950.

(b) June 1957, September 1948 and 1950, and November 1965.

## CLIMATOLOGICAL DATA: LAE (NEW GUINEA)

(Meteorological Office: Lat. 6° 44' S., Long. 147° 00' E., Height above M.S.L. 25 ft)

## BAROMETER, WIND AND CLOUD

Month	Bar. corrected to 32° F. mn sea level and standard gravity from 9 a.m. and 3 p.m. readings (m.bars)	Wind		Highest gust speed (mph)	Prevailing direction		Mean amount of clouds, 9 a.m., 3 p.m., 9 p.m.(a)
		Average miles per hour			9 a.m.	3 p.m.	
		9 a.m.	3 p.m.				
No. of years of observations	21	5	5	11	5	5	18
January . . . . .	1,006.9	7.7	8.3	51	NW	SE	6.8
February . . . . .	1,006.7	8.1	7.6	43	NW	SE	6.8
March . . . . .	1,007.2	6.8	7.3	40	NW	SE	7.0
April . . . . .	1,008.3	4.6	7.2	40	NW	SE	6.5
May . . . . .	1,009.5	2.8	6.5	36	NW	SE	6.1
June . . . . .	1,010.5	2.7	6.2	41	NW	SE	6.1
July . . . . .	1,011.0	2.0	6.6	36	NW	SE	6.5
August . . . . .	1,011.0	2.2	6.8	40	N	SE	6.5
September . . . . .	1,010.9	2.3	7.9	38	NW	SE	6.3
October . . . . .	1,010.0	2.9	7.9	40	NW	SE	6.0
November . . . . .	1,008.4	4.6	8.7	45	NW	SE	6.3
December . . . . .	1,007.3	6.0	8.4	41	NW	SE	6.7
Year { Totals . . . . .		..	..	..	..	..	..
Averages . . . . .	1,009.0	4.4	7.5	..	NW	SE	6.5
Extremes . . . . .		..	..	51	..	..	..

(a) Scale 0-8.

## TEMPERATURE

Month	Mean temperature (°Fahr.)			Extreme shade temperature (°Fahr.)	
	Mean max.	Mean m'n.	Mean	Highest	Lowest
No. of years of observations	18	18	18	18	18
January . . . . .	88.0	74.7	81.3	100.8 20/59	69.2 7/60
February . . . . .	88.2	74.7	81.5	99.1 14/57	70.0 24/62
March . . . . .	87.4	74.6	81.0	101.7 6/56	71.1 16/56
April . . . . .	86.1	73.9	80.0	93.0 4/56	70.4 22/66
May . . . . .	85.1	73.2	79.1	91.8 24/52	67.0 30/53
June . . . . .	83.4	72.2	77.8	92.2 8/58	67.0 20/53
July . . . . .	81.9	71.5	76.7	89.9 16/64	66.7 31/65
August . . . . .	82.1	71.6	76.9	90.4 28/64	67.0 27/55
September . . . . .	83.6	71.9	77.7	90.0 12. 13/50	66.3 13/61
October . . . . .	85.4	72.6	79.0	95.3 31/49	66.4 4/65
November . . . . .	86.7	73.4	80.1	94.0 30/61	69.6 13/65
December . . . . .	87.2	74.2	80.7	96.1 24/59	68.5 19/64
Year { Averages . . . . .	85.4	73.2	79.3	..	..
Extremes . . . . .	..	..	..	101.7 6/3/56	66.3 13/9/61

## HUMIDITY, RAINFALL AND FOG

Month	Vapour pressure mean 9 a.m. (m.bars)	Rainfall (inches)				Fog mean no. days
		Mean monthly	Mean No. of days of rain	Greatest monthly	Least monthly	
No. of years of observations	21	22	22	22	22	21
January . . . . .	28.8	11.23	20	20.54 1964	4.21 1958	7.84 9/59
February . . . . .	28.4	9.09	19	15.06 1953	2.09 1957	5.26 8/53
March . . . . .	28.7	13.00	21	20.63 1952	6.19 1961	6.38 10/52
April . . . . .	29.2	15.73	22	23.71 1955	11.28 1956	7.84 15/53
May . . . . .	28.9	15.27	22	33.08 1957	2.65 1956	6.52 17/61
June . . . . .	27.9	15.96	22	30.32 1965	4.51 1964	8.90 4/51
July . . . . .	27.2	20.12	24	41.66 1953	5.63 1956	11.76 16/53
August . . . . .	27.3	20.49	25	33.99 1957	6.32 1951	10.18 14/47
September . . . . .	27.5	17.85	23	29.12 1950	7.58 1960	6.16 10/51
October . . . . .	27.9	13.76	21	26.20 1957	4.82 1956	5.77 20/63
November . . . . .	28.5	12.90	21	22.73 1948	5.04 1956	7.26 2/45
December . . . . .	28.9	12.90	21	23.81 1957	6.06 1951	7.58 6/58
Year { Totals . . . . .	..	178.30	261	..	..	..
Averages . . . . .	28.3	..	..	..	..	..
Extremes . . . . .	..	..	..	41.66 7/1953	2.09 2/1957	11.76 16/7/53

## Population

Censuses of the non-indigenous population of the Territory of Papua and New Guinea have been taken in conjunction with censuses of the Commonwealth of Australia. For the indigenous population of the Territory of Papua and New Guinea, estimates of size, geographic location, and the broad age distribution of the population were available from the results of the Department of District Administration census (formerly known as the Tax Census). This was conducted over most of the Territory, but was continuous rather than conducted at a common date for all areas covered. No regular pattern of operations was adopted, although once the census had been taken in an area it was in general repeated fairly frequently. Although these estimates were of great value, the limitations of the information on population characteristics and the lack of simultaneous collection for all areas made them insufficient for many purposes. The 1966 census covered both indigenous and non-indigenous populations, and thus superseded the traditional census of non-indigenes. A short description of the development operations undertaken before the 1966 census and of the actual census operations is given in Year Book No. 53, pages 141-2.

Figures for the non-indigenous population as enumerated at censuses held in conjunction with Commonwealth censuses and estimates of the indigenous population based on the Department of District Administration censuses are set out below.

### TERRITORY OF PAPUA AND NEW GUINEA: POPULATION AT CENSUSES, 1921 TO 1966

Year	Indigenous					Non-indigenous			
	Enumerated			Persons estimated	Total persons	Males	Females	Persons	
	Males	Females	Persons						
PAPUA									
1921 . .	59,825	52,687	112,512	..	..	1,408	670	2,078	
1933 . .	..	..	170,836	..	..	1,232	941	2,173	
1941 . .	..	..	..	..	..	..	..	..	
1947 . .	..	..	..	..	..	2,057	1,182	3,239	
1950 . .	117,455	104,474	221,929	146,630	368,559	..	..	..	
1954 . .	151,464	134,732	286,196	202,200	488,396	3,867	2,446	6,313	
1961 . .	236,676	209,632	446,308	67,340	513,648	5,490	4,304	9,794	
1966(a) .	310,153	281,806	591,959	..	591,959	8,307	6,070	14,377	
NEW GUINEA									
1921 . .	(b)100,445	(b) 66,276	(b)166,721	..	..	2,502	671	3,173	
1933 . .	218,218	182,911	401,129	..	..	3,709	1,507	5,216	
1941 . .	324,830	318,988	(c)684,284	300,000	984,284	..	..	..	
1947 . .	..	..	..	..	..	4,369	1,831	6,200	
1950 . .	415,939	354,116	770,055	301,050	1,071,105	..	..	..	
1954 . .	538,113	472,480	1,010,593	184,714	1,195,307	7,201	4,241	11,442	
1961 . .	721,806	647,277	1,369,083	64,300	1,433,383	9,158	6,378	15,536	
1966(a) .	810,153	748,205	1,558,358	..	1,558,358	11,746	8,546	20,292	

(a) Preliminary results from the 1966 Census. (b) 1920: figures for 1921 not available. (c) Includes 34,087 indentured labourers, 1,127 native constabulary, 4,823 attending approved mission schools, and 429 patients at Anelaua Leprosarium and Taskul Observation Colony (New Ireland), for which particulars of sex are not available.

The total indigenous population of Papua and New Guinea at the 1966 census was 2,150,317 persons, and the total non-indigenous, 34,669 persons. Estimated totals for 30 June 1967 are 2,219,444 and 38,082 persons respectively. See pages 1206 and 1212 for further details.

### Administration

The *Papua-New Guinea Provisional Administration Act 1945-1946*, which provided for the transfer back of control from the military authorities to civil authorities after the 1939-45 War, was repealed by the *Papua and New Guinea Act 1949*, which came into force on 1 July 1949. The latter Act approved the placing of the Territory of New Guinea under the International Trusteeship system and provided for an Administrative Union of the Territory of Papua and the Territory of New Guinea with one Administrator, a Legislative Council and an Executive Council, one Supreme Court, and one Public Service.

For an outline of the development of the Legislative and Executive (later Administrator's) Councils between 1949 and 1963, see Year Book No. 51, page 117.

In May 1963 the Commonwealth Government passed an amendment to the Papua and New Guinea Act, making provision for a House of Assembly of sixty-four members to replace the Legislative Council. The house then consisted of ten official members appointed by the Governor-General on the advice of the Administrator, forty-four members elected by the people of the Territory on a common roll in forty-four open electorates, and ten non-indigenous persons elected on a common roll in ten special electorates comprising one or more open electorates. The first elections for the House of Assembly were held in February-March 1964, and the inaugural meeting of the new House was convened on 8 June 1964.

The 1963 Act also increased the membership of the Administrator's Council from seven to eleven, seven of whom must be elected members of the House of Assembly.

In October 1966 the Commonwealth Parliament passed a further amendment to the Papua and New Guinea Act, providing for an increase in the membership of the House of Assembly to ninety-four, sixty-nine members representing open electorates, fifteen from regional electorates and ten official members.

The second general election for the House of Assembly was held from 17 February-16 March 1968, and the Second House was convened on 4 June 1968. The Ministerial Nomination Committee in conjunction with the Administrator chose fifteen elected members who were appointed to seven Ministerial Member and eight Assistant Ministerial Member positions.

The *Papua and New Guinea Act 1968* provides for the Administrator's Council to become the Administrator's Executive Council, deciding major matters of Territory policy. In June 1968 it had its first meetings. It consists of the Administrator, the seven Ministerial Members, three official Members, and a twelfth Councillor who is an elected M.H.A. but a non-office holder.

Local government was introduced in 1949 by the Native Village Councils Ordinance which was replaced by the *Local Government Ordinance 1963*. The Administrator may establish by proclamation local government councils with authority in defined areas. Provision is also made for the establishment of multi-racial local councils.

### Judiciary

The courts which exercise jurisdiction within the Territory are: the Supreme Court of the Territory of Papua and New Guinea, District Courts (Papua and New Guinea), Local Courts and Children's Courts (Papua and New Guinea), and Warden's Courts.

The Supreme Court is the highest judicial authority in the Territory and has unlimited criminal and civil jurisdiction. District Courts have criminal jurisdiction over the less serious offences which are punishable on summary conviction, but have no jurisdiction to try treason crimes, misdemeanours and other indictable offences. They also exercise a limited civil jurisdiction. The Local Courts exercise a substantially similar jurisdiction but at a more subordinate level. The Administrator has power to establish, in respect of each gold-field or mineral field, warden's courts with jurisdiction over civil cases respecting mining or mining lands held under the *Mining Ordinance 1937-1966* and offences against the mining laws of the Territory.

In addition, there is the Land Titles Commission set up under the *Land Titles Commission Ordinance 1962-1967* to inquire into and determine rights in land, particularly native land. The Commission has the particular function under the *New Guinea Land Titles Restoration Ordinance 1951-1966* to inquire into and determine claims to interest in land where the official records have been lost

or destroyed as a result of the Japanese invasion of New Guinea. For the purposes of the latter Ordinance the jurisdiction of the Commission is exercised by the Chief Commissioner or a Commissioner appointed under the *Land Titles Commission Ordinance* who is a qualified legal practitioner.

## Agriculture and animal industry

### Soils

Although a large part of Papua and New Guinea is covered by skeletal soils unsuitable for agriculture, there are extensive areas in all districts where fertile soils occur suitable for growing a wide range of crops. Most of the agriculture of the Territory up to the present has been on soils on the coastal plains, which, apart from the swamp soils, consist mainly of alluvium and podsolised alluvium. So far these have been mostly under coconut plantations, although other crops such as rubber, coffee and cocoa have also been grown. The swamp soils, of which there are extensive areas in the delta plains and other parts of the Gulf of Papua and in smaller areas, are found intermittently around the coasts and along the lower reaches of the rivers, and are in general quite unsuited to any form of agricultural development.

Volcanic soils probably offer the greatest prospects for development. They are found mostly on the central plateau and southern foothills of the main island, but there are also areas in New Britain (particularly in the Gazelle and Willaumez Peninsulas), Bougainville and New Ireland, as well as in numbers of smaller islands. Other rich soils are the alluvials of the river valleys. The largest single area of this type is in the trough occupied by the Ramu and Markham Rivers.

### Land tenure

The *Land Ordinance* 1962 of the Territory of Papua and New Guinea, which came into operation in 1963, replaced much land legislation previously in force separately in the two Territories. This simplification in legislation was a major step towards applying uniform principles to land tenure throughout the whole of the Territory of Papua and New Guinea. All land in the Territory other than native land or land subject to any estates, rights, titles, or interests in force from time to time is Administration land.

There is considerable variation throughout the Territory in the nature of customary ownership of land. In most areas some rights remain in the landholding group, and individuals within the group have limited rights of use, either for life or for a shorter period. Thus the normal system by which the rights of ownership in land use are acquired is by birth to a landholding group. Transfer of rights between individuals by sale and purchase appears to have been unusual in the past, but this practice is now an established custom in some localities and appears to be increasing. Inheritance may be based on either patrilineal or matrilineal descent, or both. In parts of the Territory, however, there is a tendency for the whole inheritance system to change, particularly in communities where it is based on matrilineal descent. Following a close study of the problems in relation to land holdings by indigenes, the Government has laid down the following broad principles of policy.

The ultimate and long-term objective in Papua and New Guinea is to introduce throughout the Territory a single system of land holding regulated by the central Administration by statute, administered by the Department of Lands of the central Administration and providing for secure individual registered titles after the pattern of the Australian system.

Only the Administration working through the Department of Lands, Surveys and Mines and through the Registrar of Titles may issue and register land titles.

Land subject to native custom remains subject only to native custom until it is taken out of custom either by acquisition by the Administration or by a process, provided for by the *Land (Tenure Conversion) Ordinance* 1963, of conversion of title to an individual registered title. Upon either acquisition or conversion of title compensation is provided in respect of extinction of rights under native custom.

Land held under native custom may not be acquired outside of native custom by other than the Administration. Land may not be acquired by the Administration except for prescribed public purposes unless the native owners are willing to sell and the Administration is convinced, through its Department of District Administration, that the land is not required by them, and conversion of title from native custom to individual registered title may take place only if all those interested in the land under native custom consent to conversion and the method of conversion.



The services of Commissioners under the *Land Titles Commission Ordinance 1962-1966* are used, as a first priority, on investigations into claims by the Administration that land is ownerless and may therefore be declared administration land, on investigation into the ownership under native custom of land proposed to be acquired by the Administration, on settlement of disputes about the ownership of land held under native custom, and on investigations into the rights held under native custom in land proposed to be converted to individual registered title. The Commissioners, as opportunity offers, continue investigations into the holding of land under native custom; the results of such investigations are recorded for use in connection with future acquisitions or conversions of title.

The legislation and administrative steps necessary to put the remainder of this policy into effect are well advanced.

#### Suitable crops

The crops which can be grown in Papua and New Guinea include coconuts, coffee, tea, rubber, cocoa, fibres, rice, pepper, tobacco, peanuts, kapok, cassava, pyrethrum, ginger, cinchona, nutmeg, vanilla, tropical fruits and vegetables, sago, and tung oil, but of these the only crops of any commercial importance at present are coconuts, cocoa, rubber, coffee, peanuts, pyrethrum and passion fruit. Major developments in the production of tea and oil-palm are under way. These crops are expected to be of future economic significance.

#### Non-indigenous rural production

In 1966-67 there were 1,236 holdings in use by non-indigenous persons, 342 being in Papua and 894 in New Guinea. The total area of these holdings was 1,026,791 acres, 275,319 in Papua and 751,472 in New Guinea. The following tables summarise the information available for principal activities.

#### TERRITORY OF PAPUA AND NEW GUINEA NUMBER OF HOLDINGS, AREA, PRODUCTION AND NEW PLANTINGS 1963 TO 1967

(Source: *Production Bulletin*, Part I: *Rural Industries*, Bureau of Statistics, Papua)

Year ended 31 March—	Holdings	Area under crop(a)	Trees(a)	Production	New plantings	
					Area	Trees(b)
		acres	'000	tons	acres	'000
Coconuts—						
1963 . . .	682	262,078	11,951	83,878	3,944	242
1964 . . .	687	267,578	12,076	83,667	2,771	242
1965 . . .	670	262,039	11,995	85,034	4,013	272
1966 . . .	667	264,391	12,006	90,209	5,512	377
1967 . . .	683	269,127	12,704	81,159	5,208	460
Cacao—						
1963 . . .	434	105,726	17,403	9,900	9,787	2,496
1964 . . .	429	112,404	18,360	11,285	6,349	1,809
1965 . . .	435	116,981	19,792	14,326	7,058	1,835
1966 . . .	439	122,226	20,696	14,427	8,354	1,870
1967 . . .	447	126,147	21,830	15,059	4,981	1,366
Coffee—						
1963 . . .	242	10,305	6,002	2,830	1,078	809
1964 . . .	247	10,851	6,865	3,032	890	800
1965 . . .	261	12,228	7,860	3,374	1,345	1,162
1966 . . .	257	13,415	8,779	3,874	1,323	1,254
1967 . . .	248	14,365	9,912	4,911	1,090	1,212
Rubber—						
1963 . . .	71	32,027	3,495	4,760	1,704	301
1964 . . .	73	33,797	3,703	4,941	1,419	314
1965 . . .	70	33,317	3,768	5,183	1,238	249
1966 . . .	81	35,417	3,998	5,333	1,847	344
1967 . . .	86	37,043	4,177	5,437	1,260	305

(a) Includes mature and immature areas.

(b) Includes replacements.

**TERRITORY OF PAPUA AND NEW GUINEA: AREA UNDER PRINCIPAL CROPS  
AND CROP PRODUCTION, YEAR ENDED 31 MARCH 1967**

*(Source: Production Bulletin, Part I: Rural Industries, Bureau of Statistics, Papua)*

Crop	Recorded area in acres			Unit	Recorded production			Average yield per productive acre		
	Papua	New Guinea	Total		Papua	New Guinea	Total	Papua	New Guinea	Total
Permanent crops—										
Copra—										
Plantation . . .	35,697	233,430	269,127	ton	8,699	72,460	81,159	0.28	0.36	0.35
Trade(a) . . .	..	..	..	..	730	3,966	4,696	..	..	..
Coconuts, for use as such	..	..	..	..	50	206	256	..	..	..
Cacao—										
Plantation . . .	11,520	114,627	126,147	cwt (beans)	19,440	281,740	301,180	2.08	3.43	3.29
Trade(a) . . .	..	..	..	..	40	20,140	20,180	..	..	..
Coffee—										
Plantation . . .	714	13,651	14,365	..	611	97,606	98,216	1.36	10.24	9.84
Trade(a) . . .	..	..	..	..	325	13,002	13,327	..	..	..
Rubber . . .	35,458	1,585	37,043	cwt (dry)	108,324	413	108,737	4.71	0.89	4.15
Tea . . .	(c)	(c)	(c)	lb	..	(b)	(b)	..	(b)	(b)
Grain crops—										
Maize . . .	37	116	153	bus	783	2,442	3,225	21.16	21.05	21.08
Rice . . .	129	32	161	ton (paddy)	84	25	109	0.65	0.78	0.68
Sorghum . . .	306	475	781	bus	3,403	7,034	10,437	11.12	14.81	13.36
Crops for green fodder—										
Maize . . .	44	68	112	..	..	..	..	..	..	..
Sorghum . . .	32	75	107	..	..	..	..	..	..	..
Other . . .	120	500	620	..	..	..	..	..	..	..
Industrial crops—										
Peanuts . . .	15	5,056	5,071	cwt (kernel)	107	25,084	25,191	7.13	4.96	4.97
Vegetable crops—										
For sale—										
Beans (green) . . .	8	32	40	cwt	208	829	1,037	26.00	25.91	25.93
Tomatoes . . .	12	30	42	..	382	871	1,253	31.83	29.03	29.83
Potatoes, English . . .	20	50	70	..	210	3,087	3,297	10.50	61.74	47.10
Potatoes, sweet . . .	52	165	217	..	1,996	15,035	17,031	38.38	91.12	78.48
Pumpkins . . .	41	55	96	..	1,063	695	1,758	25.93	12.64	18.31
Other . . .	87	85	172	..	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
For consumption on holding—										
Potatoes, sweet . . .	660	3,804	4,464	cwt	28,179	285,106	313,285	42.69	74.95	70.18
All other . . .	458	1,817	2,275	..	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
All other crops . . .	326	3,680	4,006	..	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total . . .	85,736	379,333	465,069		..	..	..	..	..	..

(a) Includes all produce acquired by purchase during the year from sources outside the holding. (b) Not available for publication. (c) Included in All other crops. Total area planted to tea was 2,402 acres.

### Livestock on non-indigenous holdings

A number of British breeds of cattle are represented, but for best results the use of Zebu cross-bred types of cattle is necessary in virtually all beef cattle areas of the Territory. For dairying the Jersey seems to be the best breed and adapts admirably to tropical conditions. Sheep have not so far been successful in Papua and New Guinea.

Central abattoirs controlled by the Administration have been set up at Lae and Port Moresby and there are smaller private slaughterhouses at other centres.

The following table shows the numbers of the various kinds of livestock on non-indigenously occupied holdings in Papua and New Guinea at 31 March 1967.

**TERRITORY OF PAPUA AND NEW GUINEA: LIVESTOCK NUMBERS  
31 MARCH 1967**

*(Source: Production Bulletin, Part I: Rural Industries, Bureau of Statistics, Papua)*

<i>Kind of stock</i>	<i>Papua</i>	<i>New Guinea</i>	<i>Total</i>
Horses . . . . .	432	882	1,314
Cattle—			
For dairying—			
Cows—in milk . . . . .	344	1,350	1,694
dry . . . . .	438	934	1,372
Heifers, one year and over . . . . .	184	706	890
Heifer calves, under one year . . . . .	193	672	865
Bulls, one year and over . . . . .	135	252	387
Bulls under one year . . . . .	45	187	232
Total dairying cattle . . . . .	1,339	4,101	5,440
For beef—			
Cows and heifers, one year and over . . . . .	3,987	12,010	15,997
Calves, under one year . . . . .	1,321	4,679	6,000
Other, one year and over . . . . .	3,089	12,744	15,833
Bulls, one year and over . . . . .	230	841	1,071
Bulls, under one year . . . . .	81	200	281
Total beef cattle . . . . .	8,708	30,474	39,182
Total, all cattle . . . . .	10,047	34,575	44,622
Sheep . . . . .	41	347	388
Pigs—			
Boars . . . . .	78	227	305
Breeding sows . . . . .	324	792	1,116
Suckers, weaners, and slips . . . . .	489	1,615	2,104
Other . . . . .	40	924	964
Total pigs . . . . .	931	3,558	4,489
Goats . . . . .	455	732	1,187
Poultry(a)—			
Fowls . . . . .	51,526	57,857	109,383
Ducks . . . . .	6,630	1,612	8,242
Turkeys . . . . .	701	236	937
Geese . . . . .	13	54	67
Total poultry . . . . .	58,870	59,759	118,629

(a) Only recorded where poultry products are marketed or flocks exceed 100 birds.

### **Native agriculture**

Most of the indigenous inhabitants of Papua and New Guinea are agriculturalists producing fruit and vegetables for their own consumption. The crops grown vary according to environment and altitude and include yams, taro and sweet potatoes, coconuts, bananas, papaws, maize, sugar cane, cassava, beans, peanuts, rice, cucurbits, and tobacco. Sago is the staple food in the extensive semi-inundated areas which occur along the lower valleys of the major rivers. In these areas it is cut largely from naturally occurring stands. In other parts of the country small areas of sago are grown along stream banks and in swampy patches and are regarded as a reserve in times of poor harvest. In recent years the indigenes have taken up the production of introduced crops such as peanuts, rice, cucurbits, and maize for their own consumption, and cocoa, coffee and pyrethrum for export. Some small-scale rubber growing is now being undertaken. In coconut areas large quantities

of copra are produced. In 1965-66 estimated indigenous production was; copra 37,000 tons, coffee 6,800 tons, cocoa 4,100 tons. In many localities the indigenes follow a farming system known as bush fallowing rotation, which is described in Year Book No. 48 and earlier issues.

The growing of food is done both by the men and the women. The division of work is usually clearly defined within the village itself, but this division is not necessarily the same in all areas. Generally the felling of forests is done by the men, and carrying the harvested food home to the village is done by the women. Other work, however, such as cultivating, planting and weeding may be done by either men or women according to the customs of the particular village or area.

The advancement of native agriculture for local food supply and improved land use in village gardens as well as for economic production of crops for sale have a high priority in Government policy for the Territory. In recent years the Administration has intensified the programme of agriculture extension work among the indigenes.

#### **Survey of indigenous agriculture and ancillary surveys, 1961-62**

A survey of the agriculture of indigenes of Papua and New Guinea was carried out in 1961-62 by the Territory Bureau of Statistics in conjunction with the Commonwealth Bureau of Census and Statistics and the Territory Department of Agriculture, Stock and Fisheries. A comprehensive report on the surveys was published by the Territory Statistician in 1963, and reference should be made to this for further information. A summary of the principal results of the survey appears on pages 1104-10 of Year Book No. 52.

#### **Co-operative societies**

Co-operatives are under the supervision and guidance of the Division of Co-operative Extension within the Department of Trade and Industry, and trained staff are stationed in districts throughout the Territory. Societies fall into the two main categories, primary and secondary. The primary consist of marketing and consumer retailing bodies dealing directly with individual members. A society which combines both these activities is termed a dual purpose primary. Secondary organisation is represented by associations of societies, formed to achieve an amalgamation of purchasing power in retail consumer store operation and marketing volume in relation to agricultural production, and to concentrate capital to facilitate the purchase of large assets such as shipping, land transport, agricultural machinery, etc.

For the year ended 31 March 1967 primary societies numbered 312, with a membership of 109,488 a total capital of \$2,063,221, and a turnover of \$4,974,424. Secondary organisations numbered 14, with 240 member societies, a total capital of \$645,712, and a turnover of \$1,320,297.

### **Indigenous labour**

At 31 March 1967 approximately 100,895 indigenes were engaged in wage employment, 70,339 of these being employed by private enterprise, according to the most comprehensive survey ever carried out in the Territory.

Minimum wages and conditions of employment for indigenous workers are prescribed under the *Native Employment Ordinance* 1958-1965. An employer is required to pay a minimum cash wage to every worker employed by him, and provide the worker, and his family in appropriate cases, with food, clothing, cooking and eating utensils, towels, soap and other articles, medical attention, and, where necessary, accommodation. The estimated minimum cost of providing these entitlements, including accommodation, is \$173.00 a year per worker. The major portion of the workers employed under the conditions prescribed under the Ordinance are unskilled rural workers.

The legal minimum cash portion of the wage is \$52 a year for the first year of employment, \$58.50 in the second year and \$65.00 for subsequent years.

Industrial agreements negotiated between representatives of workers and employers in recent years have covered an increasing number of workers in urban areas. These agreements cover workers in the main towns, providing for minimum rates of payment of a total cash wage per week as follows: Lae, Rabaul and Madang, unskilled adults and married male juniors, \$6.75; Port Moresby and Wewak, \$6.50; other main towns, all workers \$6.00.

Agreements entered into in various localities and which have been registered as awards under the Territory's Industrial Relations Ordinance relate to: annual leave and sick leave (two weeks' leave on full pay and six days' sick leave per annum); the employment of qualified tradesmen (weekly rates of pay \$14.00 to \$16.00 for second class tradesmen and \$18.00 to \$20.00 for first class tradesmen); rates of pay and conditions of employment of stevedoring workers and ships' crews; tradesmen who have not completed a formal approved apprenticeship (weekly rates of pay \$15.00 to \$17.00); and rates of pay and conditions of employment of workers in the timber and sawmilling industries.

There has been a continued expansion of the trade union movement since industrial legislation for the Territory was introduced in March 1963. In December 1967 seventeen associations with a membership of 16,022 had been registered as industrial organisations of workers under the Industrial Organizations Ordinance.

Provision is made in other legislation for the establishment and maintenance of modern standards of industrial safety and for the payment of compensation for injury or disease arising out of, or in the course of, employment.

An apprenticeship scheme was inaugurated in 1955 and reorganised in 1968. An Apprenticeship Board, comprising representatives of private enterprise and government, advises the Administration on apprenticeship matters. At 31 December 1967, 352 apprentices had received trade certificates and 1,022 were in training.

### Housing

Village housing is still constructed to traditional patterns using local materials including bush timber, bamboo, grass, pit-pit and palm leaves. Town housing is generally constructed from comparatively expensive imported material including fibrous asbestos cement, aluminium and galvanised iron.

The rapid growth of town populations has created a housing shortage. Major programmes are directed towards reducing this backlog, and administration expenditure on housing for local officers reached \$3,000,000 in 1967-68.

A Housing Commission has been established and will be engaged in solving the urban housing shortage. It is expected that the Commission will stimulate both self-help housing and private home building as well as building houses which will be available to the general public on application.

### Secondary industries

Initially secondary industry, apart from several small service industries, was associated largely with the processing of local products for export. These were mainly confined to the processing of copra, fermenting of cocoa and coffee, and the curing of rubber, activities usually carried out on or near plantations. Then followed secondary industries in their own right with the establishment of a coconut oil plant, plywood factory, and a factory producing passion-fruit pulp and juice.

The emphasis has since tended to move to industries serving the growing internal market and using, in many cases, imported raw materials. These include the manufacture of cigarettes, twist tobacco, wire products, building materials, paints, concrete products, lawnmowers, oil drums, and industrial gases; the assembly of electrical appliances; and boat building, brewing and furniture making. A wide variety of service industries has also been established, such as engineering workshops, plumbing establishments, motor repairs, and electrical services. Secondary industries processing primary products are still being established, a recent example being a desiccated coconut factory.

#### TERRITORY OF PAPUA AND NEW GUINEA: SUMMARY OF FACTORY OPERATIONS, 1965-66 AND 1966-67

(Source: *Production Bulletin*, Part II: *Secondary Industries*, Bureau of Statistics, Papua)

	Papua		New Guinea		Total	
	1965-66	1966-67	1965-66	1966-67	1965-66	1966-67
Number of factories(a)	137	178	270	301	407	479
Average number employed(b)	4,080	4,316	6,706	6,678	10,786	10,994
Salaries and wages paid(c)	\$'000 3,654	4,378	5,133	5,767	8,787	10,146
Value of power, fuel, light, etc., used(d)	502	578	950	1,083	1,452	1,661
Value of materials used(e)	6,780	8,618	18,556	20,257	25,336	28,875
Value of production(f)	8,437	9,228	13,110	15,860	21,547	25,088
Value of output(g)	15,719	18,424	32,615	37,200	48,334	55,624
Value of land and buildings(h)	5,619	6,705	6,184	7,449	11,803	14,153
Value of plant and machinery(h)	4,477	5,987	7,134	7,702	11,611	13,689

(a) Any factory, workshop or mill in which four or more persons are employed or power other than hand is used.  
 (b) Average weekly employment including working proprietors. (c) Excludes drawings by working proprietors.  
 (d) Includes water and lubricating oil. (e) Includes value of containers, packing, etc., tools replaced, and repairs to plant.  
 (f) Value added in process of manufacture (i.e. value of output less value of materials and power, fuel, etc. used).  
 (g) Value of goods produced including amounts received for repair work and other work done. (h) Depreciated or book value at end of year, including estimated value of rented premises and machinery.

**TERRITORY OF PAPUA AND NEW GUINEA: FACTORY OPERATIONS  
BY CLASS OF INDUSTRY, 1966-67**

(Source: *Production Bulletin*, Part II: *Secondary Industries*, Bureau of Statistics, Papua)

	Class of industry				Total
	Industrial metals, machines and conveyances	Food, drink and tobacco	Sawmills, plywood and joinery	Other industries	
Number of factories . . . . .	220	74	122	63	479
Number of employees—					
Non-indigenous . . . . .	999	202	403	274	1,878
Indigenous . . . . .	2,353	2,354	3,304	1,105	9,116
<i>Total employees</i> . . . . .	3,352	2,556	3,707	1,379	10,994
Salaries and wages paid . . . \$'000	4,621	1,410	2,535	1,579	10,146
Value of power, fuel and light, etc. „	243	387	263	768	1,661
Value of materials used . . . „	6,698	9,362	5,127	7,687	28,875
Value of production . . . „	7,696	6,200	6,206	4,985	25,088
Value of output . . . „	14,638	15,949	11,597	13,440	55,624

*See footnotes to previous table.*

### Finance

#### Revenue and expenditure

Information on the financial operations of each Territory will be found on pages 1210-11 and 1216-17.

#### Taxation

The main forms of taxation are income tax and import duties. *Income Tax* was imposed on 1 August 1959 to operate from 1 July 1959. In the case of individuals two different methods of calculating tax payable are used. Tax on taxable incomes has applied since 1 July 1959 and is calculated on a similar basis to that in Australia. The scale of taxation is about 50 per cent of the tax payable on the same taxable income in Australia. Deductions for dependants the taxpayer is maintaining are considerably higher than those allowed in Australia. Tax on chargeable income was introduced to apply from 1 January 1967 and has supplanted a previous *Personal Tax* of \$4.00 payable by all males eighteen years and over. Chargeable income consists of gross income less expenses directly incurred in earning the income. No deductions are allowable for dependants or any other private expenditure such as medical or education expenses. The tax is a flat rate of 2.025 cents in the \$1 applying on income above \$416 with a maximum of \$20.50. The two methods of calculating tax payable are supplementary, the method applied to any particular taxpayer being the one resulting in the greater amount of tax payable. Companies are taxed on a similar basis to that in Australia, and deductions allowable are generally comparable to those in Australia. From 1 July 1959 to 30 June 1967 the rates on public and private companies differed, public companies being taxed at a flat rate of 20 cents in the \$1 and private companies at 12.5 cents in the \$1 for the first \$10,000 and 17.5 cents in the \$1 for the remainder. From 1 July 1967 a flat rate of 22.5 cents in the \$1 applies to all companies, and from the same date private companies are no longer required to distribute a portion of their income in dividends each year. To encourage industry in the Territory certain companies manufacturing products new to the Territory may be granted complete tax exemption for the first five years of operation under the Industrial Development (Incentive to Pioneer Industries) Ordinance 1965. Additionally to income taxes Native Local Government Councils (which are formed voluntarily by the indigenes) are empowered to levy local taxes for the purpose of providing for local services carried out by the councils. These taxes are set off against the taxpayers' personal taxation.

The present *Customs Tariff* provides high revenue rates on imports of ale, spirits, tobacco and cigarettes, timepieces, cigarette papers, fancy goods, and jewellery, but allows entry of most necessities affecting living and building costs duty free or at a low rate of duty. Under the Customs Tariff, plant, machinery and chemicals to be used mainly for industrial and developmental purposes are generally duty-free. A by-law covers goods imported by passengers. No preferential rates are specified in the schedule. Export duties imposed on copra, cocoa, rubber, mother-of-pearl, trochus and burgos shell, and gold were repealed in July 1959.

Provision is made in the *Australian Customs Tariff (Papua and New Guinea Preference)* 1936 for the free entry into Australia of certain agricultural goods produced in and imported direct from the Territory (see chapter Overseas Transactions). In addition, goods produced or manufactured in the Territory and imported directly into Australia are exempted from primage duty.

**Banking**

Average weekly deposits of cheque-paying banks in the Territory of Papua and New Guinea for the year 1966-67 were \$32,271,000 and loans, advances, etc., \$14,717,000. Average weekly debits to customers' accounts amounted to \$11,837,000. Savings banks depositors' balances at 30 June 1967 amounted to \$29,760,000, comprising indigenous \$11,095,000 and non-indigenous \$18,665,000, having increased since June 1957 from \$2,134,000 and \$5,802,000 respectively.

**TERRITORY OF PAPUA****General description****Area, etc.**

Papua lies wholly within the tropics. The northernmost point touches 5° S. latitude; its southernmost portion, comprising Tagula and Rossel Islands, lies between 11° S. and 12° S. latitude. It is separated from Australia by Torres Strait. The length of Papua from east to west is upwards of 930 miles; towards either end the breadth from north to south is about 320 miles, but about the centre it is considerably narrower. The Territory includes also the islands of the Trobriand, Woodlark, D'Entrecasteaux, and Louisiade groups. The length of coast-line is estimated at 3,664 miles—1,728 on the mainland and 1,936 on the islands. The total area is 86,100 square miles, of which 83,325 are on the mainland and 2,775 on the islands. A description of the physical characteristics of the Territory appears in earlier issues of the Year Book (*see* No. 18, page 633).

**Administration**

Particulars of the early administration of Papua are given in Year Book No. 19, page 576. The Territory was placed under the authority of the Commonwealth on 1 September 1906 by proclamation issued in pursuance of Letters Patent of 18 March 1902 and was accepted by the Commonwealth by the *Papua Act* 1905, which came into force by virtue of the aforesaid proclamation. The transfer was made under the authority of Section 122 of the Constitution. The Territory is under the control of the Commonwealth, but not included within it, and is divided into seven administrative districts, Southern Highlands, Chimbu (part), Western, Gulf, Central, Milne Bay, and Northern.

**Population****Indigenous population**

Within the major division, Melanesian, into which most indigenous inhabitants of the Territory are classified, a distinction may be made between a Melanesian type and a Papuan type, the former representative of the eastern mainland and the island archipelagos to the east and south-east, and the latter representative of the western third and the interior of the Territory. Some negrito traits have been noted in a few of the inland mountain groups. The total indigenous population of the Territory of Papua as recorded from preliminary results of the 1966 census is shown on page 1197. The estimated indigenous population for 30 June 1967 was 583,542 persons, comprising Central, 113,310; Gulf, 65,408; Milne Bay, 100,160; Northern, 56,253; Southern Highlands, 187,627; and Western, 60,784.

**Non-indigenous population**

Preliminary results of the numbers of non-indigenous population from the 1966 census are given on page 1197. The estimated non-indigenous population for 30 June 1967 was 8,290 males, 6,436 females, 14,726 persons.

**Land tenure**

The basic principles applying to land tenure in Papua are the same as those applying to the whole of the Territory of Papua and New Guinea described on pages 1199-1200. At 30 June 1967, of the total area of Papua, 55,104,000 acres, only 1,912,740 acres had been alienated. The distribution of alienated land at 30 June 1967 according to tenure was as follows: held by private non-indigenous inhabitants, freehold, 24,280 acres; land tenure conversions, freehold, 1,720 acres; leasehold, 376,000 acres; native reserves, 67,250 acres; other Administration land, including land reserved for public purposes, 1,443,490 acres.

Although a small amount of freehold land exists in Papua, present legislation does not provide for the granting of estates in freehold. Leases of various kinds may be granted by the Administration. The principal types of leases available are agricultural leases, pastoral leases, leases of town allotments, business leases and residence leases of other than town allotments, and various forms of special leases and licences over land. Leasehold terms are liberal, and, in general, leases may be granted for periods of up to ninety-nine years. Rent is based on the unimproved value of the land.

Leases of Crown land are granted by the Administrator following a land use examination, advertisement of leases available, and consideration of applications by the Land Board. Dealings in privately-owned land are a matter for private treaty. Native-owned land, however, cannot be acquired or leased from the native owners by private individuals. The Administration alone may purchase native-owned land, and then only if the owners are willing to sell and the Administration is satisfied that the owners do not require, and are not likely to require, the land.

The registration of titles, interests and dealings in alienated land is provided for under the *Real Property Ordinance* 1913-1962, modelled on the Torrens system of land registration.

## Production

### Primary production

The products of the Territory are obtained principally from its agricultural, forestry, mining, and fishing industries. Native subsistence agriculture, fishing and hunting produce most of the food requirements of the indigenous population. The main native agricultural products are taro, yams, sweet potatoes, bananas, and pawpaws. Peanuts are becoming of increasing importance in native diet. Non-indigenous enterprise produces most of the commodities exported. Indigenes, however, produce copra for export, while native enterprise in other fields of agricultural production for export purposes, e.g. cocoa and coffee, is undertaken. The principal agricultural products of Papua for the export trade are copra and rubber. Native production of copra is increasing. The main products of fisheries exported from Papua are trochus shell and mother-of-pearl. Gold, manganese, zinc-lead, and copper ores have been mined in commercial quantities in the past, but current production is limited.

For information on the agricultural and animal industries, which for the sake of convenience covers the Territories of Papua and New Guinea singly and combined, see pages 1199-1203. The following paragraphs relate to forestry, mining, fisheries, and water-power resources in Papua.

### Forestry

A general description of the forest policy, which applies in Papua as well as in the Trust Territory of New Guinea, is given under the heading, Timber, on page 1213.

Mixed species of tropical rain forest covers most of Papua, although north-east of Port Moresby there is an area of monsoonal savannah country. Because of the mixed nature of the timbers in any one area, their utilisation on an economical basis is somewhat difficult. Mangroves occur in large areas fringing the Gulf of Papua. Forestry field work is carried out in Papua with a view to assessing the forest resources available and also to survey areas subsequently made available for cutting.

At 30 June 1967 thirty permits and twenty-eight licences were current. The total areas of forest involved were 385,736 acres and 84,512 acres respectively. The total number of logging mills was 28, and the total sawn-timber produced during 1966-67 was 10.9 million super feet.

### Mining

Although a large number of minerals have been found in Papua, including platinum, gold, silver, copper, tin, lead, zinc, cinnabar, iron, osmiridium, manganese, sulphur, chromite, gypsum, and lignite, current mineral production is not of economic importance. Before the 1939-45 War gold was an important item in Papuan production, but it has since dwindled to insignificance. Large quantities of copper ore were mined and exported up to 1940. Extensive deposits of magnetite sands exist along the Gulf of Papua coastline, but these contain the undesirable impurity titanium, and ways of separating this from magnetite are under investigation. The *Mining Ordinance* 1937-1966 and the *Mining Development Ordinance* 1955-1960 control mining in Papua.

The existence of petroleum has been proved at scattered locations over a large area, but commercial quantities have not been discovered. Natural gas has been found in several wells, but its commercial use is not yet economically feasible. At 30 June 1967 seventeen permits and licences were effective under the provisions of the *Petroleum (Prospecting and Mining) Ordinance* 1951-1965. Oil prospecting is confined mainly to the Gulf and Western Districts, including off-shore areas in the Gulf of Papua.

### Fisheries

Surveys have been carried out of the fisheries resources of Papua. These have been demonstrated to be considerable, and efforts are being made to increase the present small degree of utilisation. Assistance is also being given by the Administration in improving the indigenous methods of fishing, and the use of improved gear is being encouraged by extension workers. Shell fishing, particularly trochus, provides the main cash return.



**Water power**

Most of the rivers in Papua carry a large volume of water from a great height over a relatively short distance, thereby offering opportunities for the installation of hydro-electric power plants. It is estimated that at least 1,850 MW could be developed.

The Rouna No. 1 hydro station on the Laloki River near Port Moresby has a capacity of 5.5 MW. A second hydro station, Rouna No. 2, came into operation in 1967, with an initial installed capacity of 18 MW. Total planned capacity of this station is 30 MW.

**Trade, transport and communication****Value of imports and exports**

**TERRITORY OF PAPUA: IMPORTS AND EXPORTS, 1962-63 TO 1966-67**  
(**\$'000**)

	1962-63	1963-64	1964-65	1965-66	1966-67
<i>Total imports(a)</i>	21,438	27,617	32,733	42,865	49,952
<i>Exports—</i>					
Domestic exports	5,049	5,318	6,075	6,113	5,417
Re-exports	1,625	1,857	2,971	2,827	3,421
<i>Total exports</i>	6,675	7,175	9,046	8,940	8,838

(a) Includes outside packages.

**Country of origin or destination**

**TERRITORY OF PAPUA: COUNTRY OF ORIGIN OF IMPORTS**  
**1962-63 TO 1966-67**  
(**\$'000**)

<i>Country of origin</i>	1962-63	1963-64	1964-65	1965-66	1966-67
Australia	13,581	17,568	20,305	25,986	31,243
Canada	36	60	73	220	437
China (mainland)	55	156	250	312	529
Germany (Federal Republic of)	420	582	567	676	663
Hong Kong	850	966	1,011	1,132	1,348
Indonesia	807	862	493	31	90
Japan	1,018	1,575	1,977	3,112	4,167
Malaysia (including Singapore)	102	389	626	962	1,081
United Kingdom	1,546	1,648	2,186	3,027	2,711
United States of America	1,154	1,775	2,924	2,925	3,214
Other countries	1,869	2,035	2,321	4,481	4,469
<i>Total</i>	21,438	27,617	32,733	42,865	49,952

**TERRITORY OF PAPUA: COUNTRY OF DESTINATION OF EXPORTS**  
**1962-63 TO 1966-67**  
(**\$'000**)

<i>Country of destination</i>	1962-63	1963-64	1964-65	1965-66	1966-67
Australia	5,351	5,752	6,836	6,771	6,993
Japan	232	290	238	280	430
United Kingdom	728	650	1,220	1,172	926
Other countries	365	483	752	717	489
<i>Total</i>	6,675	7,175	9,046	8,940	8,838

**Principal commodities exported**

**TERRITORY OF PAPUA: PRINCIPAL DOMESTIC EXPORTS**  
**1962-63 TO 1966-67**  
**(\$'000)**

<i>Commodity</i>	<i>1962-63</i>	<i>1963-64</i>	<i>1964-65</i>	<i>1965-66</i>	<i>1966-67</i>
Rubber . . . . .	2,331	2,434	2,551	2,562	2,475
Copra . . . . .	2,085	1,968	2,805	2,550	2,083
Cocoa beans . . . . .	48	100	71	123	209
Gold . . . . .	1	1	2	2	1
Shell (marine) . . . . .	21	24	26	17	25
Crocodile skins . . . . .	315	529	392	623	344
Other . . . . .	249	263	228	236	280
<b>Total . . . . .</b>	<b>5,049</b>	<b>5,318</b>	<b>6,075</b>	<b>6,113</b>	<b>5,417</b>

**Shipping**

In 1966-67 shipping entries (overseas and inter-Territory vessels) at Territory ports totalled 563, and 298,976 tons of cargo were discharged and 89,830 tons were loaded.

Regular passenger and freight services operate between Australia, New Guinea and Papua. Vessels trading between Australia and the East also call at Territory ports, and there are services from continental and United Kingdom ports. Coastal and inter-island shipping services are maintained by vessels operating from the two principal ports of Port Moresby and Samarai.

**Other forms of transport and communication**

Scheduled flights provide a network of air transport throughout Papua, and regular air services link the Territory with Australia and neighbouring Territories, and also with Manila and Hong Kong. There were 100 aerodromes in Papua at 30 June 1967, and of these 2 were the responsibility of the Department of Civil Aviation, 48 were operated and maintained by the Administration, and 50 were owned and maintained by Missions, plantation and mining interests. Much of the internal traffic and freight is carried on a charter basis.

At 30 June 1967 there were 2,148 miles of road in Papua of which 624 were adequately paved. Total motor vehicle registrations (excluding defence force vehicles) at 31 December 1966 were 6,534.

Telephone services operate in the main centres. The radio station at Port Moresby for both transmission and reception is shared by the Overseas Telecommunications Commission and the Administration. The former provides all external radio-telephone and telex circuits, while the latter operates internal telephone and telegraph services. Local telephone services are provided from automatic exchanges at Port Moresby and Sogeri and from manual exchanges at Popondetta, Samarai, Mendi, Tapini, Kerema and Daru. Port Moresby is connected by direct radio-telephone trunk circuits with Popondetta and Samarai and with Lae, Rabaul and Wewak in New Guinea. Radio telegraph services are provided from Port Moresby, Samarai, Kerema, and Daru to nearly 300 outstations. The Australian Broadcasting Commission broadcasts from medium wave station 9PA and short wave stations VLK and VLT located at Port Moresby. The Administration Department of Information and Extension Services operates transmitters at Alotan, Daru and Kerema and produces programmes in several local languages covering news, health features, general information and programmes of local and regional significance.

**Education and health****Education**

Education in the Territory is provided by the Administration and various Mission organisations. Schools for indigenes, also, have been established by Local Government Councils. The *Education Ordinance* 1962-64 enables the Administration to establish an education advisory board, district education committees and European and native schools, and to grant financial aid for educational purposes. European teachers are recruited from Australia and overseas, and indigenous teachers are trained in the Territory by the Administration and Missions. During the year ended 30 June 1967, 172 schools were maintained by the Administration for 29,509 children. The total number of pupils in the various grades of mission schools was 39,441. To assist the educational work of the Missions the Administration provides expert advice, educational equipment and text-books. In addition, the sum of \$496,000 was distributed among the Missions as grants-in-aid during the year ended 30 June 1967.

### Health

The Department of Public Health of the Territory of Papua and New Guinea has the general oversight of all medical and dental services. The Department has the following seven functional divisions: medical services; preventive medicine; medical training; infant, child and maternal health; medical research; administration; and mental health. The services for the Territory of Papua are under the administrative control of a regional medical officer, with headquarters staff at Port Moresby.

The cases treated in hospitals are mainly pneumonia, gastro-enteritis, skin disease, malaria, accidents, diseases due to old age, and confinements. At 30 June 1967 the Administration had established 31 general hospitals, 2 hospitals for the treatment of Hansen's disease, 1 Hansenide-tuberculosis hospital, 2 tuberculosis hospitals, and 1 mental hospital; the Missions had established 34 general hospitals, 2 Hansenide hospitals, 2 Hansenide-tuberculosis hospitals, and 1 tuberculosis hospital. There were 441 village aid posts or medical centres (173 Mission), 78 maternal and child welfare clinics (66 Mission), and 719 mobile clinic centres (587 Mission). School medical examinations, immunisation, ante-natal and post-natal care, and pre-school services are also provided. The Missions employ their own doctors and nurses in their medical establishments.

For some years suitably qualified indigenes attended the Central Medical School at Suva, Fiji, to be trained as Assistant Medical Officers. In 1959 the Administration began training indigenous medical officers at the Papuan Medical College which is associated with the Port Moresby General Hospital. The College, planned to accommodate 600 students eventually, is being built in stages. The course consists of a preliminary year and five years further study. Training for nurses and medical auxiliaries in many categories is also being provided.

### Finance

#### TERRITORY OF PAPUA: REVENUE AND EXPENDITURE, 1962-63 TO 1966-67 (\$'000)

	1962-63	1963-64	1964-65	1965-66	1966-67
REVENUE					
Customs . . . . .	2,540	3,109	3,548	4,832	5,879
Licences . . . . .	112	136	156	192	237
Stamp duties . . . . .	99	81	145	158	250
Postal . . . . .	803	856	1,090	1,437	1,848
Land revenue . . . . .	172	152	151	318	345
Mining receipts . . . . .	7	7	10	12	14
Fees and fines . . . . .	29	36	56	85	117
Health revenue . . . . .	89	93	92	108	117
Forestry . . . . .	48	74	73	97	88
Agriculture . . . . .	79	96	76	91	113
Public utilities . . . . .	811	315	279	352	388
Direct taxation(a) . . . . .	2,919	3,646	4,917	5,705	8,255
Miscellaneous . . . . .	701	1,888	2,428	3,475	3,810
Territory loans . . . . .	..	..	..	(b)2,485	2,141
<i>Total internal revenue . . . . .</i>	<i>8,409</i>	<i>10,489</i>	<i>13,023</i>	<i>19,347</i>	<i>23,602</i>
Grant by Commonwealth of Australia . . . . .	15,728	20,022	22,125	23,821	19,804
<b>Total revenue . . . . .</b>	<b>24,137</b>	<b>30,511</b>	<b>35,148</b>	<b>43,168</b>	<b>43,406</b>
(a) Includes Personal Tax. (b) Previously deducted from expenditure.					

TERRITORY OF PAPUA: REVENUE AND EXPENDITURE  
1962-63 TO 1966-67—*continued*  
(\$'000)

	1962-63	1963-64	1964-65	1965-66	1966-67
<b>EXPENDITURE</b>					
Expenditure from revenue—					
Special appropriations . . . . .	450	556	874	1,333	1,396
Departments—					
Administrator—					
Administrator . . . . .	386	627	380	446	538
Legislative and Administrator's Councils(a) . . . . .	31	43	97	123	145
Information and Extension Services . . . . .	133	175	200	296	290
Public Service Commissioner(b) . . . . .	186	222	246	319	429
Treasury—					
Central Treasury . . . . .	1,231	1,501	1,641	1,705	3,983
Taxation Branch . . . . .	44	52	60	69	75
Motor Transport Branch . . . . .	(c)	512	564	702	846
Stores and Supply Branch(d) . . . . .	1,688	2,712	2,761	3,019	2,475
Government Printing Office . . . . .	(e)	76	88	110	100
Public Health . . . . .	2,486	2,775	2,997	3,308	3,385
District Administration(f) . . . . .	1,044	1,231	1,547	1,812	1,631
Agriculture, Stock and Fisheries . . . . .	894	1,062	1,334	1,564	1,407
Education . . . . .	2,333	3,007	3,852	4,554	4,638
Labour . . . . .	82	99	140	186	189
Police . . . . .	690	716	893	1,193	1,973
Law—					
Law(g) . . . . .	170	200	241	357	381
Corrective Institutions Branch . . . . .	97	116	137	191	385
Lands, Surveys and Mines . . . . .	430	515	645	617	729
Forests . . . . .	141	178	220	316	287
Posts and Telegraphs . . . . .	995	1,200	1,311	1,585	1,794
Trade and Industry(h) . . . . .	463	542	746	936	738
Public Works—					
Public works . . . . .	440	575	1,300	1,274	1,298
General maintenance . . . . .	2,640	3,141	3,573	3,569	3,815
Capital works and services(i) . . . . .	6,228	7,158	7,525	11,801	8,687
Purchase of capital assets . . . . .	883	1,520	1,618	1,883	1,673
<i>Expenditure from revenue . . . . .</i>	<i>24,163</i>	<i>30,511</i>	<i>34,988</i>	<i>43,268</i>	<i>43,286</i>
Expenditure chargeable to					
Loan Fund . . . . .	754	1,277	2,407	..	..
<b>Total expenditure . . . . .</b>	<b>24,917</b>	<b>31,787</b>	<b>37,395</b>	<b>43,268</b>	<b>43,286</b>

(a) Includes the Administrator's Council which replaced the Executive Council during 1960-61 and the House of Assembly which replaced the Legislative Council during 1963-64. (b) Includes expenditure of the Administrative College. (c) Transport costs transferred to consuming departments. (d) Includes costs of general stores for all departments except Public Works. (e) Printing costs transferred to consuming departments. (f) Before 1964-65, Department of Native Affairs. (g) Up to 1963-64 the Land Titles Commission was included in the Department of Law. The two figures have been combined for 1964-65 and 1965-66. (h) Includes Trade and Industry, Customs and Migration, and Marine. (i) Additional expenditure on this item included under 'Expenditure chargeable to Loan Fund'.

## TRUST TERRITORY OF NEW GUINEA

### General description

#### Area, etc.

The Trust Territory of New Guinea extends almost from the equator to latitude 8° S., a distance of 400 nautical miles, and from longitude 141° E. to 160° E., a distance of 1,000 nautical miles. The land area is 92,160 square miles, that of the New Guinea mainland being 69,095 square miles and that of adjacent islands, including the two northernmost islands of the Solomon Islands, Buka and Bougainville, and the Bismarck Archipelago, 23,065 square miles. Information regarding physiography and climate will be found in Year Book No. 22, page 613, in the *Official Handbook of the Territory of New Guinea*, and the Administration Annual Reports.

#### Administration

The terms of the League of Nations mandate (1920) of the former German possession of New Guinea are given in Year Book No. 33 (see page 264). Particulars of the administration of the Territory of New Guinea prior to the setting-up of the Papua and New Guinea Administration are given in Year Book No. 36 and earlier issues, and of events following the outbreak of the Pacific War in Year Book No. 37 and subsequent issues up to No. 48.

Following the 1939-45 War the Commonwealth Government undertook to place the Territory of New Guinea under the Trusteeship System established under the Charter of the United Nations. The Trusteeship Agreement for the Territory, under which the Government of Australia is the sole administering authority, was approved by the General Assembly of the United Nations Organization on 13 December 1946. The terms of the Agreement are shown in Year Book No. 39, pages 355-7.

For administrative purposes the Territory is divided into the following twelve districts: East New Britain and West New Britain, comprising New Britain and the adjacent islands; Morobe, Madang, Eastern Highlands, Chimbu, Western Highlands, East Sepik and West Sepik on the mainland; New Ireland, comprising New Ireland, Lavongai and adjacent islands; Manus, comprising the Admiralty Group; and Bougainville in the Solomon Islands. Each district is administered by a District Commissioner.

### Population

#### Indigenous population

The indigenous people of the Territory may in general be grouped with the Melanesians who occupy the greater part of the Western Pacific. They may be divided into two main types—Melanesian and Papuan—the former, with a few exceptions, constituting the population of the Bismarck Archipelago, the Solomon Islands and the coastal districts of the New Guinea mainland, the latter inhabiting the interior of the mainland. Some tribes of Negritos exist in the mountains of New Guinea. There is a strain of Papuan, and, possibly, of Polynesian blood in the Admiralty Islanders, while the Western Islanders and the inhabitants of the small islands east and south-east of New Ireland are Micronesians. (See Year Book No. 16, page 670, and *Official Handbook of the Territory of New Guinea*, Part V.)

The indigenous population of the Territory at the census of 30 June 1966 is shown on page 1197. At 30 June 1967 the estimated indigenous population was 1,635,902 persons, comprising Bougainville, 68,566; Eastern Highlands, 213,249; Chimbu, 175,669; Western Highlands, 311,908; Madang, 156,375; Manus, 23,126; Morobe, 224,672; East New Britain, 91,709; West New Britain, 47,548; New Ireland, 45,392; East Sepik, 153,444; and West Sepik, 124,244.

#### Non-indigenous population

The non-indigenous population of the Territory of New Guinea at the 1966 Census is shown on page 1197. At 30 June 1967 the estimated non-indigenous population of the Territory was 13,685 males, 9,671 females, 23,356 persons.

### Land tenure

The principles governing the acquisition and ownership of land and types of tenure available in New Guinea are in general similar to those which obtain in Papua, and grants of estates are restricted to leasehold tenure. In New Guinea, however, the amount of freehold land of earlier origin held by

private non-indigenous owners amounts to more than half a million acres. Freehold titles to this land, which includes a good deal of plantation land, may be transferred by purchase, subject only to the general provision that dealings in land require the approval of the Administrator.

The area of the Territory of New Guinea is estimated at approximately 59,000,000 acres, of which at 30 June 1967 only 1,721,710 acres were alienated. The following was the distribution of alienated land according to tenure at 30 June 1967: held by private non-indigenous inhabitants—freehold, 525,830 acres, leasehold, 425,160 acres; native reserves, 26,810 acres; other Administration land, including land reserved for public purposes, 743,910 acres.

Under German law there was a system of registration of titles in a Ground Book, but registration did not necessarily confer an indefeasible title. The German system has been replaced by one modelled on the Torrens plan, embodied in the *Lands Registration Ordinance* 1924–1962. The land registers were lost during the 1939–45 War, but provision for restoration of the lost titles is made in the *New Guinea Land Titles Restoration Ordinance* 1951–1966.

## Production

The products of the Territory are obtained principally from its agricultural, mining, fishing, and forestry industries. A copra crushing mill near Rabaul, established in 1952, commenced crushing at about 18,000 tons of copra per annum, and its capacity is now about 60,000 tons of copra per annum. At Bulolo a company is producing high quality moisture-proof plywood in a factory with an approximate annual plywood production of 28 million square feet (on a  $\frac{3}{4}$  in basis). Native subsistence agriculture, fishing and hunting produce most of the food requirements of the indigenous population. The main native agricultural products are taro, yams, sweet potatoes, coconuts, bananas, papaws. Non-indigenous enterprise produces most of the commodities exported. Indigenes, however, produce copra for export, and in recent years have taken up the production of introduced crops such as peanuts, rice, cucurbits, and maize for their own consumption and cocoa, coffee and pyrethrum for export. The principal agricultural products of New Guinea for the export trade are copra and coconut oil, cocoa, and coffee, but exports of timber and timber products are substantial. The main products of fisheries exported from New Guinea are trochus and green snail shell, including that collected by indigenes. Gold is the principal mineral mined. Indigenes are taking an increasing interest in mining for alluvial gold on their own account, and production from this source is continually rising, in contrast to falling European production.

For information on the agricultural and animal industries, which for the sake of convenience covers the Territories of Papua and New Guinea singly and combined, see pages 1199–1203. The following paragraphs relate to the timber, fishing and mining industries in the Territory of New Guinea alone.

### Timber

Various species of timber are found in the Territory, and one accessible pure stand is the valuable pine forests of the Bulolo Valley. This timber is used mainly for the production of plywood and veneer. The Territory forests also provide fitches, battery veneer, and egg-case parts. The Administration operates a training centre for forestry workers, nurseries and a herbarium, and is establishing a research institute in Port Moresby.

The Government intends to make available a number of large-scale permit areas containing from 2,000 to 5,000 million super feet of timber to help overcome the problems of multiplicity of species and continuity of supply of particular species. In opening up these major permit areas consultants are being employed to investigate the forest resources, assess the market potential and recommend working places and forms of processing for each area. Present policy calls for the orderly development of the timber industry on sound forestry principles to ensure no waste of the resources and no over-exploitation. Timber growing on native lands cannot be acquired by private purchasers direct from the native people, but must be obtained through the Administration. Royalty is payable on all forest produce taken under permit or licence. Reforestation of areas dedicated for forestry in perpetuity is carried out by the Administration.

At 30 June 1967, 59 permits and 18 licences were current, the total areas of forest involved being 682,395 acres and 48,101 acres respectively. The total number of logging mills was 47, and the total sawn timber produced during 1966–67 was 21.4 million super feet.

### Mining

The production of gold and associated silver is the most important mining activity in New Guinea, although other minerals, such as osmiridium, platinum, copper, iron ore, sulphur, and brown coal, have been discovered. The production of gold in New Guinea since the 1939–45 War has been on a

much smaller scale than before the war, decreasing from \$1,410,000 in 1959-60 to \$893,000 in 1966-67. The discovery of extensive low-grade copper deposits on Bougainville has given impetus to the copper industry in the Territory.

The laws in operation governing mining are the *Mining Ordinance* 1928-1966, the *Mines and Works Regulation Ordinance* 1935-1966 and the *Mining Development Ordinance* 1955-1960 and the regulations made thereunder.

The *Petroleum (Prospecting and Mining) Ordinance* 1951-1965 deals with the issue of permits and the granting of licences and leases for oil exploration. There were three prospecting permits for oil current at June 1967.

### Water power

An approach was made during 1966-67 to the International Bank for Reconstruction and Development with regard to a loan for the Upper Ramu Hydro-electric Scheme, a 72 MW project planned for supplying Lae, Madang, Goroka, Mount Hagen, and intervening areas. Officials of the Bank examined the Scheme, and further investigations recommended by the Bank are being carried out.

## Trade, transport and communication

### Value of imports and exports

#### TERRITORY OF NEW GUINEA: IMPORTS AND EXPORTS 1962-63 TO 1966-67 (\$'000)

	1962-63	1963-64	1964-65	1965-66	1966-67
<i>Total imports(a)</i>	35,652	43,119	54,113	67,566	76,133
Exports—					
Domestic exports	27,689	31,342	37,237	37,431	40,262
Re-exports	1,921	2,372	2,858	3,458	4,120
<i>Total exports</i>	29,610	33,714	40,095	40,889	44,382

(a) Includes outside packages.

### Countries of origin or destination

#### TERRITORY OF NEW GUINEA: COUNTRY OF ORIGIN OF IMPORTS(a), 1962-63 TO 1966-67 (\$'000)

Country of origin	1962-63	1963-64	1964-65	1965-66	1966-67
Australia	19,448	24,029	29,355	36,466	40,002
China (mainland)	196	587	991	1,288	1,728
Germany (Federal Republic of)	1,290	1,433	1,909	1,644	2,024
Hong Kong	1,991	2,625	2,657	2,913	2,958
India	293	303	250	449	313
Indonesia	1,646	427	184	98	81
Japan	2,620	3,749	5,427	6,884	8,906
Malaysia (including Singapore)	127	885	852	2,376	360
Netherlands	302	343	390	346	4,049
United Kingdom	2,728	2,752	4,404	5,617	4,430
United States of America	2,455	2,782	3,436	4,583	4,590
Other countries	2,556	3,204	4,258	4,902	6,692
<i>Total</i>	35,652	43,119	54,113	67,566	76,133

(a) Includes outside packages.

**TERRITORY OF NEW GUINEA: COUNTRY OF DESTINATION OF  
EXPORTS, 1962-63 TO 1966-67**

(\$'000)

<i>Country of destination</i>	<i>1962-63</i>	<i>1963-64</i>	<i>1964-65</i>	<i>1965-66</i>	<i>1966-67</i>
Australia . . . . .	12,054	14,936	16,758	16,274	17,864
Germany, Federal Republic of . . . . .	1,373	1,616	2,690	2,255	3,017
Japan . . . . .	999	1,569	1,547	1,700	2,364
Netherlands . . . . .	1,577	2,218	1,625	1,436	1,071
United Kingdom . . . . .	10,532	10,976	13,849	15,405	13,617
Other countries . . . . .	3,076	2,399	3,626	3,819	6,449
<b>Total . . . . .</b>	<b>29,610</b>	<b>33,714</b>	<b>40,095</b>	<b>40,889</b>	<b>44,382</b>

**Principal commodities exported**

**TERRITORY OF NEW GUINEA: PRINCIPAL DOMESTIC EXPORTS**

1962-63 TO 1966-67

(\$'000)

<i>Commodity</i>	<i>1962-63</i>	<i>1963-64</i>	<i>1964-65</i>	<i>1965-66</i>	<i>1966-67</i>
Copra . . . . .	7,352	8,050	9,604	11,749	7,911
Other coconut products . . . . .	5,326	5,189	7,425	6,589	5,840
Cocoa beans . . . . .	5,863	6,743	6,977	4,311	9,336
Coffee beans . . . . .	4,024	5,326	7,276	8,712	10,095
Peanuts . . . . .	592	573	461	527	521
Crocodile skins . . . . .	374	377	464	378	392
Gold . . . . .	1,334	1,320	1,076	945	913
Shell (marine) . . . . .	38	77	47	30	76
Timber . . . . .	1,115	1,329	1,416	1,683	2,255
Plywood . . . . .	1,390	1,948	2,021	1,903	2,040
Veneer . . . . .	72	68	73	83	127
Other . . . . .	209	342	397	521	756
<b>Total . . . . .</b>	<b>27,689</b>	<b>31,342</b>	<b>37,237</b>	<b>37,431</b>	<b>40,262</b>

**Shipping**

Regular passenger and freight services operate between Australia, Papua and the Territory of New Guinea. Vessels trading between the East and Australia and the Pacific Islands call at Territory ports, and there are monthly services from continental and United Kingdom ports. Coastal and inter-island shipping services are maintained by vessels operating from the principal ports of the Territory. Shipping within the Territory is regulated by the *Shipping Ordinance* 1951-1960 and the Coastal Shipping, Ports and Harbours Regulations. Main ports of call for overseas vessels are Lae, Madang, Wewak (mainland), Rabaul (New Britain), and Kavieng (New Ireland). In 1966-67 shipping entries at Territory ports totalled 1,054, and 473,087 tons of cargo were discharged and 303,108 tons loaded. Corresponding figures for 1965-66 were 912, 436,390, 262,576 respectively. There are no inland waterways, and the natural river system is not generally suitable for vessels except those of small tonnage.

**Other forms of transport and communication**

There are no railways in New Guinea, but a road construction programme is being undertaken progressively to assist the economic development of the Territory. Road transport services operate in the main towns and on the trunk roads linking Rabaul and Kokopo; Lae, Bulolo and Wau; Kavieng and Namatanai; and on the network in the Eastern and Western Highland Districts centred on Goroka and Mount Hagen. The total mileage of roads in the Territory of New Guinea at 30 June 1967 was 5,286, of which 1,888 were adequately paved. Total motor vehicle registrations (excluding defence force vehicles) at 31 December 1966 were 10,727.

Scheduled flights provide a network of air transport throughout New Guinea, and regular air services link the Territory with Australia and neighbouring territories and also with Manila and Hong Kong. There were 249 aerodrome and seaplane alighting areas in New Guinea at 30 June 1967, and of these 10 were controlled by the Department of Civil Aviation, 73 by the Administration, and 166 by private interests.

Telephone services are operated in the main centres by the Administration, and radio telephone trunk circuits link Port Moresby with Lae, Rabaul, Wewak, and Madang. The latter is connected via the SEACOM cable operated by the Overseas Telecommunications Commission with Australia



and south-east Asia. Nine zone or group centres for radio telegraph communications with about 725 out-stations have been established at Lae, Rabaul, Kavieng, Lorengau, Madang, Mount Hagen, Wewak, Sohano, and Goroka.

The Australian Broadcasting Commission broadcasts from medium wave station 9RB Rabaul. The Administration Department of Information and Extension Services operates transmitters at Goroka, Kieta, Mount Hagen, Rabaul and Wewak. The stations broadcast a balanced programme of news, information, health features and entertainment designed particularly for the people in the district in which each is located.

## Education and health

### Education

Education in the Territory is provided by the Administration and various Mission organisations. Schools for indigenes have also been established by Local Government Councils. The *Education Ordinance* 1952-1965 enables the Administrator to establish an education advisory board, district education committees and schools for all sections of the community, and to grant financial aid for educational purposes. Expatriate teachers are recruited from Australia and overseas, and indigenous teachers are trained in the Territory by the Administration and the Missions. During the year ended 30 June 1967, 355 schools were maintained by the Administration for 53,140 children. In addition, there is a correspondence school. The total number of pupils in the various grades of mission schools, excluding exempt schools, was 98,706. To assist the educational work of the Missions the Administration provides expert advice, educational equipment and text-books. In addition, the sum of \$1,405,000 was distributed among the Missions as grants-in-aid during the year ended 30 June 1967.

### Health

The cases treated in hospital are mainly pneumonia, gastro-enteritis, skin diseases, malaria, accidents, diseases due to old age, and confinements. At 30 June 1967 there were 73 Administration hospitals, including 3 Hansenide colonies, 2 tuberculosis hospitals, and 1 Hansenide and tuberculosis hospital. The Missions have established an additional 81 hospitals, including 3 Hansenide colonies and 1 Hansenide and tuberculosis hospital. There were 1,130 village aid posts or medical centres (162 conducted by Missions) and 2,173 maternity and child welfare centres (1,589 provided by Missions). The Missions staff their own medical establishments but receive financial assistance from the Administration, which also provides much of their medical stores and supplies.

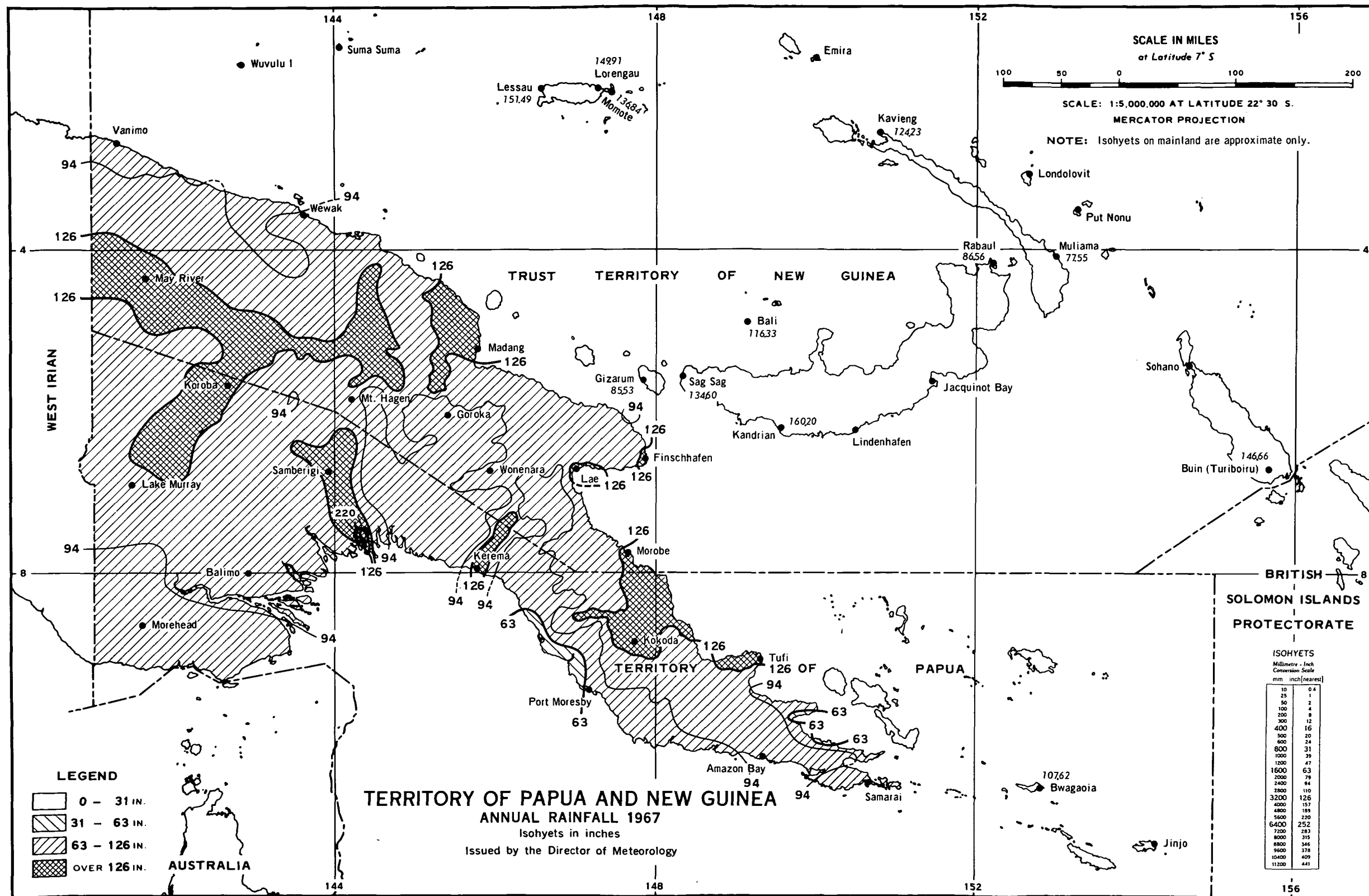
## Finance

### TRUST TERRITORY OF NEW GUINEA: REVENUE AND EXPENDITURE 1962-63 TO 1966-67 (\$'000)

	1962-63	1963-64	1964-65	1965-66	1966-67
REVENUE					
Customs . . . . .	3,974	4,412	5,332	6,951	9,037
Licences . . . . .	191	231	275	331	397
Stamp duties . . . . .	141	114	99	191	172
Postal . . . . .	514	705	963	1,111	1,353
Land revenue . . . . .	133	195	205	335	443
Mining receipts . . . . .	25	25	26	29	25
Fees and fines . . . . .	42	55	74	101	131
Health revenue . . . . .	123	128	141	154	183
Forestry . . . . .	318	315	389	453	484
Agriculture . . . . .	213	299	338	494	673
Direct taxation(a) . . . . .	2,428	2,971	3,876	4,478	5,647
Public utilities . . . . .	765	207	153	204	240
Miscellaneous . . . . .	773	2,608	3,034	3,627	3,942
Territory loans(b) . . . . .	..	..	..	3,671	4,053
<i>Total internal revenue</i> . . . . .	<i>9,640</i>	<i>12,265</i>	<i>14,906</i>	<i>22,130</i>	<i>26,783</i>
Grant by Commonwealth of Australia . . . . .	24,272	30,477	33,873	38,179	49,979
<b>Total revenue</b> . . . . .	<b>33,912</b>	<b>42,741</b>	<b>48,780</b>	<b>60,309</b>	<b>76,762</b>

(a) Includes Personal Tax.

(b) Previously deducted from expenditure.





TRUST TERRITORY OF NEW GUINEA: REVENUE AND EXPENDITURE  
1962-63 TO 1966-67—*continued*  
(\$'000)

	1962-63	1963-64	1964-65	1965-66	1966-67
EXPENDITURE					
Expenditure from revenue—					
Special appropriations . . . . .	763	923	1,420	1,969	2,641
Departments—					
Administrator—					
Administrator . . . . .	527	942	606	423	767
Legislative and Administra- tor's Councils(a) . . . . .	52	71	157	182	274
Information and Extension Ser- vices . . . . .	213	285	332	354	457
Public Service Commissioner(b)	315	369	400	471	811
Treasury—					
Central Treasury . . . . .	1,835	2,124	2,297	2,302	6,563
Taxation Branch . . . . .	74	87	97	102	142
Motor Transport Branch . . . . .	(c)	1,147	1,304	1,550	1,678
Stores and Supply Branch(d) . . . . .	2,842	4,502	4,516	4,949	4,685
Government Printing Office . . . . .	(e)	126	142	163	189
Public Health . . . . .	4,319	4,702	5,079	6,119	6,890
District Administration(f)	1,897	2,108	2,511	2,940	4,077
Department of Agriculture, Stock and Fisheries . . . . .	1,556	1,916	2,372	2,771	3,782
Education . . . . .	3,938	4,911	5,945	6,902	8,337
Labour . . . . .	210	235	286	286	406
Police . . . . .	1,239	1,253	1,454	1,769	3,267
Law—					
Law(g) . . . . .	358	417	472	660	808
Corrective Institutions Branch . . . . .	131	185	221	318	600
Lands, Surveys and Mines . . . . .	690	869	967	1,241	1,487
Forests . . . . .	640	674	773	828	1,141
Posts and Telegraphs . . . . .	1,327	1,537	1,782	1,943	2,455
Trade and Industry(h) . . . . .	553	674	785	809	1,226
Public Works . . . . .	746	954	2,248	2,078	2,416
General maintenance . . . . .	3,629	3,727	4,428	5,157	5,893
Capital works and services(i)	4,689	5,919	6,107	11,422	12,534
Purchase of capital assets . . . . .	1,370	2,085	2,077	2,601	3,234
Expenditure from revenue . . . . .	33,912	42,741	48,780	60,309	76,762
Expenditure chargeable to Loan Fund—					
Capital works and services . . . . .	1,043	2,119	3,911	..	..
Total expenditure . . . . .	34,955	44,861	52,691	60,309	76,762

(a) Includes the Administrator's Council, which replaced the Executive Council during 1960-61, and the House of Assembly, which replaced the Legislative Council during 1963-64. (b) Includes the Administrative College. (c) Transport costs transferred to consuming departments. (d) Includes costs of general stores for all departments except Public Works. (e) Printing costs transferred to consuming departments. (f) Before 1964-65, Department of Native Affairs. (g) Up to 1963-64 the Land Titles Commission was included in the Department of Law. The two figures have been combined for 1964-65 and 1965-66. (h) Includes Trade and Industry, Customs and Migration, and Marine. (i) Additional expenditure on this item included under Expenditure chargeable to Loan Fund.

## HEARD ISLAND AND McDONALD ISLANDS

These islands, about 2,500 miles south-west of Fremantle, were transferred from the United Kingdom to Australia as from 26 December 1947. The laws of the Australian Capital Territory were declared to be in force in the Territory of Heard Island and McDonald Islands by the *Heard and McDonald Islands Act 1953*.

In December 1947 an Australian scientific station was established on Heard Island, and meteorological investigations were conducted until the station was closed in March 1955 following the establishment of Mawson station on the Antarctic mainland. Australian expeditions have since

visited the island from time to time. Heard Island is about twenty-seven miles long and thirteen miles wide. The McDonald Islands are twenty-six miles to the west of Heard Island. They are small, rocky and precipitous.

### AUSTRALIAN ANTARCTIC TERRITORY

An Imperial Order in Council of 7 February 1933 placed under Australian authority all the islands and territories other than Terre Adélie situated south of 60° S. latitude and lying between 160° E. longitude and 45° E. longitude. The Order came into force with a Proclamation issued by the Governor-General on 24 August 1936 after the passage of the *Australian Antarctic Territory Acceptance Act* 1933. The boundaries of Terre Adélie were definitively fixed by a French Decree of 1 April 1938 as the islands and territories south of 60° S. latitude lying between 136° E. longitude and 142° E. longitude. The *Australian Antarctic Territory Act* 1954 declared that the laws in force in the Australian Capital Territory are, so far as they are applicable and are not inconsistent with any ordinance made under the Act, in force in the Australian Antarctic Territory.

On 13 February 1954 the Australian National Antarctic Research Expeditions (ANARE) established a station on MacRobertson Land at latitude 67° 36' S. and longitude 62° 53' E. The station was named Mawson in honour of the late Sir Douglas Mawson and was the first permanent Australian station to be set up on the Antarctic continent. Meteorological and other scientific research is conducted at Mawson, which is the centre for coastal and inland survey expeditions.

A second Australian scientific research station was established on the coast of Princess Elizabeth Land on 13 January 1957 at latitude 68° 35' S. and longitude 77° 59' E. The station was named Davis in honour of the late Captain John King Davis of Melbourne, who commanded a number of famous Antarctic ships. The station was temporarily closed down in January 1965. In February 1959 the Australian Government accepted from the United States Government custody of Wilkes Station, which was established by the United States on 16 January 1957 on Vincennes Bay, at latitude 66° 15' S. and longitude 110° 33' E. The station was named in honour of Lieut. Charles Wilkes, who commanded the 1838-40 United States expedition to the area. A new station of advanced design is being constructed close to Wilkes which it will eventually replace. ANARE have also operated a station, since the 1947-48 Antarctic season, at Macquarie Island, approximately 850 miles south-east of Hobart. Macquarie Island is a dependency of the State of Tasmania.

On 1 December 1959 Australia signed the Antarctic Treaty with Argentina, Belgium, Chile, France, Japan, New Zealand, Norway, South Africa, the U.S.S.R., the United Kingdom, and the United States of America. Poland, Czechoslovakia and Denmark have subsequently acceded to the Treaty. The Treaty reserves the Antarctic area south of 60° S. latitude for peaceful purposes, provides for international co-operation in scientific investigation and research, and preserves, for the duration of the Treaty, the *status quo* with regard to territorial sovereignty, rights and claims. The Treaty entered into force on 23 June 1961. Since then the Antarctic Treaty powers have held four consultative meetings under the Treaty, the first at Canberra in July 1961, the second at Buenos Aires in July 1962, the third at Brussels in June 1964, and the fourth at Santiago in 1966. The fifth is to be held in Paris in 1968.

### COCOS (KEELING) ISLANDS

#### General description

The Cocos (Keeling) Islands, two separate atolls comprising some twenty-seven small coral islands with a total area of about 5½ square miles, are situated in the Indian Ocean in latitude 12° 5' S. and longitude 96° 53' E. They lie some 1,720 miles north-west of Perth and 2,290 miles almost due west of Darwin, while Johannesburg is some 3,800 miles further distant to the south-west and Colombo is 1,400 miles to the north-west of the group.

The main islands of the Territory are West Island, the largest, about six miles from north to south, on which are the aerodrome and most of the European community; Home Island, the headquarters of the Clunies-Ross Estate; Direction Island; and Horsburgh Island. North Keeling Island, which forms part of the Territory, lies about fifteen miles to the north of the groups and has no inhabitants.

Main settlements are on West Island and Home Island. The group of atolls is low-lying, flat and thickly covered by coconut palms, and surrounds a lagoon which has a harbour in the northern part but which is extremely difficult for navigation.

The climate is equable and pleasant, usually being under the influence of the south-east trade winds for about three-quarters of the year. However, the winds vary at times, and meteorological reports from the Territory are particularly valuable to those engaged in forecasting for the eastern Indian Ocean. The temperature varies between 70° and 89° F., and the average rainfall is about 67 inches. There are occasional violent storms. The estimated population at 30 June 1967 was 631 (341 males and 290 females).

#### History and administration

Summarised particulars of the discovery of the islands and their history up to 1946, when they became a dependency of the Colony of Singapore, are given in Year Book No. 51, page 140, and in earlier issues. On 23 November 1955 the Cocos Islands ceased to form part of the Colony of Singapore and were placed under the authority of the Commonwealth of Australia. The transfer was effected by an Order in Council made by Her Majesty Queen Elizabeth the Second under the Imperial Act entitled the Cocos Islands Act 1955 and by the *Cocos (Keeling) Islands Act 1955* of the Commonwealth whereby the islands were declared to be accepted by the Commonwealth as a Territory under the authority of the Commonwealth, to be known as the Territory of Cocos (Keeling) Islands.

Responsibility for the administration of the Territory rests with the Minister for External Territories. The first Official Representative was appointed on 23 November 1955 to take charge of the local administration of the Territory. Under the *Official Representative Ordinance 1955-1961* of the Territory, the Official Representative is given such powers and functions in relation to the Territory as are delegated to him by the Minister under the *Cocos (Keeling) Islands Act 1955-1966* or are otherwise conferred on him under that Act or by or under any other law of the Territory. The laws of the Colony of Singapore which were in force in the islands immediately before the date of the transfer were, with certain exceptions, continued in force by the *Cocos (Keeling) Islands Act 1955-1966*. They may be amended or repealed by Ordinances made under the provisions of that Act which empower the Governor-General to make Ordinances for the peace, order and good government of the Territory.

#### Transport and communication

There is an international airport at West Island under the control of the Commonwealth Department of Civil Aviation. Although there is no regular shipping service, vessels from Australia and Singapore call at intervals. A radio teletype link with Perth airport is maintained by the Department of Civil Aviation. Local postal and telephone services exist, and a non-commercial broadcasting station operates.

### CHRISTMAS ISLAND

Christmas Island is an isolated bank situated in the Indian Ocean in latitude 10° 25' S., longitude 105° 40' E. It is approximately 220 miles south from Java Head at the south entrance to Sunda Strait, 815 miles from Singapore and 1,630 miles from Fremantle. Christmas Island covers an area of about fifty-two square miles. It consists of a central plateau of about 600 to 800 feet with several prominent rises up to 1,170 feet. The plateau descends to the sea in a series of steep slopes alternating with terraces, the last dropping in a cliff of 200 to 300 feet to a shore terrace, terminating in a sea cliff of 10 to 150 feet, which is continuous round the island except in a few places, the chief of which is Flying Fish Cove, where the principal settlement is located and which is also the only known anchorage.

The climate is healthy and pleasant, and the prevailing winds come from the south-east to east-south-east from May to December, but from then to April (the wet season) they occasionally shift round to between north and west. The average yearly rainfall is about 80 inches with a marked summer incidence. The porous nature of the ground prevents the formation of pools of water, but there are several good springs which maintain an adequate supply of fresh water for the small population and the installations. The mean average temperature is about 80° and does not vary greatly throughout the year.

The economy of the Territory is based almost entirely on the mining and extraction of phosphate. Because of the nature of the land there appears little prospect of establishing any other economic activity.

At 30 June 1967 the estimated population was 3,653 (2,426 males and 1,227 females).

#### Education

At 30 June 1967 there were two school systems on the Island—the Christmas Island school system which serves the majority of the children, and a European school which serves a small number of children. The Christmas Island school system follows the Singapore curriculum, and has a staff of

23 teachers mostly recruited from Singapore, and 847 pupils (624 primary and 223 secondary). The European school follows the Western Australian primary school syllabus, with two teachers seconded from the Western Australian Department of Education, and 55 pupils.

#### **History and administration**

Summarised particulars of the history of Christmas Island up to its administration by the United Kingdom as a separate Crown Colony from 1 January 1958, pending transfer to Australia, are given in Year Book No. 51, page 141, and in earlier issues. On 1 October 1958 the island was transferred to the Commonwealth of Australia by the *Christmas Island Act* 1958 and is now administered as a Territory under the authority of the Commonwealth. Responsibility for the administration and government of the Territory rests with the Minister for Territories, and day to day affairs on the island are administered by an Official Representative under delegation from the Minister. The laws which were in force in the island at 30 September 1958 were continued as the laws of the Territory after its transfer to Australia.

#### **Phosphate deposits**

The only commercial activity carried out is the mining of phosphate. The British Phosphate Commissioners act as managing agents for the Christmas Island Phosphate Commission. There are three principal phosphate deposits on the islands, of which the largest is that now being worked at South Point. This field is situated on the 600 feet to 800 feet level and is approximately 12 miles from the drying and shipping plant at Flying Fish Cove. During 1966-67 approximately 995,000 tons of phosphate were exported to Australia and New Zealand. In addition some 100,000 tons of phosphate dust were exported to Malaysia, Singapore and Australia.

#### **Transport and communication**

Transport to and from the island is maintained by vessels operated under charter by the Christmas Island Phosphate Commission. One vessel makes regular trips between Christmas Island and Singapore, and other vessels carry phosphate to Australian ports and New Zealand.

A post office and internal telephone system are operated by the British Phosphate Commissioners. The latter comprises four automatic exchanges and three small subscriber-attended exchanges. A radio station is also operated by the Commissioners for messages via Perth and Singapore and for communication with ships at sea. A limited broadcasting station commenced operating during 1966-67.

## CHAPTER 30

### MISCELLANEOUS

This chapter comprises statistics and other descriptive information not directly related to the subjects of the preceding chapters, or which it is convenient to assemble in single sections, arranged as follows: Valuation of Australian production; Indexes of farm production; Consumption of foodstuffs and beverages; Retail trade; Interstate trade; Statistical organisation in Australia; Statistical and other official publications of Australia.

#### VALUATION OF AUSTRALIAN PRODUCTION

The value of production for Australia is computed in accordance with the decisions reached at the Conferences of Australian Statisticians and principally at the Conference held in 1935. The figures published in the following tables have been compiled by the Statisticians in the various States from the latest and best data available and are on a substantially uniform basis. However, marketing costs are not on a completely comparable basis between States and, in addition, accurate information is difficult to obtain for many items. In consequence, differences between States in the relationships of local to gross value should be treated with some reserve.

Attention is directed to the fact that the values shown in the tables herein refer only to the production of primary industries and factories, and exclude the building and construction industry, those industrial establishments not classified as factories, and certain agricultural and farmyard produce obtained from areas of less than one acre.

#### Explanation of terms used

The following is a brief explanation of the terms used.

- (a) *Gross value of production* is the value placed on recorded production at the wholesale price realised at the principal markets. In general, the 'principal markets' are the metropolitan markets in each State. In cases where primary products are consumed at the place of production or where they become raw material for a secondary industry, these points of consumption are presumed to be the principal markets.
- (b) *Local value* (i.e. gross production valued at the place of production) is ascertained by deducting marketing costs from the gross value. Marketing costs include freight, cost of containers, commission, and other charges incidental thereto.
- (c) *Net value of production* represents local value less value of materials used in the process of production. Materials used in the process of production include seed, power, power kerosene, petrol and other oils, fodder consumed by farm stock, manures, dips, sprays, and other costs. No deductions have been made for depreciation or certain maintenance costs, as particulars are not available for all States. The net value of production is the only satisfactory measure to use when comparing or combining the value of primary industries with those of other industries.

For the years shown in the following tables, no allowance for power, power kerosene, petrol, and other oils has been made in New South Wales. In the case of the mining and quarrying industry, however, this allowance has been made in all States. Marketing costs for mining and quarrying and costs of materials used in the process of production in respect of bee-farming, trapping, forestry, and fisheries are not available for all States. Local values have been used for these industries, with consequent understatement in gross value for the mining and quarrying industry and overstatement in net value for the other industries. Because of revisions, some figures for the fisheries and mining and quarrying industries differ from corresponding figures in earlier chapters of this Year Book.



## Value of production, Australia

**GROSS, LOCAL AND NET VALUE OF PRODUCTION OF PRIMARY INDUSTRIES AND FACTORIES: AUSTRALIA, 1966-67**  
(\$'000)

<i>Industry</i>	<i>Gross production valued at principal markets</i>	<i>Local value—gross production valued at place of production</i>	<i>Net value of production (without deduction of depreciation or maintenance)</i>
Agriculture . . . . .	1,644,756	1,392,900	1,214,486
Pastoral . . . . .	1,486,066	1,367,547	1,181,848
Dairying . . . . .	523,814	495,599	372,066
Poultry . . . . .	174,451	154,045	69,908
Bee-farming . . . . .	3,992	3,278	(a)3,278
<i>Total, rural . . . . .</i>	<i>3,833,076</i>	<i>3,413,371</i>	<i>2,841,586</i>
Trapping . . . . .	13,525	11,948	(a)11,948
Forestry . . . . .	121,619	111,892	(a)111,892
Fisheries . . . . .	48,847	44,574	(a)44,574
Mining and quarrying(b) . . . . .	(a)630,396	630,396	516,228
<i>Total, non-rural . . . . .</i>	<i>814,390</i>	<i>798,810</i>	<i>684,642</i>
<i>Total, all primary . . . . .</i>	<i>4,647,467</i>	<i>4,212,180</i>	<i>3,526,226</i>
Factories . . . . .	(c)6,887,305	(c)6,887,305	6,887,305
<b>Grand total . . . . .</b>	<b>11,534,772</b>	<b>11,099,485</b>	<b>10,413,531</b>

(a) Local value. (b) Year ended 31 December 1966. (c) Net value.

## Net value of production

**NET(a) VALUE OF PRODUCTION OF PRIMARY INDUSTRIES AND FACTORIES: STATES AND TERRITORIES, 1966-67**  
(\$'000)

<i>Industry</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
Agriculture . . . . .	407,909	255,016	229,426	137,042	154,821	29,381	354	537	1,214,486
Pastoral . . . . .	351,488	315,142	222,178	134,608	126,049	21,566	9,256	1,561	1,181,848
Dairying . . . . .	120,355	145,694	50,026	25,266	11,060	19,161	113	391	372,066
Poultry . . . . .	21,609	32,464	6,296	2,610	3,801	2,760	200	167	69,908
Bee-farming(b) . . . . .	1,088	758	320	613	442	44	..	13	3,278
<i>Total, rural . . . . .</i>	<i>902,450</i>	<i>749,074</i>	<i>508,246</i>	<i>300,139</i>	<i>296,173</i>	<i>72,912</i>	<i>9,923</i>	<i>2,669</i>	<i>2,841,586</i>
Trapping(b) . . . . .	4,487	3,976	1,502	669	758	477	79	..	11,948
Forestry(b) . . . . .	30,967	31,982	12,631	8,853	12,473	14,332	303	351	111,892
Fisheries(b) . . . . .	8,836	4,307	6,436	5,420	16,469	3,024	82	..	44,574
Mining and quarrying(c) . . . . .	216,904	43,388	118,177	36,250	63,811	25,828	11,070	800	516,228
<i>Total, non-rural . . . . .</i>	<i>261,193</i>	<i>83,653</i>	<i>138,746</i>	<i>51,192</i>	<i>93,511</i>	<i>43,660</i>	<i>11,536</i>	<i>1,151</i>	<i>684,642</i>
<i>Total, all primary . . . . .</i>	<i>1,163,643</i>	<i>832,727</i>	<i>646,992</i>	<i>351,331</i>	<i>389,684</i>	<i>116,572</i>	<i>21,457</i>	<i>3,820</i>	<i>3,526,226</i>
Factories . . . . .	2,938,227	2,235,430	592,607	563,975	335,788	194,571	7,847	18,860	6,887,305
<b>Grand total . . . . .</b>	<b>4,101,870</b>	<b>3,068,157</b>	<b>1,239,599</b>	<b>915,306</b>	<b>725,472</b>	<b>311,143</b>	<b>29,304</b>	<b>22,680</b>	<b>10,413,531</b>

(a) See letterpress on page 1221. (b) Local value. (c) Year ended 31 December 1966.

NET(a) VALUE OF PRODUCTION OF PRIMARY INDUSTRIES AND FACTORIES PER  
HEAD OF POPULATION, STATES, 1966-67

(\$)

<i>Industry</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>Aust.(b)</i>
Agriculture . . .	95.47	78.47	135.91	124.14	179.58	78.58	103.73
Pastoral . . .	82.26	96.97	131.62	121.93	146.21	57.68	100.94
Dairying . . .	28.17	44.83	29.63	22.89	12.83	51.24	31.78
Poultry . . .	5.06	10.00	3.73	2.36	4.41	7.38	5.97
Bee-farming(c) . .	0.25	0.23	0.19	0.56	0.51	0.12	0.28
<i>Total, rural . . .</i>	<i>211.21</i>	<i>230.49</i>	<i>301.08</i>	<i>271.87</i>	<i>343.54</i>	<i>195.00</i>	<i>242.69</i>
Trapping(c) . . .	1.05	1.22	0.89	0.61	0.88	1.28	1.02
Forestry(c) . . .	7.25	9.84	7.48	8.02	14.47	38.33	9.56
Fisheries(c) . . .	2.07	1.33	3.81	4.91	19.10	8.09	3.81
Mining and quarrying(d) .	50.77	13.35	70.01	32.84	74.02	69.07	44.09
<i>Total, non-rural . .</i>	<i>61.13</i>	<i>25.74</i>	<i>82.19</i>	<i>46.37</i>	<i>108.47</i>	<i>116.76</i>	<i>58.47</i>
<i>Total, all primary . .</i>	<i>272.34</i>	<i>256.23</i>	<i>383.27</i>	<i>318.24</i>	<i>452.00</i>	<i>311.76</i>	<i>301.14</i>
Factories . . .	687.67	687.84	351.05	510.86	389.49	520.36	588.22
<b>Grand total . . .</b>	<b>960.02</b>	<b>944.07</b>	<b>734.33</b>	<b>829.10</b>	<b>841.49</b>	<b>832.12</b>	<b>889.38</b>

(a) See letterpress on page 1221. (b) Includes Northern Territory and Australian Capital Territory. (c) Local value. (d) Year ended 31 December 1966.

NET(a) VALUE OF PRODUCTION OF PRIMARY INDUSTRIES AND  
FACTORIES: AUSTRALIA, 1962-63 TO 1966-67

(\$'000)

<i>Industry</i>	<i>1962-63</i>	<i>1963-64</i>	<i>1964-65</i>	<i>1965-66</i>	<i>1966-67</i>
Agriculture . . .	830,414	917,388	975,164	860,428	1,214,486
Pastoral . . .	1,078,698	1,340,578	1,221,300	1,188,536	1,181,848
Dairying . . .	307,358	330,218	360,737	349,853	372,066
Poultry . . .	52,836	61,508	50,916	62,636	69,908
Bee-farming(b) . .	2,990	5,144	4,118	3,515	3,278
<i>Total, rural . . .</i>	<i>2,272,296</i>	<i>2,654,836</i>	<i>2,612,235</i>	<i>2,464,965</i>	<i>2,841,586</i>
Trapping(b) . . .	11,416	13,364	13,060	13,824	11,948
Forestry(b) . . .	96,102	102,624	111,139	114,603	111,892
Fisheries(b) . . .	30,622	31,684	38,685	41,725	44,574
Mining and quarrying(c) .	291,028	327,664	400,119	443,854	516,228
<i>Total, non-rural . .</i>	<i>429,168</i>	<i>475,336</i>	<i>563,000</i>	<i>614,007</i>	<i>684,642</i>
<i>Total, all primary . .</i>	<i>2,701,464</i>	<i>3,130,172</i>	<i>3,175,235</i>	<i>3,078,975</i>	<i>3,526,226</i>
Factories(d) . . .	4,795,241	5,270,003	5,896,754	6,251,861	6,887,305
<b>Grand total . . .</b>	<b>7,496,705</b>	<b>8,400,176</b>	<b>9,071,989</b>	<b>9,330,836</b>	<b>10,413,531</b>

(a) See letterpress on page 1221. (b) Local value. (c) Year ended 31 December of first year shown. (d) Excludes Northern Territory and Australian Capital Territory prior to 1964-65.

## INDEXES OF FARM PRODUCTION

In the first two tables in this section indexes of price and quantum (i.e. value at constant prices) of production are given for the following industrial groups: Agriculture, Pastoral, Dairying, poultry and bee-farming, and All farming combined (including separate indexes for Wool and Products other than wool). In the third table indexes of quantum (i.e. value at constant prices) of production, exports and consumption of farm products for food use are shown.

## Farm production price indexes

The farm production price indexes shown in the following table relate to average 'prices' of agricultural, pastoral, dairying, poultry and bee-farming products realised at the principal markets of Australia. The 'price' data used are average unit values for the total quantities of the relevant commodities produced or marketed in each year, and the index numbers therefore measure both the effects of changes in prices (as such) and of variations in the quality, type, usage, etc. of products marketed. The index numbers for any year relate to the average values of products produced or marketed in that year irrespective of the periods in which payment is received by producers.

The indexes have been calculated by the fixed-base weighted aggregative method. 'Prices' for each commodity in any year are obtained by dividing gross value of production by the quantity produced in that year. In the original published series of Production Price Index Numbers the average quantities of the relevant commodities *produced* in the period 1923-24 to 1927-28 were used as fixed weights. This series, re-computed to the base average 1936-37 to 1938-39 = 100, was published in earlier issues of the Year Book (see No. 43, page 1050). For 1936-37 and later years the original series was replaced in December 1952 by a revised series in which average quantities of each product *marketed* during the period 1946-47 to 1950-51 were used as fixed weights. In the revised series the regimen was extended and modified to include farm products (as defined by Australian Statisticians) in all cases. Certain other refinements were also incorporated in the revised indexes, the principal of which was the omission from the weights used for the All farming index of quantities of crops marketed for livestock feeding in Australia.

FARM PRODUCTION: INDEXES OF PRICES AT PRINCIPAL MARKETS, AUSTRALIA  
1952-53 TO 1966-67

(Base: Average of 3 years ended June 1939 = 100)

Year	Agriculture	Pastoral	Dairying, poultry and bee- farming	All farming	Wool (shorn and dead)	Products other than wool
1952-53	364	531	387	440	623	379
1953-54	324	534	395	429	621	365
1954-55	316	489	371	401	540	355
1955-56	330	451	392	397	468	373
1956-57	336	536	386	432	607	374
1957-58	336	435	382	388	473	359
1958-59	322	396	386	369	370	369
1959-60	329	464	402	403	440	391
1960-61	349	443	402	401	397	403
1961-62	348	421	373	385	412	376
1962-63	334	450	388	396	449	378
1963-64	351	511	402	431	531	398
1964-65	351	460	423	415	437	408
1965-66	354	501	422	431	458	423
1966-67	350	496	418	427	433	425

**Indexes of quantum (i.e. value at constant prices) of farm production**

The indexes shown in the following table relate to gross output of farm products valued at constant prices. They have been calculated by revaluing quantities of each farm product included in the indexes at the average unit gross value of each product for the base years.

In the original published series the period 1923-24 to 1927-28 was adopted as the base for revaluing each farm product. This series, re-computed to the base: average 1936-37 to 1938-39 = 100, was published in earlier issues of the Year Book (*see* No. 43 page 1051). For 1936-37 and later years the original series was replaced in December 1952 by a revised series in which average unit values for the period 1936-37 to 1938-39 were used. The regimen used for the revised series was extended and modified to include farm products (as defined by Australian Statisticians) in all cases. Certain other refinements were incorporated in the revised indexes, the principal of which was the omission, in calculating the All farming index, of quantities of crops fed to livestock in Australia.

**INDEXES OF QUANTUM(a) OF FARM PRODUCTION: AUSTRALIA  
1952-53 TO 1966-67**

*(Base: Average of 3 years ended June 1939 = 100)*

<i>Year</i>	<i>Agri- culture</i>	<i>Pastoral</i>	<i>Dairying, poultry and bee- farming</i>	<i>All farming</i>	<i>Wool (shorn and dead)</i>	<i>Products other than wool</i>
1952-53	121	126	108	121	131	118
1953-54	129	123	107	122	128	120
1954-55	120	127	117	123	132	120
1955-56	134	136	120	131	146	127
1956-57	120	148	117	131	164	121
1957-58	109	142	114	124	148	116
1958-59	165	159	119	149	164	145
1959-60	140	163	123	144	172	136
1960-61	177	152	120	152	165	148
1961-62	163	160	128	155	174	150
1962-63	191	163	129	166	170	165
1963-64	196	172	131	174	183	171
1964-65	218	172	136	181	183	180
1965-66	184	163	138	166	169	165
1966-67	265	167	145	199	180	205

(a) Indexes of value at constant prices, i.e. quantities revalued at average unit values of the base years (*see* text preceding table).

**Farm products for food use: indexes of quantum (i.e. value at constant prices) of production, exports and consumption**

The indexes shown in the following table have been calculated by revaluing quantities of each farm product included in the indexes at the average unit gross value of each product for the years 1936-37 to 1938-39. The items included comprise products in the form in which they are sold from farms in all cases except livestock sold for slaughter for meat, which are included in terms of dressed carcass weight of meat. Quantity data relating to exports include exports of processed food in terms of farm product equivalent. The indexes of production relate basically to gross output of farm products for food use, including crops exported for stock-feeding overseas.

**FARM PRODUCTS FOR FOOD USE: INDEXES OF QUANTUM<sup>(a)</sup> OF  
PRODUCTION, EXPORTS AND CONSUMPTION  
AUSTRALIA, 1952-53 TO 1966-67**

(Base: average of 3 years ended June 1939 = 100)

Year	Production		Exports		Consumption in Australia	
	Total	Per head of total population	Total	Per head of total population	Total	Per head of total population
1952-53	118	93	113	89	119	94
1953-54	122	94	102	79	124	96
1954-55	121	91	117	89	127	96
1955-56	129	95	131	97	131	97
1956-57	123	88	118	85	136	98
1957-58	115	81	90	64	139	98
1958-59	146	101	137	94	142	98
1959-60	138	93	132	89	145	98
1960-61	148	98	170	112	143	95
1961-62	154	99	161	104	150	97
1962-63	168	107	187	119	154	98
1963-64	175	109	207	129	159	99
1964-65	185	112	219	134	163	99
1965-66	167	100	181	108	162	97
1966-67	197	115	244	143	168	98

(a) Indexes of value at constant prices, i.e. quantities revalued at average unit values for the base years (see text preceding table).

## CONSUMPTION OF FOODSTUFFS AND BEVERAGES

### Quantities consumed

The estimates of total consumption and consumption per head of population in Australia in the two tables which follow have been compiled by deducting net exports from the sum of production and imports and allowing for recorded movements in stocks of the respective commodities. While the estimates may be generally accepted as being reasonably accurate, there are some deficiencies to which attention should be directed. These relate chiefly to the quantities of fish, rabbits and hares and the quantities of certain oils and fats entering consumption. In addition, little information is available on the quantities of vegetables, fruit, eggs, etc. which householders produce for their own requirements and the extent of wastage occurring in the marketing of foodstuffs. In all these cases careful estimates have been compiled from the best available data, and the quantities shown as entering consumption in Australia have been adjusted to allow for these circumstances. The absence of particulars for stocks of certain commodities has resulted in some inaccuracies in the estimates of annual consumption. Consumption of foodstuffs is measured in general at 'producer' level. As a result, no allowance is made for wastage before the foodstuffs are consumed. In recent years wastage of foodstuffs has possibly been less than previously because of more efficient distribution and storage methods. Furthermore, it is likely that the quantities of foodstuffs shown in the following pages as available for consumption have been supplemented by production by householders for their own requirements. In most cases broad estimates of non-commercial (householders') production have been made. Except in a few special cases, no adjustment has been made for changes in stocks held by wholesalers and retailers. Where no allowance is made it is considered unlikely that these stocks would make any appreciable difference to consumption estimates. It is felt that the foregoing deficiencies do not seriously impair the accuracy of the estimates compiled.

The estimates of consumption per head of population shown in the second of the following tables have been derived by dividing the total apparent consumption of each commodity or commodity group in a given year by the mean population of Australia in the same period.

More detailed information on the consumption of foodstuffs and beverages is contained in the statistical bulletin: *Report on Food Production and the Apparent Consumption of Foodstuffs and Nutrients*, issued by this Bureau.

The following tables show the average annual consumption during the three-year periods ended 1938-39, 1948-49 and 1958-59, together with the data for each of the years 1964-65, 1965-66 and 1966-67. Because of revisions, figures for some items for 1966-67 in the following tables differ from corresponding figures in earlier chapters of this Year Book.

**ESTIMATED QUANTITY OF FOODSTUFFS AND BEVERAGES AVAILABLE FOR  
CONSUMPTION ANNUALLY: AUSTRALIA, 1936-37 TO 1966-67**

Commodity	Average three years ended—					
	1938-39	1948-49	1958-59	1964-65	1965-66	1966-67p
<b>Milk and milk products—</b>						
Fluid whole milk . . . . . mil. gal	161	233	276	327	330	330
Fresh cream . . . . . '000 tons	19.7	5.1	8.7	10.1	10.3	10.5
Condensed, concentrated and evaporated milk—						
Full cream—						
Sweetened . . . . . }	13.2 {	11.9	11.3	10.8	13.6	11.4
Unsweetened . . . . . }	13.6 {	13.6	27.6	(a)39.5	(a)40.5	(a)40.7
Skim . . . . . }	n.a. }	n.a.	5.6	9.8	9.8	11.1
Powdered milk—						
Full cream . . . . . }	8.1	11.0	11.0	12.2	10.2	8.9
Skim . . . . . }	..	1.9	10.7	(b)32.9	(b)39.0	(b)45.5
Infants' and invalids' foods . . . . . }	3.0	4.3	9.4	15.4	16.3	19.6
Cheese . . . . . }	13.4	18.8	25.0	37.8	40.7	40.7
<i>Total milk and milk products (in terms of milk solids)</i> . . . . . }	120.5	167.4	212.4	277.8	286.6	291.9
<b>Meat—</b>						
Beef and veal (carcass weight) . . . . . }	430.3	372.7	538.4	499.2	475.6	439.3
Mutton . . . . . }	184.1	154.0	221.6	231.3	236.0	215.8
Lamb . . . . . }	46.0	86.1	127.7	197.3	189.2	222.1
Pigmeat . . . . . }	26.2	24.3	43.6	59.3	68.4	70.5
Offal . . . . . }	25.7	30.3	49.7	62.2	57.4	56.3
Canned meat (canned weight) . . . . . }	6.5	9.0	17.9	23.1	23.1	26.2
Bacon and ham (cured carcass weight) . . . . . }	31.5	39.9	30.5	38.0	38.8	41.9
<i>Total meat (in terms of carcass equivalent weight)</i> . . . . . }	769.9	736.9	1,054.1	1,132.9	1,111.2	1,099.0
<b>Poultry, fish, rabbits and hares—</b>						
Poultry, rabbits and hares (dressed weight) . . . . . }	n.a.	n.a.	n.a.	67.8	80.7	
Fish (edible weight)—						
Fresh—						
Australian origin . . . . . }	19.7	19.4	{ 13.8	15.9	16.9	16.3
Imported . . . . . }	..	..	{ 9.0	15.1	19.4	17.4
Cured (including smoked and salted) . . . . . }	2.1	2.1	{ 3.8	3.8	4.8	3.4
Crustaceans and molluscs . . . . . }	..	..	{ 3.8	7.6	7.7	9.3
Canned—Australian origin . . . . . }	12.4	10.5	{ 3.3	5.1	5.6	4.6
Imported . . . . . }	..	..	{ 7.4	11.8	12.4	12.5
<i>Total poultry, fish, rabbits and hares (edible weight)</i> . . . . . }	n.a.	n.a.	n.a.	98.4	113.4	
<b>Eggs and egg products (in terms of eggs in shell)—</b>						
Eggs in shell . . . . . }	78.7	86.5	92.1	(c)127.0	(c)131.6	(c)134.6
Egg pulp . . . . . }	2.9	8.6	5.7	(c)8.9	(c)8.8	(c)8.1
Egg powder . . . . . }	..	..	0.2	(c)0.8	(c)0.6	(c)0.9
<i>Total eggs and egg products</i> . . . . . { mil. doz	81.6	95.1	98.0	(c)136.6	(c)141.0	(c)143.6
	139.3	162.3	167.3	204.1	210.5	214.5

For footnotes see next page.

**ESTIMATED QUANTITY OF FOODSTUFFS AND BEVERAGES AVAILABLE FOR  
CONSUMPTION ANNUALLY: AUSTRALIA, 1936-37 TO 1966-67—continued**

Commodity	Average three years ended—					
	1938-39	1948-49	1958-59	1964-65	1965-66	1966-67 <sup>p</sup>
<b>Fats and oils—</b>						
Butter . . . . . '000 tons	101.4	84.7	118.4	113.2	111.6	114.1
Margarine—						
Table . . . . . "	2.8	3.0	n.a.	22.6	24.0	21.8
Other . . . . . "	12.2	18.7	21.2	30.8	30.0	33.9
Vegetable oils and other fats . . . . . "	19.6	18.0	19.6	22.7	23.1	23.5
<i>Total fats and oils (fat content)</i> . . . . . "	<i>115.5</i>	<i>105.5</i>	<i>n.a.</i>	<i>161.9</i>	<i>161.6</i>	<i>165.6</i>
<b>Sugar and syrups—</b>						
Refined sugar—						
As sugar . . . . . '000 tons	216.5	234.6	259.0	260.9	256.4	257.4
In manufactured products . . . . . "	110.1	174.2	226.1	294.5	311.8	321.4
Honey, glucose and syrups (sugar content) . . . . . "	17.3	19.1	22.8	36.2	35.5	36.9
<i>Total sugar and syrups (sugar content)</i> . . . . . "	<i>343.9</i>	<i>427.9</i>	<i>507.9</i>	<i>591.6</i>	<i>603.7</i>	<i>615.6</i>
<b>Pulse and nuts—</b>						
Dried pulse . . . . . "	4.5	7.4	11.1	16.3	18.7	20.9
Peanuts (weight without shell) . . . . . "	2.8	8.7	7.2	9.8	12.2	13.8
Edible tree nuts (weight without shell) . . . . . "	2.6	4.4	6.7	10.5	10.0	9.9
Cocoa (raw beans) . . . . . "	6.3	11.6	12.1	18.7	18.3	16.5
<i>Total pulse and nuts</i> . . . . . "	<i>16.2</i>	<i>32.1</i>	<i>37.1</i>	<i>55.3</i>	<i>59.1</i>	<i>60.5</i>
<b>Fruit—</b>						
Citrus fruit(d) . . . . . "	97.8	127.2	153.8	255.8	214.5	254.8
Other fresh fruit . . . . . "	288.2	297.5	341.4	392.3	450.0	445.5
Jams . . . . . "	35.1	42.5	37.5	38.9	38.8	38.2
Dried fruit . . . . . "	24.8	30.0	26.4	29.3	24.2	32.2
Canned fruit . . . . . "	31.9	37.3	59.4	99.8	105.3	103.9
<i>Total fruit (fresh fruit equivalent)</i> . . . . . "	<i>532.3</i>	<i>607.9</i>	<i>691.4</i>	<i>909.9</i>	<i>909.7</i>	<i>984.5</i>
<b>Vegetables(d)—</b>						
Leafy and green vegetables . . . . . "	n.a.	154.0	172.1	232.2	227.5	251.6
Tomatoes . . . . . "	(e)48.0	86.3	124.4	157.3	158.9	167.6
Root and bulb vegetables . . . . . "	n.a.	143.7	152.8	175.3	180.5	202.7
Potatoes—						
White . . . . . "	318.5	424.3	495.4	465.3	573.7	577.8
Sweet . . . . . "	7.4	5.3	6.1	7.0	7.2	7.3
Other vegetables . . . . . "	n.a.	162.8	178.4	188.2	194.1	200.7
<i>Total vegetables</i> . . . . . "	<i>n.a.</i>	<i>976.4</i>	<i>1,129.2</i>	<i>1,225.3</i>	<i>1,343.2</i>	<i>1,407.3</i>
<b>Grain products—</b>						
Flour (including wheatmeal for baking and sharps) . . . . . "	574.0	689.7	789.1	847.6	887.8	900.9
Breakfast foods . . . . . "	32.5	45.8	58.8	73.2	78.3	74.0
Rice (milled) . . . . . "	12.2	3.0	n.a.	21.3	25.2	27.5
Tapioca, sago, etc. . . . . "	3.7	2.3	1.4	0.9	0.9	1.0
Pearl barley . . . . . "	3.0	1.7	2.0	1.5	1.4	1.7
<i>Total grain products</i> . . . . . "	<i>(f)629.7</i>	<i>(f)747.4</i>	<i>n.a.</i>	<i>944.5</i>	<i>993.6</i>	<i>1,005.1</i>
<b>Beverages—</b>						
Tea . . . . . "	21.1	22.1	26.1	28.8	28.4	27.4
Coffee(g) . . . . . "	2.0	3.4	5.9	12.1	11.3	13.3
Beer . . . . . mil. gal	80.1	129.5	221.0	272.6	278.5	291.1
Wine . . . . . "	4.2	9.8	11.1	13.8	15.3	17.5
Spirits . . . . . mil. pf gal	1.5	2.4	2.8	4.1	3.7	3.7

(a) Includes ice cream mixes. (b) Includes buttermilk and mixed skim and buttermilk. (c) Not comparable with data prior to 1960-61, in which year the average weight of an egg was altered in calculations from 1.75 oz to 2 oz. (d) Includes fresh equivalent of manufactured products. (e) Probably understated owing to lack of complete data. (f) Includes an allowance for edible starch (cornflour). (g) Coffee and coffee products in terms of processed whole or ground pure coffee.

## ESTIMATED QUANTITY OF FOODSTUFFS AND BEVERAGES AVAILABLE FOR CONSUMPTION ANNUALLY PER HEAD OF POPULATION: AUSTRALIA, 1936-37 TO 1966-67

Commodity		Average three years ended—			1964-65	1965-66	1966-67p
		1938-39	1948-49	1958-59			
<b>Milk and milk products—</b>							
Fluid whole milk	gallons	23.4	30.5	28.3	29.1	28.7	28.2
Fresh cream	lb	6.1	1.5	2.0	2.0	2.0	2.0
Condensed, concentrated and evaporated milk—							
Full cream—							
Sweetened	"	4.3	3.5	2.6	2.1	2.6	2.2
Unsweetened	"	4.0	4.0	6.4	(a)7.8	(a)7.9	(a)7.8
Skim	"	n.a.	n.a.	1.3	1.9	1.9	2.1
Powdered milk—							
Full cream	"	2.6	3.2	2.5	2.4	2.0	1.7
Skim	"	0.6	0.6	2.5	(b)6.5	(b)7.6	(b)8.7
Infants' and invalids' foods	"	1.0	1.3	2.2	3.1	3.2	3.7
Cheese	"	4.4	5.5	5.7	7.5	7.9	7.8
<i>Total milk and milk products (in terms of milk solids)</i>	"	39.3	49.1	48.7	55.2	55.8	55.8
<b>Meat—</b>							
Beef and veal (carcass weight)	"	140.3	109.1	123.8	99.2	92.6	84.0
Mutton	"	60.0	45.1	51.0	45.9	46.0	41.3
Lamb	"	15.0	25.2	29.3	39.2	36.8	42.5
Pigmeat	"	8.5	7.1	10.1	11.8	13.3	13.5
Offal	"	8.4	8.9	11.4	12.3	11.5	11.0
Canned meat (canned weight)	"	2.1	2.6	4.1	4.6	4.5	5.0
Bacon and ham (cured carcass weight)	"	10.2	11.7	7.1	7.5	7.6	8.0
<i>Total meat (in terms of carcass equivalent weight)</i>	"	250.9	215.7	242.4	225.0	216.4	210.2
<b>Poultry, fish, rabbits and hares—</b>							
Poultry, rabbits and hares (dressed weight)	"	n.a.	n.a.	n.a.	13.5	15.7	
Fish (edible weight)—							
Fresh—							
Australian origin	"	6.4	5.7	3.2	3.2	3.3	3.1
Imported	"	2.1	2.1	3.0	3.8	3.8	3.3
Cured (including smoked and salted)	"	0.7	0.6	0.9	0.7	0.9	0.6
Crustaceans and molluscs	"	0.7	0.6	0.9	1.5	1.5	1.8
Canned—							
Australian origin	"	4.1	3.0	0.8	1.0	1.1	0.9
Imported	"	1.7	1.7	2.3	2.4	2.4	2.4
<i>Total poultry, fish, rabbits and hares (edible weight)</i>	"	n.a.	n.a.	n.a.	19.5	22.1	
<b>Eggs and egg products (in terms of eggs in shell)—</b>							
Eggs in shell	"	25.7	25.4	21.2	(c)25.2	(c)25.6	(c)25.7
Egg pulp	"	0.9	2.5	1.3	(c)1.8	(c)1.7	(c)1.6
Egg powder	"	..	..	..	(c)0.2	(c)0.1	(c)0.2
<i>Total eggs and egg products</i>	{ No.	26.6 243	27.9 255	22.5 206	(c)27.1 217	(c)27.5 220	(c)27.5 220
<b>Fats and oils—</b>							
Butter	lb	32.9	24.8	27.2	22.5	21.7	21.8
Margarine—							
Table	"	0.9	0.9	n.a.	4.5	4.6	4.2
Other	"	4.0	5.2	4.9	6.1	5.8	6.5
Vegetable oils and other fats	"	6.4	5.3	4.5	4.5	4.5	4.5
<i>Total fats and oils (fat content)</i>	"	37.6	30.9	n.a.	32.2	31.5	31.7
<b>Sugar and syrups—</b>							
Refined sugar—							
As sugar	"	70.6	68.7	59.6	51.8	49.9	49.2
In manufactured products	"	35.9	51.0	52.0	58.5	60.7	61.5
Honey, glucose and syrups (sugar content)	"	5.5	5.6	5.2	7.2	6.9	7.1
<i>Total sugar and syrups (sugar content)</i>	"	112.0	125.3	116.8	117.5	117.6	117.8
<b>Pulse and nuts—</b>							
Dried pulse	lb	1.5	2.1	2.6	3.2	3.6	4.0
Peanuts (weight without shell)	"	0.9	2.5	1.7	2.0	2.4	2.6
Edible tree nuts (weights without shell)	"	0.8	1.3	1.5	2.1	1.9	1.9
Cocoa (raw beans)	"	2.1	3.4	2.8	3.7	3.6	3.2
<i>Total pulse and nuts</i>	"	5.3	9.3	8.6	11.0	11.5	11.6

For footnotes see next page.



**ESTIMATED QUANTITY OF FOODSTUFFS AND BEVERAGES AVAILABLE FOR  
CONSUMPTION ANNUALLY PER HEAD OF POPULATION: AUSTRALIA  
1936-37 TO 1966-67—continued**

Commodity	Average three years ended—					
	1938-39	1948-49	1958-59	1964-65	1965-66	1966-67p
<b>Fruit—</b>						
Citrus fruit(d) . . . . . lb	31.9	37.2	35.4	50.8	41.8	48.7
Other fresh fruit . . . . . "	94.0	87.1	78.4	77.9	87.6	85.2
Jams . . . . . "	11.4	12.4	8.6	7.7	7.6	7.3
Dried fruit . . . . . "	8.1	8.7	6.0	5.8	4.7	6.1
Canned fruit . . . . . "	10.4	11.0	13.6	19.8	20.5	19.8
<i>Total fruit (fresh fruit equivalent)</i> . . . . . "	<i>173.6</i>	<i>178.0</i>	<i>157.6</i>	<i>180.7</i>	<i>177.2</i>	<i>188.3</i>
<b>Vegetables(d)—</b>						
Leafy and green vegetables . . . . . "	n.a.	45.1	39.5	46.1	44.3	48.1
Tomatoes . . . . . (e)15.7		25.3	28.6	31.2	30.9	32.1
Root and bulb vegetables . . . . . "	n.a.	42.1	35.1	34.8	35.2	38.7
<b>Potatoes—</b>						
White . . . . . "	103.8	124.2	113.9	92.4	111.7	110.5
Sweet . . . . . "	2.4	1.5	1.4	1.4	1.4	1.4
Other vegetables . . . . . "	n.a.	47.7	41.0	37.4	37.8	38.4
<i>Total vegetables</i> . . . . . "	<i>n.a.</i>	<i>285.9</i>	<i>259.5</i>	<i>243.4</i>	<i>261.3</i>	<i>269.2</i>
<b>Grain products—</b>						
Flour (including wheatmeal for baking and sharps) . . . . . "	187.1	201.9	181.5	168.3	172.9	172.4
Breakfast foods . . . . . "	10.6	13.4	13.5	14.5	15.4	14.2
Rice (milled) . . . . . "	4.0	0.9	n.a.	4.2	4.9	5.3
Tapioca, sago, etc. . . . . "	1.2	0.7	0.3	0.2	0.2	0.2
Pearl barley . . . . . "	1.0	0.5	0.4	0.3	0.3	0.3
<i>Total grain products</i> . . . . . (f)205.3	(f)205.3	(f)218.8	n.a.	187.6	193.5	192.3
<b>Beverages—</b>						
Tea . . . . . "	6.9	6.5	6.0	5.7	5.5	5.2
Coffee(g) . . . . . "	0.6	1.0	1.3	2.4	2.2	2.5
Beer . . . . . gallons	11.7	16.9	22.7	24.2	24.2	24.9
Wine . . . . . "	0.6	1.3	1.1	1.2	1.3	1.5
Spirits . . . . . pf gal	0.2	0.3	0.3	0.4	0.3	0.3

(a) Includes ice cream mixes. (b) Includes buttermilk and mixed skim and buttermilk. (c) Not comparable with data prior to 1960-61, in which year the average weight of an egg was altered in calculations from 1.75 oz to 2 oz. (d) Includes fresh equivalent of manufactured products. (e) Probably understated owing to lack of complete data. (f) Includes an allowance for edible starch (cornflour). (g) Coffee and coffee products in terms of processed whole or ground pure coffee.

**Level of nutrient intake**

The next table shows details of the estimated supplies of nutrients available for consumption in Australia during the three years 1964-65 to 1966-67 in comparison with the annual averages for the three-year periods ended 1938-39, 1948-49 and 1958-59. The table has been compiled by the Nutrition Section of the Commonwealth Department of Health and is based on the estimates of the quantity of foodstuffs available for consumption per head of population shown in the preceding table.

**ESTIMATED SUPPLY OF NUTRIENTS AVAILABLE FOR CONSUMPTION  
AUSTRALIA, 1936-37 TO 1966-67  
(Per head per day)**

Nutrient	Average three years ended—					
	1938-39	1948-49	1958-59	1964-65	1965-66	1966-67p
<b>Kilocalories . . . . .</b>	<b>3,117</b>	<b>3,245</b>	<b>3,297</b>	<b>3,251</b>	<b>3,274</b>	<b>3,300</b>
<b>Protein—</b>						
Animal . . . . . g	58.7	57.4	59.6	60.0	61.6	61.2
Vegetable . . . . . "	30.9	35.3	32.3	31.3	32.5	32.9
Total . . . . . "	89.6	92.7	91.9	91.3	94.1	94.1
<b>Fat . . . . . "</b>	<b>133.5</b>	<b>121.7</b>	<b>131.7</b>	<b>129.5</b>	<b>127.7</b>	<b>127.2</b>
<b>Carbohydrate . . . . . "</b>	<b>377.4</b>	<b>424.8</b>	<b>416.7</b>	<b>410.8</b>	<b>420.4</b>	<b>424.7</b>
<b>Calcium . . . . . mg</b>	<b>642</b>	<b>785</b>	<b>817</b>	<b>909</b>	<b>885</b>	<b>977</b>
<b>Iron . . . . . "</b>	<b>15.4</b>	<b>15.1</b>	<b>14.0</b>	<b>13.9</b>	<b>14.2</b>	<b>13.9</b>
<b>Vitamin A . . . . . I.U.</b>	<b>4,905</b>	<b>4,630</b>	<b>4,568</b>	<b>4,330</b>	<b>4,368</b>	<b>4,433</b>
<b>Ascorbic acid . . . . . mg</b>	<b>86</b>	<b>96</b>	<b>89</b>	<b>97</b>	<b>94</b>	<b>94</b>
<b>Thiamine . . . . . "</b>	<b>1.4</b>	<b>1.5</b>	<b>1.3</b>	<b>1.3</b>	<b>1.3</b>	<b>1.3</b>
<b>Riboflavin . . . . . "</b>	<b>1.7</b>	<b>1.9</b>	<b>1.8</b>	<b>2.0</b>	<b>1.9</b>	<b>2.1</b>
<b>Niacin . . . . . "</b>	<b>18.7</b>	<b>17.6</b>	<b>18.6</b>	<b>18.3</b>	<b>18.8</b>	<b>19.0</b>

## RETAIL TRADE

The statistics in this section relate to retail establishments throughout Australia and the value of retail sales of goods by these establishments.

Information of this nature was first collected in respect of the year ended 30 June 1948 by a full census of all retail establishments. As this was the first census of its type in Australia, its scope and the data sought were the minima consistent with the objective of securing a record of the number of such establishments, their type, their geographical distribution, their aggregate sales of goods, and a simple commodity dissection, together with a record of the value of certain services provided. This census was followed by a second census of all retail establishments trading during the year ended 30 June 1949.

Further censuses were taken in respect of the years ended 30 June 1953 and 1957. In these censuses retailers were asked to furnish more detailed information concerning the dissection of their turnover into commodity groups, and questions were asked about stocks of goods on hand, the number of persons engaged in retail activities, and credit sales. In addition, the 1956-57 census included questions relating to purchases, customers' indebtedness and type of organisation.

The most recent census was taken in respect of the year ended 30 June 1962, and results have been published for all States and Australia. With the exception of some modifications to the scope of collection (*see hereunder*), the 1961-62 census followed the same general principles adopted for the previous census.

In general terms the census covered the retail trading activities of establishments which normally sell goods by retail to the general public from fixed premises (i.e. shops, rooms, kiosks, and yards). Retail activities of wholesalers and manufacturers were included if they sold regularly by retail to the general public. Sales by itinerant vendors (e.g. hawkers, street sellers, etc.) and sales from casual stalls or booths were excluded. Organisations such as clubs and societies making sales to their own members were excluded from the main census collection, but a supplementary collection was made, covering sales by *licensed clubs*.

In general, establishments with retail sales of goods amounting to less than \$1,000 in the census year are not included in the census tabulations. However, some 'service' establishments with retail sales of less than \$1,000, but with takings of \$1,000 or more from repairs, meals or hairdressing were included in the main census collection, and details of these establishments are included in tables in Year Book No. 50, page 1244. The types of establishments in this category are boot repairers, repair-only garages, cafes and restaurants, and hairdressers.

The design of the census is such that particulars of retail sales relate principally to sales to the final consumer of new and second-hand goods generally used for household and personal purposes. For this reason, sales of building materials, farm and industrial machinery and equipment, earth-moving equipment, etc., have been excluded from the censuses. For the same reason, and also because of difficulties in obtaining reliable and complete reporting, sales of builders' hardware and supplies, business machines and equipment, grain, feed, fertiliser and agricultural supplies, and tractors were excluded from the 1961-62 census. Retail sales of motor vehicles, parts, etc., have been included, whether for industrial, commercial, farm, or private use.

During the period between censuses variations in the value of retail sales have been measured by means of quarterly sample surveys. Annual totals derived from these surveys, adjusted to a basis comparable in scope with the 1961-62 census, and some of the results of the 1961-62 census, are included in this section.

Year Book No. 50, pages 1239-45, contains details of the number of retail establishments, the values of retail sales and of retail stocks, and particulars of hairdressing, boot repairing and motor repairing establishments, restaurants, self-service stores and licensed clubs, for each State and Territory, from the results of the 1961-62 census. Major classifications are by commodity groups and type of business. More complete details are set out in published bulletins of the 1961-62 Census of Retail Establishments (*see page 1244*).

#### Value of retail sales in each commodity group, Australia

The following table shows the value of retail sales of goods in each of the commodity groups specified in the years 1961-62 and 1963-64 to 1966-67 on a comparable basis throughout. The figures for the year 1961-62 were obtained from the census, whereas figures for the other years shown are estimates based on sample surveys.

**VALUE OF RETAIL SALES: COMMODITY GROUPS, AUSTRALIA(a)**  
**1961-62 AND 1963-64 TO 1966-67**  
(\$ million)

<i>Commodity group</i>	<i>1961-62</i>	<i>1963-64</i>	<i>1964-65</i>	<i>1965-66</i>	<i>1966-67</i>
Groceries . . . . .	858.3	941.5	1,018.8	1,096.0	1,167.7
Butchers' meat . . . . .	422.3	468.2	507.6	544.4	583.8
Other food(b) . . . . .	729.9	795.4	846.5	889.6	938.9
<i>Total, food and groceries</i> . . . . .	<i>2,010.5</i>	<i>2,205.1</i>	<i>2,372.9</i>	<i>2,530.0</i>	<i>2,690.4</i>
Beer, wine and spirits(c) . . . . .	545.9	592.6	630.6	683.5	738.8
Clothing and drapery . . . . .	900.0	1,013.0	1,075.9	1,115.1	1,162.6
Footwear . . . . .	154.7	171.8	178.3	182.1	198.7
Hardware, china and glassware(d) . . . . .	146.0	154.9	164.8	166.2	178.3
Electrical goods(e) . . . . .	348.0	389.0	413.1	398.7	402.7
Furniture and floor coverings . . . . .	230.1	272.0	301.3	309.2	317.2
Chemists' goods . . . . .	265.8	307.4	337.2	365.8	391.5
Newspapers, books and stationery . . . . .	166.4	191.6	203.9	214.9	233.6
Other goods(f) . . . . .	489.7	557.7	599.9	638.8	678.6
<i>Total (excluding motor vehicles, etc.)</i> . . . . .	<i>5,257.1</i>	<i>5,855.1</i>	<i>6,277.9</i>	<i>6,604.3</i>	<i>6,992.4</i>
Motor vehicles, parts, petrol, etc.(g) . . . . .	1,603.2	2,180.9	2,330.9	2,302.5	2,400.7

(a) Excludes Northern Territory and Australian Capital Territory. (b) Includes fresh fruit and vegetables, confectionery, soft drinks, ice cream, cakes, pastry, cooked provisions, fish, etc., but excludes some delivered milk and bread. (c) Excludes sales made by licensed clubs. (d) Excludes basic building materials, builders' hardware and supplies such as tools of trade, paint, etc. (e) Includes radios, television and accessories, musical instruments, domestic refrigerators, etc. (f) Includes tobacco, cigarettes, etc., jewellery, sporting goods, etc., but excludes grain and produce and business machines. (g) Includes new and used motor vehicles, parts, petrol, etc., but excludes tractors, farm machinery and implements, earth-moving equipment, etc.

**Total value of retail sales, States**

**TOTAL VALUE OF RETAIL SALES (EXCLUDING MOTOR VEHICLES, PARTS, PETROL, ETC.)**  
**STATES, 1961-62 AND 1963-64 TO 1966-67**  
(\$ million)

<i>Year</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>Aust.(a)</i>
1961-62 . . . . .	2,060.4	1,517.1	701.6	451.6	360.3	166.1	5,257.1
1963-64 . . . . .	2,250.3	1,696.1	800.1	524.1	404.0	180.5	5,855.1
1964-65 . . . . .	2,387.7	1,824.2	859.9	573.2	440.9	192.0	6,277.9
1965-66 . . . . .	2,497.3	1,918.7	903.0	599.5	486.4	199.4	6,604.3
1966-67 . . . . .	2,628.1	2,032.6	964.1	621.2	530.4	216.0	6,992.4

(a) Excludes Northern Territory and Australian Capital Territory.

**TOTAL VALUE OF RETAIL SALES OF MOTOR VEHICLES, PARTS, PETROL, ETC., STATES**  
**1961-62 AND 1963-64 TO 1966-67**  
(\$ million)

<i>Year</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>Aust.(a)</i>
1961-62 . . . . .	623.1	431.2	218.0	143.1	133.9	53.9	1,603.2
1963-64 . . . . .	828.3	575.1	326.6	211.6	168.9	70.4	2,180.9
1964-65 . . . . .	868.4	629.1	352.5	236.5	169.1	75.3	2,330.9
1965-66 . . . . .	851.9	630.4	344.4	217.9	181.2	76.7	2,302.5
1966-67 . . . . .	909.0	639.2	347.8	209.0	217.0	78.7	2,400.7

(a) Excludes Northern Territory and Australian Capital Territory.

## INTERSTATE TRADE

Prior to the federation of the Australian Colonies (now States) each Colony published statistics of its trade with the other Colonies. A similar record was continued by the Commonwealth Government under the provisions of the Constitution (section 93). On the expiry of the 'bookkeeping' period these records were discontinued as from 13 September 1910, and the last published statements were for the year 1909. Later, the Governments of Western Australia and Tasmania revived the records, and relevant statistics are available again for those States. A detailed collection for Queensland was re-introduced from July 1953.

At the Conference of Statisticians held in January 1928 it was resolved that efforts should be made in other States to record the interstate movement of certain principal commodities. Complete interstate trade statistics are now published in detail for Queensland, Western Australia and Tasmania by the Deputy Commonwealth Statisticians in those States, and incomplete statistics, relating mainly to trade with Western Australia and Tasmania, by the Deputy Commonwealth Statisticians in the remaining States.

## STATISTICAL ORGANISATION IN AUSTRALIA

### Early development of Australian statistics

Statistical organisation in Australia was founded in the 'Blue Books' which, in the Crown Colony days, were prepared annually for the information of the Colonial Office. Although intended primarily for administrative purposes, these documents have been important sources of statistical data, and formed the basis from which later statistical publications were developed. Following the advent of responsible government, the 'Blue Book' was succeeded in all States by 'Statistical Registers' which, however, were still largely confined to summaries of the 'by-product' statistics of government administrative departments.

The growing need for quantitative data concerning the progress of the several young communities of Australia led eventually to the appointment of official Statisticians commissioned to prepare and publish such data, and conferences were held between the Statisticians to provide for the interchange of ideas between States and to obtain uniform State statistics which could be aggregated to Australian totals. Altogether, six conferences were held prior to the formation of the Commonwealth Bureau of Census and Statistics in 1906—in 1861, 1875, 1890, 1900, 1902 and 1903. The holding of these conferences has been continued since the formation of the Commonwealth Bureau, and a representative from New Zealand attended up to 1928.

### Creation of the Commonwealth Bureau of Census and Statistics

Under the provisions of Section 51 of the Commonwealth Constitution, power is conferred on the Commonwealth Parliament 'to make laws for the peace, order, and good government of the Commonwealth with respect to . . .' (*inter alia*) '(XI.) Census and Statistics'. In compliance with this provision, the *Census and Statistics Act* 1905 was passed, and in 1906 the Commonwealth Bureau of Census and Statistics was created. A conference of Statisticians in 1906 defined the relations between the Commonwealth and State Bureaux, and in each case the State Statistician became the representative in his own State of the Commonwealth Statistician for the purpose of administering the Commonwealth Act. In addition, each State had its own 'Statistics Act', and although these were not identical for all States, they embodied common principles. The Commonwealth Bureau did not attempt to duplicate the existing State statistical organisations, but endeavoured to use their services whenever possible, and undertook the initial collection of statistics only in fields not covered by the States, or in which efficiency demanded complete centralisation.

### Integration of statistical services

The creation and development of the Commonwealth Bureau of Census and Statistics, the frequent conferences of Commonwealth and State Statisticians, and the close and increasing liaison between officers dealing with the same subjects in the State and Commonwealth fields did much to promote uniformity in official statistics and methods employed in their collection throughout Australia. The complete realisation of this aim could not, however, be achieved, even with the utmost co-operation of those concerned, while seven separate statistical systems operated. This became apparent when economic problems following the 1914–18 War drew attention to deficiencies in Australian statistical data.

The first step towards integration was taken in 1924, when, in response to a proposal by the Prime Minister to the Premiers' Conference that State and Commonwealth Statistical Bureaux be amalgamated, the Tasmanian office was transferred to the Commonwealth. (Other States did not agree to the proposal at that time.) The Tasmanian office has since functioned as a Commonwealth office which also serves State statistical needs.

The varied economic and social problems of the 1920's and 1930's, the 1939-45 War and the post-war boom, and the development during and since the war of a volume of new statistics, imposed a severe strain on the statistical systems and increased the complexities of the several administrations in their efforts to secure and maintain uniformity in statistical collections.

The difficulties of maintaining efficient statistical services were further emphasised during the immediate post-war years when the problems of planning for post-war reconstruction greatly increased the demand for current economic statistics. In 1949, discussions with the Premiers were initiated by the Prime Minister, with the object of integrating the statistical services of the Commonwealth and the States by agreement. Following negotiations, all State Governments accepted the terms of draft agreements to integrate their respective statistical offices with that of the Commonwealth, and effect was given to this by the *Statistics (Arrangements with States) Act 1956*. This legislation, permissive in nature, was designed to enable the Commonwealth to enter into an agreement with any State to effect an amalgamation of Commonwealth and State statistical offices and services. The object of such an agreement was to establish an integrated statistical service, with branches in each State, operated by Commonwealth statistical officers under the immediate direction of a statistician who would hold office under both the Commonwealth and State Governments. Both Commonwealth and State were to be adequately served with statistics, and no State would be required to surrender its existing powers in the field of statistics. Integration of the Commonwealth and State statistical services was finally accomplished when the integration arrangement with Victoria came into effect on 15 September 1958.

The relationships which at present obtain between the Bureau and the several State Governments are a reflection of these agreements. Each State has retained its power to collect statistics under State laws, but the Commonwealth provides the staff and the funds, and is responsible for all statistical work required by both Commonwealth and State Governments. Annual conferences of the Commonwealth and Deputy Commonwealth Statisticians meet to discuss current and projected future operations of the Bureau.

Under the system as it now operates, Deputy Commonwealth Statisticians and their staffs provide the principal avenue of contact between State Government agencies and other State users and suppliers of statistical information. Special requirements of State users and problems of obtaining statistical information from them are normally dealt with by correspondence between Deputy Statisticians and the Commonwealth Statistician, or are discussed at the annual conferences referred to above. For the most part, negotiations with Commonwealth agencies and other national users and suppliers of statistical information are undertaken by the Commonwealth Statistician and his Central Office staff. However, the division of responsibility between the Bureau's Central and State Offices in the matter of relationships with users and suppliers of statistical information is by no means as precise as might be assumed from the above remarks. The statistical services are highly integrated and operate as one unit rather than as seven separate Bureaux. In general, it might be said that moves to develop new statistical series or to modify existing ones for State purposes are normally initiated by Deputy Statisticians, whereas moves to develop new or modified series for national socio-economic policy purposes are usually initiated by the Commonwealth Statistician.

#### **Scope of the Commonwealth Bureau of Census and Statistics**

The scope of the Commonwealth Bureau of Census and Statistics has continually been widened. Additional requirements in the administrative, industrial, financial and scientific spheres have led to the development of many new statistical collections. All these activities are covered by the Census and Statistics Act, which empowers the Statistician to collect information and contains stringent provisions to ensure that the secrecy of information provided by individual persons and businesses is preserved.

In the Australian centralised official statistical service, it is recognised that there is a danger that official statisticians may become isolated from the thinking of the users of statistics and insensitive to the problems of the firms or individual persons whose responsibility it is to supply statistical information. The dangers inherent in this situation are for the most part obviated because the six State Offices of the Bureau keep in very close contact with the individual businesses which use statistics and supply statistical information, and special steps are taken to ensure that users have adequate scope for expression of their needs and that requests for information are kept within reasonable and practical limits. The methods towards this end which have been adopted in the Bureau

are reflected in its organisational structure. The organisation is on the basis of specialist subject-matter branches, and to each relatively narrow field of socio-economic activity there is a corresponding branch within the Bureau which is responsible for obtaining statistics and providing statistical services. Thus, for example, in the Central Office, there are specialist branches dealing with primary industries; secondary industries; wholesale and retail trade; employment; population and vital statistics; etc. A broadly similar organisational pattern exists in State Offices of the Bureau, although local requirements have naturally given rise to differences in detail.

#### **Organisation of the Central Office of the Commonwealth Bureau of Census and Statistics**

The Central Office of the Bureau is organised functionally into the following branches, listed alphabetically. As shown below, these branches are further sub-divided into specialist subject-matter sections.

*Demography and Employment Branch.* Demographic and Social; Employment and Field Survey Operations; Population Research.

*Finance and Overseas Transactions Branch.* Balance of Payments; Overseas Trade and Shipping; Public Finance and Taxation; Private Finance.

*National Accounts Branch.* National Income and Expenditure; Inter-industry and Sector Financial Accounts.

*Population Census Branch.* Classifications Research; Field Organisation and Mapping; Operations.

*Prices and Labour Branch.* Household Expenditure; Labour; Quantum Indexes; Retail Prices; Wholesale Prices and Price Indexes.

*Production, Distribution, and Development Branch.* Development, Integration and Classification; Internal Trade; Primary Industry; Secondary Industry.

*Sampling and Methodology Branch.* Methodology; Sampling; Special Projects.

*Services Branch.* Establishments and Finance; Publications; Secretariat.

In addition to the above-mentioned branches, the Bureau's Computer Service Centre operates the largest computer network in Australia and one of the largest used for statistical purposes in the world. It comprises Control Data 3600 and 3300 computers in Canberra, 3300, 3200 and 160-A computers in Sydney and Melbourne, and 3200 computers in the remaining State capitals. All installations use a full complement of peripheral devices. Mass storage and interrogation facilities are available at Canberra, Sydney and Melbourne.

At 30 June 1968 the staff of the Bureau numbered approximately 2,750, of whom 450 were university graduates. Of the total staff, some 1,230 were employed in the Bureau's Central Office in Canberra. Expenditure for the year 1967-68 amounted to \$15,974,648, of which \$3,169,761 was expenditure on equipment of a capital nature.

#### **Relation of the Bureau to other Commonwealth Departments**

The Commonwealth Statistician is the co-ordinating authority on all statistical activities in Commonwealth Departments, and where any new statistical field is to be established involving the regular collection of statistics, the Commonwealth Statistician must be consulted to ensure that they are necessary and that they are based on sound statistical methods; furthermore, the Commonwealth Statistician is empowered to make regular inspections of all statistical work undertaken in Departments to ensure that their needs are being met by the most economical means and without duplication of effort.

The Bureau provides methodological and general statistical advice to Commonwealth Departments and instrumentalities from time to time as required. However, for a small number of Departments, which have a continuing need for specialised statistical services, the Bureau provides, from its own staff, the key personnel to serve these needs.

### **STATISTICAL AND OTHER OFFICIAL PUBLICATIONS OF AUSTRALIA**

The official statistical publications of Australia may be divided bibliographically into two main divisions, namely: (i) Commonwealth publications dealing both individually and collectively with the several States of Australia; and (ii) State publications dealing with individual States only. Commonwealth publications containing statistics may be grouped under two heads, namely: (i) publications issued by the Commonwealth Statistician; and (ii) Parliamentary and Departmental Reports and Papers. State publications may similarly be grouped into publications issued by the Deputy Commonwealth Statistician in each State and State Parliamentary and Departmental Reports and Papers. The statistics contained in the second group in each case are in the main incidental to the primary purpose of the particular report or paper.

## Publications issued by the Commonwealth Statistician

### Principal statistical publications issued to date

The following is a list of the principal statistical publications issued from the Central Office of the Commonwealth Bureau of Census and Statistics since its inauguration. Minor changes in titles have not been referred to. Copies of a number of these publications, particularly earlier issues, are not now available.

- Australian Capital Territory Statistical Summary*. Annually, 1963 to 1968.
- Balance of Payments, Australia*. Statements Nos 1 to 3, 1928–29 to 1951–52.
- Banking and Currency*. Bulletin, annually, 1961–62 and 1962–63 (combined issue) to 1966–67.
- †*Building and Construction*. Bulletin, annually, 1964–65 to 1966–67.
- Causes of Death*. Bulletin, annually, 1963 to 1966.
- Census (1911) Results*. Bulletin. Vols I (Statistician's Report), II and III, with Appendix *Mathematical Theory of Population*.
- Census (1921) Results*. Bulletins, Nos 1 to 26. Parts I to XVI, forming Vol. I, and Parts XVII to XXIX (Part XXVII, Life Tables), forming, with the Statistician's Report, Vol. II.
- Census (1933) Results*. Bulletins, Nos 1 to 25. Parts I to XIV, forming Vol. I, Parts XV to XXVIII, forming Vol. II, and Parts XXIX to XXXVII, forming, with the Statistician's Report and Australian Life Tables, 1932–1934, Vol. III.
- Census (1947) Results*. Bulletins, Nos 1 to 25. Parts I to XVI, forming Vol. I, Parts XVII to XIX, forming Vol. II, and Parts XX to XXVIII, forming with the Statistician's Report and Australian Life Tables, 1946–1948, Vol. III.
- Census (1954) Results*. Bulletins, Nos 1 to 3. Vols I to VI, comprising respectively Parts I to V for each State; Vol. VII, comprising Parts I to V for the Australian Territories; Vol. VIII, comprising Parts I to III for Australia, Australian Life Tables, 1953–1955, and the Statistician's Report.
- Census (1961) Results*. Vols I to VI, comprising respectively Parts I to V for each State; Vol. VII, comprising Parts I to V for the Australian Territories; and Vol. VIII, comprising Parts I to III for Australia, Australian Life Tables, 1960–1962, and the Statistician's Report (see page 1239).
- Census (1966) Results*. Summarised results for each State and Territory and for Australia are being published in a series of mimeographed bulletins available from the Commonwealth Statistician (see pages 1239–40).
- \**Conference of British Commonwealth Statisticians, 1951, Report of Proceedings*.
- \**Dairying Industry* (formerly *Summary of Dairying Industry*). Statistical Bulletin, monthly and half-yearly; first issue, September 1937.
- Demography*. Bulletin, annually, 1911 to 1966. Commencing 1963, excludes details of causes of death, see *Causes of Death*.
- \**Digest of Current Economic Statistics*. Monthly from August 1959 onward.
- \**Export Commodity Classification, Australian*. Annually, 1966–67 and 1967–68 (sectional revisions).
- Exports, Australian*. Annually, 1958–59 to 1966–67.
- \**Factories, Principal Statistics, Summary*. Annually, 1948–49 to 1966–67.
- Finance*. Bulletin, 1907 to 1960–61. Commencing 1955–56, issued in two parts—Part I, Public and Private Finance; Part II, Commonwealth Taxation. Commencing 1961–62, issued as five separate bulletins, see *Banking, Finance (2), Insurance, and Taxation*.
- Finance, Commonwealth*. Bulletin, annually, 1961–62 and 1962–63 (combined issue) to 1967–68.
- Finance, State, Territory and Local Government Authorities, and Government Securities*. Bulletin, annually, 1961–62 and 1962–63 (combined issue) to 1966–67.
- \**Food Production and the Apparent Consumption of Foodstuffs and Nutrients, Report on*. Statistical Bulletin, half-yearly, 1946–47 to 1947–48; annually, 1948–49 to 1966–67.
- \**Fruit Growing Industry* (formerly *Summary of Fruit Growing Industry*). Statistical Bulletin, annually, 1944–45 to 1966–67.
- \**Import Commodity Classification, Australian*. Annually, 1965–66 to 1967–68 (sectional revisions).
- Imports, Australian*. Bulletin, annually, first issue 1966–67.
- Imports Cleared for Home Consumption*. Annually, 1950–51 to 1966–67.
- Insurance and Other Private Finance (other than Banking and Currency)*. Bulletin, annually, 1961–62 and 1962–63 (combined issue) to 1966–67.
- Labour and Industrial Statistics*. Memoranda and Reports, various, to 1922.
- Labour Report*, 1913 to 1965 and 1966 (combined issue).
- Life Tables, Australian*, 1901–1910. *Australian Joint Life Tables*, 1901–1910.
- Life Tables, Australian*, 1920–1922.
- Life Tables, Australian*, 1932–1934. *Australian Joint Life Tables*, 1932–1934.

- Life Tables, Australian, 1946-1948.*  
*Life Tables, Australian, 1953-1955.*  
*Life Tables, Australian, 1960-1962.*  
 \**Livestock Numbers* (formerly *Summary of Livestock Statistics*). Statistical Bulletin, annually, 1943 to 1967.  
*Local Government in Australia*. July 1919.  
*Manufacturing Industries*. Bulletins on individual industries, annually, 1936-37 to 1939-40, 1940-41 (issue incomplete) and 1944-45 to 1966-67.†  
*Manufacturing Industry*. Bulletin, annually, 1963-64 to 1965-66.  
*Manufacturing Commodities*. Bulletin, annually, first issue 1963-64 and 1964-65 (combined issue).  
 ‡*Mineral Industry, The Australian* (formerly *Minerals and Metals Bulletin*). Part 2—*Quarterly Statistics* of a quarterly bulletin issued jointly with the Bureau of Mineral Resources.  
*Monthly Review of Business Statistics*. October 1937 onward.  
*Motor Vehicles, Census of, 31st December, 1955*. Bulletin Nos 1 to 8.  
*Motor Vehicles, Census of, 31st December, 1962*. Bulletins Nos 1 to 9.  
*Motor Vehicles, Survey of (1947-48), Results*. Bulletins Nos 1 to 7.  
*National Accounts, Australian (National Income and Expenditure)*, 1948-49 to 1961-62, first issue, mimeographed\*, to 1966-67.  
 §*Non-rural Primary Industries*. Bulletin, annually, first issue, 1964-65.  
*Non-rural Primary Industries and Value of Production*. Bulletin, annually, 1962-63 and 1963-64. (Commencing 1964-65 issued as two separate Bulletins, see *Non-rural Primary Industries*, and *Value of Production*).  
*Northern Territory Statistical Summary*. Annually, 1960 to 1968.  
 \**Occupation Survey (1945) Results*. Detailed tables.  
*Official Year Book of the Commonwealth of Australia*. 1907 to present issue (No. 54). Issues Nos 40 to 51 also published in parts.  
*Pocket Compendium of Australian Statistics* (formerly *Statistical Digest*). 1913, 1914, 1916 and 1918 to 1968, annually.  
*Population and Vital Statistics*. Bulletins and Reports, various, 1906-1910.  
*Primary Industries*. Bulletins, annually, 1950-51 to 1961-62 in two parts—Part I, Rural Industries; Part II, Non-rural Industries and Value of Production. Commencing 1962-63, issued as two separate Bulletins, see *Rural Industries* and *Non-rural Primary Industries and Value of Production*.  
*Primary Industries, Australian*. Report prepared for the Empire Producers Conference, Sydney, March 1938.  
*Production*. Bulletin, annually, 1906 to 1949-50. From 1936-37 to 1949-50 issued in two parts—Part I, Secondary Industries; Part II, Primary Industries (including Total Recorded Production); thereafter separate Bulletins (see *Primary Industries* and *Secondary Industries*).  
*Professional Papers*. Various. A full list appears in Official Year Book No. 13, page 3.  
 \**Publications of the Commonwealth Bureau of Census and Statistics*. Annually since 1950 (1964 to 1968 printed).  
*Quarterly Summary of Australian Statistics* (replaced *Monthly Summary of Australian Statistics*). December 1917 onward.  
 \**Retail Establishments, Census of (1947-48), Results*. Bulletins, Nos 1 to 7.  
 \**Retail Establishments, Census of (1948-49), Results*. Bulletins, Nos 1 to 7.  
 \**Retail Establishments, Census of (1952-53), Results*. Bulletins, Nos 1 to 14.  
*Retail Establishments, Census of (1956-57), Results*. Bulletins, Nos 1 to 8 (mimeographed\*) and 9 to 15 (printed).  
*Retail Establishments and Other Services, Census of (1961-62), Results*. Bulletins Nos 1 to 7 (printed) and 8 and 9 (mimeographed\*).  
 \**Rural Holdings, Classification by Size and Type of Activity, 1959-60*. Bulletins, Nos 1 to 7.  
*Rural Holdings, Classification by Size and Type of Activity, 1965-66*. Bulletins, Nos 1 to 7.  
*Rural Holdings, Size Classification of, 1955-56*. Bulletins Nos 1 to 7.  
*Rural Industries*. Bulletin, annually, 1962-63 to 1965-66.  
 \**Rural Land Use and Crop Production* (formerly *Summary of Crop Statistics*). Statistical Bulletin, annually, 1943-44 to 1966-67.  
 \**Seasonally Adjusted Indicators*. Bulletin, annually, 1967 and 1968.  
*Secondary Industries*. Bulletin, annually, 1950-51 to 1962-63 (commencing 1960-61 issued in two parts—Part I, Factory and Building Operations; Part II, Materials Used and Articles Produced in Factories). Commencing 1963-64 issued as separate bulletins, see *Manufacturing Industry*, *Manufacturing Commodities*, and *Building and Construction*.  
*Social Insurance*. Report to the Hon. the Minister for Trade and Customs, 1910.  
*Social Statistics*. Bulletin, 1907 to 1915 annually, and 1918.



*Superannuation for the Commonwealth Public Service.* Report to the Hon. the Minister for Home Affairs, 1910.

*Tariff Items and Statistical Key Codes, Description of, Supplement to Imports Cleared for Home Consumption*, first issue 1966-67.

*Taxation Assessments, Commonwealth.* Annually, 1961-62 to 1966-67.

*Trade, Overseas.* Bulletin, annually, 1906 to 1966-67.

\**Trade Overseas.* Preliminary Bulletin, annually, 1952-53 to 1967-68, in two parts—Part 1, Exports; Part 2, Imports. (See also *Exports, Australian* and *Imports Cleared for Home Consumption*.)

*Transport and Communication.* Bulletin, 1906, 1908 to 1916 annually, 1919 to 1930 annually and 1932 to 1966-67 annually.

§ *Value of Production.* Bulletin, annually, 1964-65 and 1965-66.

*Wealth.* The Private Wealth of Australia and its Growth as ascertained by various methods, together with a Report on the War Census in 1915.

\**Wheat Industry* (formerly *Summary of the Wheat Situation*). Statistical Bulletin, periodically; first issue, July 1936.

\**Wool Production and Utilisation.* Bulletin, annually, 1952-53 to 1966-67.

### Current or recent statistical publications

The publications listed on the following pages comprise all current or recent publications of the Central Office of the Commonwealth Bureau of Census and Statistics. For further information, including particulars of publications issued by the State offices of the Bureau, see *Publications of the Commonwealth Bureau of Census and Statistics* (Reference 1.8, page 1239).

The publications listed are grouped into (i) *General publications*, (ii) *population census publications*, and (iii) *other publications*.

*General publications* contain statistics on a wide variety of subjects, including all major topics.

*Other publications* comprise reports, bulletins, statements, surveys, etc., which deal mainly with particular fields or subjects, and are listed alphabetically according to topic. They are of three kinds:

- (i) publications (mainly annual) containing detailed tables of the main statistics collected which constitute the Bureau's permanent detailed printed records;
- (ii) supplementary publications in mimeographed form (triennial, annual, half-yearly, quarterly; and monthly) which advance the statistics contained in (i), provide further detail, or issue new statistics;
- (iii) preliminary reports of special surveys or censuses, such as the Population, Retail Trade and Motor Vehicle Censuses in mimeographed form.

*Population census publications* have been issued in respect of each Commonwealth census taken from 1911 to 1966, namely 1911, 1921, 1933, 1947, 1954, 1961 and 1966. Only the publications issued for the 1961 and 1966 censuses are listed in the following pages, but details of publications for earlier censuses are shown on page 1236.

Publications of the *Census of retail establishments and other services* and the *Census of motor vehicles* are listed respectively under the headings of **Retail Trade** and **Transport and Communication**.

*Frequency of issue* is indicated as follows:

<i>tri</i> — triennially	<i>m</i> — monthly
<i>a</i> — annually	<i>irr</i> — irregularly
<i>hy</i> — half-yearly	<i>occ</i> — occasionally
<i>q</i> — quarterly	

The *most recent issue* of each annual publication is shown in parentheses.

*Prices.* Those publications for which a charge is made are listed at the end of this Year Book. The prices are shown after the number and year of issue—in order, price excluding postage, and price including postage in Australia.

\* Distributed by the Commonwealth Statistician—for methods of obtaining other publications still in print see back of this volume.

† See pages 1244-5 for 1966-67 series.

‡ Previously included in *Secondary Industries*, Part I—*Factory and Building Operations*.

§ Previously included in *Non-rural Primary Industries and Value of Production*.

|| Copies available from the Bureau of Mineral Resources, Canberra and the Department of National Development, Melbourne and Sydney.

## GENERAL PUBLICATIONS

*Reference*

- 1.1 Official Year Book of the Commonwealth of Australia *a* (No. 54, 1968)
- 1.2 Pocket Compendium of Australian Statistics *a* (No. 53, 1968)
- 1.3 Quarterly Summary of Australian Statistics *q*
- 1.4 Monthly Review of Business Statistics *m*
- 1.5 Digest of Current Economic Statistics *m\**
- 1.10 Seasonally Adjusted Indicators *a* (1968)\*
- 1.6 Northern Territory Statistical Summary *a* (1968)
- 1.7 Australian Capital Territory Statistical Summary *a* (1968)
- 1.8 Publications of the Commonwealth Bureau of Census and Statistics *a* (1968)\*
- 1.9 Monthly Statement of Publications issued by the Commonwealth Bureau of Census and Statistics *m\**
- 1.11 Publications of the Commonwealth Bureau of Census and Statistics—Additions to List *a* (November 1968)\*

## 1961 POPULATION CENSUS PUBLICATIONS†

These publications are issued in volumes and parts, with a separate volume for each State, for the Territories, and for Australia, each volume comprising a number of parts as follows:

## STATES

Volumes: I—New South Wales; II—Victoria; III—Queensland; IV—South Australia; V—Western Australia; VI—Tasmania.

## Parts

<i>Reference</i>	<i>Part</i>	
2.81	I	Analysis of Population in Local Government Areas, etc.
2.82	II	Cross-classifications of the Characteristics of the Population
2.83	III	Analysis of Dwellings in Local Government Areas, etc.
2.84	IV	Cross-classifications of the Characteristics of Dwellings and Householders
2.85	V	Population and Occupied Dwellings in Localities

## TERRITORIES

## Volume VII

## Parts

<i>Reference</i>	<i>Part</i>	
2.87	I	Northern Territory: Population
2.88	II	Northern Territory: Dwellings and Householders
2.89	III	Australian Capital Territory: Population
2.90	IV	Australian Capital Territory: Dwellings and Householders
2.91	V	External Territories: Population and Dwellings

## AUSTRALIA

## Volume VIII

## Parts

<i>Reference</i>	<i>Part</i>	
2.93	I	Cross-classifications of the Characteristics of the Population
2.94	II	Cross-classifications of the Characteristics of Dwellings and of Householders
2.95	III	Population and Occupied Dwellings in Localities
2.96	..	Statistician's Report
2.97	..	Australian Life Tables, 1960–62

## 1966 POPULATION CENSUS PUBLICATIONS†

Publications issued so far in respect of the 1966 Census are of two kinds:

- (a) mimeographed field count statements, containing preliminary figures compiled by field personnel during the taking of the census; and
- (b) mimeographed bulletins, which contain, in general, preliminary summarised particulars of the detailed information that will eventually be published in the appropriate Parts of final printed Volumes of the Census. They should therefore *not* be regarded as providing the final detailed analysis available of the topic in question.

\* Distributed by the Commonwealth Statistician free of charge.

† See page 1236 for previous Censuses.

1966 POPULATION CENSUS PUBLICATIONS—*continued*

## FIELD COUNT STATEMENTS\*†

## Reference

- 2.1 FC 1 Population: Australian Capital Territory
- 2.2 „ 2 Population: Nauru, Norfolk Island, Christmas Island, and Cocos (Keeling) Islands
- 2.3 „ 3 Population: States and Territories of Australia
- 2.4 „ 4 Population: Principal Urban Centres of Australia
- 2.5 „ 5 Population: Administrative Divisions, Australian Capital Territory
- 2.6 „ 6 Population: Local Government Areas and Urban Centres, New South Wales
- 2.7 „ 7 Population: Local Government Areas and Urban Centres, Victoria
- 2.8 „ 8 Population: Local Government Areas and Urban Centres, Queensland
- 2.9 „ 9 Population: Local Government Areas and Urban Centres, South Australia
- 2.10 „ 10 Population: Local Government Areas and Urban Centres, Western Australia
- 2.11 „ 11 Population: Local Government Areas and Urban Centres, Tasmania
- 2.12 „ 12 Population: Police Districts, Northern Territory
- 2.41 Special Statement—Full-blood Aborigines: States and Territories of Australia

## BULLETINS\*

The following bulletins are to be issued in this series. The first digit in the bulletin numbers shown indicates the State, etc., to which the bulletin relates, as follows: 1—New South Wales; 2—Victoria; 3—Queensland; 4—South Australia; 5—Western Australia; 6—Tasmania; 7—Northern Territory; 8—Australian Capital Territory; 9—Australia; 10—External Territories—e.g. No. 4.3 (*Reference* 2.15.) represents the bulletin *Population: By Age and Marital Status, South Australia*.

## Reference

## For each State and Territory and Australia

- 2.13 Nos. 1-9.1 Summary of Population†
- 2.14 „ 1-9.2 Summary of Dwellings‡
- 2.15 „ 1-9.3 Population: By Age and Marital Status†
- 2.16 „ 1-9.4 Population: By Industry and Age†
- 2.17 „ 1-9.5 Overseas Born Population: By Birthplace and Nationality†
- 2.18 „ 1-9.6 Population: By Industry and Occupational Status†
- 2.19 „ 1-9.7 Population: By Marital Status, Age and Occupational Status†
- 2.20 „ 1-6.8 Population and Dwellings: Local Government Areas and Urban Centres§
- 2.20 „ 7.8 Population and Dwellings: Police Districts†
- 2.20 „ 8.8 Population and Dwellings: Administrative Divisions†

## For Australia, by States

- 2.21 No. 9. 9 Population: By Single and Grouped Age
- 2.22 „ 9.10 Population: By Marital Status
- 2.23 „ 9.11 Population: By Birthplace
- 2.24 „ 9.12 Overseas Born Population: By Period of Residence
- 2.25 „ 9.13 Population: By Nationality
- 2.26 „ 9.14 Population: By Religion
- 2.27 „ 9.15 Population: By Occupational Status
- 2.28 „ 9.16 Population: By Industry
- 2.29 „ 9.17 Population: By Occupation
- 2.30 „ 9.18 Population: By Education
- 2.31 „ 9.19 Population: By Race
- 2.32 „ 9.20 Population: By Industry and Birthplace
- 2.33 „ 9.21 Overseas Born Population: By Birthplace and Period of Residence
- 2.34 „ 9.22 Population: By Birthplace and Occupational Status
- 2.35 „ 9.23 Population: By Occupation and Age
- 2.36 „ 9.24 Population: By Education and Age
- 2.37 „ 9.25 Population: By Education and Occupation
- 2.39 „ 9.26 Dwellings, by Class: Local Government Areas and Urban Centres
- 2.42 The Aboriginal Population (Revised Statement): States and Territories of Australia†

## For the External Territories

- 2.40 Nos. 10-12.1 Summaries of Population: Norfolk Island; Christmas Island; Cocos (Keeling) Islands respectively.

\* Distributed by the Commonwealth Statistician free of charge.

† Issued.

‡ A.C.T. and Australia (Interim) issued.

§ In course of issue.

## OTHER PUBLICATIONS

*Reference***Balance of Payments** (*see Overseas Trade and Balance of Payments, 8.1, 8.2*)**Births** (*see Demography, 4.4, 4.9*)**Building—**

- 3.1 Building and Construction *a* (No. 3, 1966–67)
- 3.2 Building Approvals *m*\*
- Building Societies (*see Finance, 5.5*)
- 3.3 Building Statistics, Australian Capital Territory *q*\*
- 3.4 Building Statistics, Northern Territory *q*\*
- 3.5 Building Statistics—Number of New Houses and Flats (Preliminary) *q*\*
- 3.6 Building Statistics, Quarterly *q*\*

**Deaths** (*see Demography, 4.7 to 4.9*)**Demography—**

- 4.1 Arrivals and Departures, Overseas. Part 1, Permanent and Long-Term Movement *q*\*
- 4.2 Arrivals and Departures, Overseas. Part 2, Total and Short-term Movement *q*\*
- 4.3 Arrivals and Departures, Overseas *m*\*
- 4.4 Births, Australian Demographic Review *a*\*
- 4.5 Canberra, Population Count *occ* (30 June 1967)\*
- 4.7 Death, Causes of *a* (No. 4, 1966)
- 4.8 Deaths, Australian Demographic Review *a*\*
- Demographic Review, Australian (*see Births, Deaths, Marriages, Population*)
- 4.9 Demography *a* (No. 84, 1966)
- Life Tables, Australian (*see 1961 Population Census, 2.97*)
- 4.10 Marriages, Australian Demographic Review *a*\*
- 4.11 Population and Vital Statistics, Summary of, Australian Demographic Review *q*\*
- 4.13 Projections of the Population *irr* (1966 to 1986)

**Divorces** (*see Social Statistics, 13.1, 13.2*)**Employment** (*see Labour, Wages and Employment*)**Factories** (*see Secondary Industries*)**Finance—**

- 5.1 Banking and Currency *a* (No. 5, 1966–67)
- 5.2 Banking Statistics *m*\*
- 5.3 Banking Statistics, Major Trading Banks (Preliminary) *m*\*
- 5.4 Banking Statistics (Gazette Extract) *a*\* and *m*\*
- Banks, Savings (*see Savings Bank Statistics*)
- 5.5 Building Societies, Registered *a* (No. 5, 1966–67)\*
- 5.6 Capital and Maintenance Expenditure by Private Businesses in Australia—June and December quarters only\*†
- 5.7 Capital Expenditure by Private Businesses in Australia (Preliminary) *q*\*
- 5.8 Capital Expenditure by Private Businesses in Australia—March and September quarters only\*
- 5.9 Capital Raisings by Companies in Australia, New *q*\*
- 5.10 Capital Raisings by Companies in Australia, New (Preliminary) *q*\*
- 5.11 Finance and Government Securities, State, Territory and Local Government Authorities' *a* (No. 5, 1966–67)‡
- 5.12 Finance, Commonwealth *a* (No. 6, 1967–68)
- 5.13 Finance Companies *a* (July 1964–September 1967)\*
- 5.14 Finance Companies, Australia *m*\*
- 5.15 Insurance and Other Private Finance (other than Banking and Currency) *a* (No. 5, 1966–67)
- 5.16 Insurance, Fire, Marine and General *a* (No. 15, 1966–67)\*
- 5.32 Insurance Statistics, Life *a* (1967)\*
- 5.17 Insurance Statistics, Life *m*\*
- 5.18 Instalment Credit for Retail Sales *q*\*
- 5.19 Instalment Credit for Retail Sales (Preliminary and Provisional) *m*\*
- 5.20 Investment, Overseas *a* (1966–67)\*

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† Contains details of anticipated new capital expenditure for the ensuing six months.

‡ In course of issue.

*Reference*

- 5.21 Investment, Overseas (Preliminary) *a* (1966-67)\*  
National Accounts, Australian (*see* National Accounts)
- 5.23 Pension and Superannuation Schemes, Government *a* (No. 3, 1965-66)\*
- 5.25 Pension Funds, Survey of Selected Private *a* (1966-67)\*
- 5.26 Savings Bank Statistics *m*\*
- 5.27 Savings Bank Statistics (Gazette Extract) *a*\* and *m*\*
- 5.28 Savings Bank Statistics (Preliminary) *m*\*
- 5.29 Taxation Assessments, Commonwealth *a* (No. 6, 1966-67)
- 5.30 Taxation Collections, Commonwealth, State and Territory *a* (1966-67)\*
- 5.31 Unit Trusts, Land Trusts and Mutual Funds *q*\*

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- 6.1 Earnings and Hours, Survey of Weekly *a* (October 1967)\*
- 6.18 Earnings, Average Weekly *irr* (September Quarter 1967)\*
- 6.4 Employment and Unemployment *m*\*
- 6.5 Industrial Awards, Determinations and Agreements, Incidence of *irr* (May 1963) (S.B. 383)\*
- 6.6 Industrial Disputes *q*\*
- 6.7 Labour Report *a* (No. 52, 1965 and 1966)
- 6.8 Labour Turnover *hy*\*
- 6.9 Leavers from Schools, Universities or Other Educational Institutions, Survey of *a* (February 1967)\*
- 6.10 Multiple Jobholding, Australia, Survey of *irr* (August 1967)\*
- 6.12 Wage and Salary Earners in Civilian Employment (Preliminary) *m*\*
- 6.13 Wage and Salary Earners in Employment *irr* (June 1954 to June 1961) (S.B. 412)\*
- 6.14 Wage and Salary Earners in Employment *irr* (June 1961 to June 1965) (S.B. 295)\*
- 6.15 Wage, Minimum Rates of, and Prescribed Hours of Work—Adult Male and Female Occupations, Sydney and Melbourne *hy*\*
- 6.16 Wage Rates and Earnings *m*\*
- 6.17 Wage Rates, Minimum *irr* (March 1939 to June 1965)\*

**Manufacturing (*see* Secondary Industries)****Marriages (*see* Demography, 4.9, 4.10)****Migration, Overseas (*see* Demography, 4.1 to 4.3, 4.9)****Mining and Quarrying (*see* Primary Industries, 10.4, 10.13, 10.17 to 10.23, 10.40 to 10.42)****Motor Vehicles (*see* Transport and Communication)****National Accounts—**

- 7.1 National Accounts, Australian—National Income and Expenditure *a* (1953-54 to 1966-67)\*
- 7.2 National Accounts, Australian (Preliminary Statement No. 1)—Gross National Product at Current and Constant Prices *a* (1953-54 to 1966-67)\*
- 7.3 National Accounts, Australian (Preliminary Statement No. 2)—Personal Income by States *a* (1953-54 to 1966-67)\*
- 7.4 National Accounts, Australian (Preliminary Statement No. 3)—Gross National Product at Factor Cost, by Industry *a* (1953-54 to 1966-67)\*
- 7.5 National Income and Expenditure, Quarterly Estimates *q*\*

**Non-rural Primary Industries (*see* Primary Industries)****Overseas Trade and Balance of Payments—**

- 8.1 Balance of Payments *hy*\*
- 8.2 Balance of Payments, Quarterly Summary *q*\*
- 8.3 Export Commodity Classification, Australian *a*\*
- 8.21 Exports and Imports of Merchandise at Constant Prices†\*
- 8.22 Exports and Imports of Merchandise at Constant Prices *q*\*
- 8.4 Exports, Australian *a* (No. 9, 1966-67)
- 8.5 Exports of Principal Products of Australian Origin *m*\*
- 8.6 Import Commodity Classification, Australian *a*\*
- 8.19 Imports, Australian *a* (No. 1, 1966-67)

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† Introductory issue.

*Reference*

- 8.7 Imports Cleared for Home Consumption *a* (No. 8, 1966-67)
- 8.8 Imports of Assembled New Passenger Motor Cars (other than Buses or Special Vehicles) *m\**  
Overseas Investment (*see Finance, 5.20, 5.21 and Primary Industries, 10.42*)
- 8.9 Overseas Trade, Part 1—Exports *m\**
- 8.10 Overseas Trade, Part 2—Imports *m\**
- 8.11 Overseas Trade *a* (No. 64, 1966-67)
- 8.12 Overseas Trade, Australia, Exports and Imports (Preliminary) *m\**
- 8.18 Overseas Trade, Exports by Commodity Divisions, Australia *m\**
- 8.13 Overseas Trade, Imports by Commodity Divisions, Australia *m\**
- 8.14 Overseas Trade, Major Groups of Countries *q\**
- 8.15 Overseas Trade (Preliminary)—Part 1, Exports *a* (1967-68)\*
- 8.16 Overseas Trade (Preliminary)—Part 2, Imports *a* (1967-68)\*
- 8.20 Tariff Items and Statistical Key Codes, Descriptions of *a* (1966-67) (Supplement to Imports Cleared for Home Consumption, 1966-67, Bulletin No. 8)
- 8.17 Trade of Australia with Eastern Countries *a* (1967-68)\*

**Population** (*see also Population Census and Demography*)

- 15.1 Ex-service Personnel, Australian, Survey of *irr* (November 1966)\*

**Prices and Price Indexes** (*see also 6.7, Labour Report*)

- 9.1 Consumer Price Index *q\**
- 9.2 Export Price Index *m\**
- 9.3 Retail Prices of Selected Food and Grocery Items, Average *q\**
- 9.4 Wholesale Price (Basic Materials and Foodstuffs) Index *m\**
- 9.5 Wholesale Prices—Price Index of Electrical Installation Materials *q\**

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- 10.1 Aerial Agriculture Operations *q\**
- 10.2 Agricultural Machinery (*see Secondary Industries, 12.1*)
- 10.3 Agricultural Statistics (Preliminary) *a* (1966-67)\*
- 10.3 Bee Farming *a* (1966-67)\*
- 10.44 Butter Factories (*see Secondary Industries, 12.12-21, 12.16-55*)
- 10.44 Chicken Hatchings and Poultry Slaughterings *m\**
- 10.44 Consumption of Foodstuffs, etc. (*see Food, Tea*)
- 10.44 Crop Production (*see Rural Land Use*)
- 10.4 Construction Material Quarrying, A.C.T. *a* (1967)\*
- 10.5 Dairying Industry *hy\**
- 10.6 Dairying Industry *m\**
- 10.6 Earthmoving Equipment (*see Secondary Industries, 12.2*)
- 10.7 Farm Machinery on Rural Holdings *a* (March 1967)\*
- 10.8 Fisheries *a* (No. 13, 1966-67)\*
- 10.9 Fisheries (Preliminary) *a* (1966-67)\*
- 10.10 Food Production and the Apparent Consumption of Foodstuffs and Nutrients *a* (No. 21, 1965-66)\*
- 10.11 Fruit Growing Industry *a* (No. 23, 1966-67)\*
- 10.12 Fruit Statistics (Preliminary) *a* (1966-67)\*
- 10.13 Gold Mining Industry *m\**
- 10.14 Livestock Numbers *a* (No. 25, March 1967)\*
- 10.15 Livestock Statistics (Preliminary) *a* (March 1968)\*
- 10.16 Meat Industry *m\**
- 10.41 Mineral Exploration *a* (No. 2, 1966)\*
- 10.17 Mineral Industry, The Australian (Quarterly Review and Statistics) *q*
- 10.18 Minerals and Mineral Products *a* (No. 3, 1966)\*
- 10.40 Minerals and Mineral Products (Preliminary) *a* (1967)\*
- 10.19 Minerals and Mineral Products *m\**
- 10.20 Mining and Quarrying *a* (No. 15, 1966)\*
- 10.21 Mining and Quarrying (Preliminary) *a* (1966)\*
- 10.22 Mining and Quarrying, Statistical Summary *irr* (1952 to 1964)\*

*Reference*

- 10.42 Mining Industry, Australian, Overseas Participation in *a* (1966)\*
- 10.23 Non-rural Primary Industries *a* (No. 1, 1964-65)
- 10.24 Primary Production, Value of (Preliminary Estimates) *a* (1967-68)\*
- 10.25 Primary Production, Value of (Preliminary Statement) *a* (1967-68)\*
- 10.26 Production, Value of *a* (No. 2, 1965-66)
- 10.27 Production, Value of, and Indexes of Price and Quantum of Farm Production *a* (No. 17, 1966-67)\*
- 10.28 Rural Holdings, Classification of, by Size and Type of Activity, 1965-66, *Bulletins* Nos 1-7 (Australia and States) *irr*
- 10.29 Rural Industries *a* (No. 4, 1967-68)
- 10.30 Rural Land Use and Crop Production *a* (No. 24, 1966-67)\*
- 10.31 Rural Statistics of the Australian Capital Territory *a* (1967-68)\*
- 10.33 Tea and Coffee, Apparent Consumption of *a* (No. 6, 1966-67)\*
- Tractors, New (*see Secondary Industries*, 12.18)
- 10.34 Tractors on Rural Holdings *tri* (March 1966)\*
- 10.35 Wheat Industry *a* (No. 112, 1966-67, and 1967-68 Preliminary)\*
- 10.36 Wheat Industry *a* (No. 113, 1967-68 Preliminary)\*—supplement to No. 112
- 10.37 Wine and Brandy, Wholesale Sales and Stocks of *a* (1967-68)\*
- Wool, Exports of (*see Overseas Trade and Balance of Payments*, 8.5)
- 10.38 Wool Production and Utilisation *a* (No. 15, 1966-67)\*
- 10.39 Wool Production (Preliminary) *a* (No. 18, 1967-68)\*
- Wool Production, Woollen Mills (*see Secondary Industries*)

**Production (*see Primary Industries and Secondary Industries*)****Retail Trade—**

- 11.1 Retail Establishments and Other Services, Census of *irr* (year ended 30 June 1962)—  
Preliminary Statements Nos 1-14 (Australia and States)\*  
Bulletins Nos 1-7 (Australia and States)  
Bulletins Nos 8, 9 (Australian Capital Territory and Northern Territory)\*  
Supplementary Collections Nos 1-3—Licensed Clubs; Laundries and Dry Cleaners;  
Motion Picture Theatres\*
- 11.2 Retail Establishments, Survey of, Australian Capital Territory *a* (1966-67)\*
- 11.3 Retail Establishments, Survey of, Northern Territory *a* (1966-67)\*
- 11.4 Retail Sales of Goods *q*\*
- 11.5 Retail Sales of Goods (Preliminary) *q*\*
- 11.6 Retail Sales of Goods (Provisional) *m*\*

**Rural Industries (*see Primary Industries*)****Schools (*see Social Statistics*, 13.4 13.5)****Secondary Industries—**

- 12.1 Agricultural Machinery Statistics, New *q*\*
- 12.2 Construction Machinery and Attachments, Sales of New *q*\*
- 12.3 Factories by Class of Industry, Principal Statistics of *a* (1965-66)\*†
- 12.4 Factories, Summary of Principal Statistics of *a* (No. 19, 1966-67)\*
- 12.5 Factory Production, Indexes of *a* (1949-50 to 1965-66)\*
- 12.7 Factory Products, Principal *a* (No. 16, 1962-63 to 1966-67)\*
- 12.8 Factory Statistics, Australian Capital Territory *a* (1966-67)\*
- 12.9 Factory Statistics, Northern Territory *a* (1966-67)\*
- 12.10 Factory Statistics, Preliminary *a* (1966-67)\*‡
- 12.11 Manufacturing Commodities *a* (No. 1, 1963-64 and 1964-65)
- 12.12 Manufacturing Industries *a* (1966-67)\*—  
1. Cement and Cement Goods  
2. Bricks, Tiles, Pottery and Earthenware  
3. Chemicals, Drugs and Medicines  
4. White Lead, Paints and Varnish  
5. Chemical Fertilisers  
6. Soap and Candles  
7. Basic Metal Industries  
8. Metal Fabricating Industries

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† *See* 12.10.

‡ Includes 12.3 for 1966-67.

*Reference*

9. Motor Vehicles and Cycles
10. Cotton Mills
11. Woollen Mills
12. Rope and Cordage
13. Tanneries
14. Boots and Shoes
15. Clothing (including Hosiery and Knitted Goods)
16. Flour and other Grain Mills
17. Biscuits
18. Confectionery
19. Jam, Fruit, Vegetables, Pickles, Sauces, Condiments, etc.
20. Bacon Curing
21. Butter, Cheese and Condensed, Concentrated, etc., Milk
22. Aerated Waters and Cordials
23. Meat and Fish Preserving
24. Breweries
25. Wineries and Distilleries
26. Tobacco, Cigars and Cigarettes
27. Sawmilling
28. Pulp and Paper Making
29. Rubber Works
30. Brooms and Brushes
31. Electric Light and Power Works
32. Gas Works
33. Plastic Moulding and Products
34. Leather Goods (including Saddlery and Belting)
35. Printing and Stationery
- 12.13 Manufacturing Industry *a* (No. 3, 1965-66)
- 12.6 Packaging and Associated Items *a* (1966-67)\*
- 12.14 Production Statistics *m*\*
- 12.15 Production Statistics (Preliminary) *m*\*
- 12.16 Production Summaries *m*\*—
  1. Automotive Spark Plugs and Shock Absorbers
  2. Chemicals, etc.
  3. Plastics and Synthetic Resins and Plasticisers
  4. Paints and Other Surface Coatings
  5. Electricity and Gas
  6. Soap, Detergents, Glycerine and Fatty Acids
  7. Internal Combustion Engines
  8. Lawnmowers
  9. Electrical Appliances
  10. Motor Bodies, Trailed Vehicles, Lift-on Freight Containers, etc.
  11. Pedal Cycles
  12. Meters
  13. Building Fittings
  14. Cotton Goods
  15. Woolscouring, Carbonising and Fellmongering
  16. Wool Textile Industry—Woollen and Worsted Carding, Combing and Spinning
  17. Wool Textile Industry—Wool Weaving
  18. Hosiery
  19. Shirts, Cardigans, Nightwear, Underclothing, etc.
  20. Cellulosic and Synthetic Fibre Tops, Yarns and Woven Fabrics
  21. Paper, Wood Pulp and Adhesive Tapes
  22. Floor Coverings
  23. Electric Motors
  24. Men's, Youths' and Boys' Outer Clothing
  25. Foundation Garments
  27. Gloves and Slide/Zip Fasteners
  28. Footwear
  29. Biscuits, Ice Cream, Cocoa, Confectionery

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*Reference*

- 30. Storage Batteries—Wet Cell
- 32. Perambulators, Pushers and Strollers
- 33. Motor Vehicles
- 34. Radio, etc., Television Sets and Cabinets
- 35. Bed Bases and Mattresses
- 36. Preserved Milk Products
- 38. Canned Fish
- 39. Jams and Preserved Fruit and Vegetables
- 40. Cereal Products
- 41. Vegetable Oils: Margarine and other Edible Processed Fats
- 42. Malt and Beer
- 43. Stock and Poultry Meals (Other than Cereal)
- 45. Phonograph Records
- 47. Aerated and Carbonated Waters, Cordials and Syrups, and Concentrated Cordial Extract
- 48. Sports Goods
- 49. Building Materials
- 50. Electrodes for Manual Welding
- 51. Hides and Skins used for Tanning
- 52. Electrical Power Frequencies Transformers, Chokes and Ballasts
- 53. Plastics Film, Sheeting and Coated Materials
- 55. Butter and Cheese
- 56. Canned Meat
- 58. Steel Wire and Wire Products
- 59. Non-ferrous Rolled, Extruded and Drawn Products
- 12. 17 Textile Industries, Machines Installed *a* (30 June 1966 and 1967)\*
- 12. 18 Tractors, New, Receipts, Sales and Stocks *q*\*

**Social Statistics—**

- 13. 1 Divorce *a* (1967)\*
- 13. 2 Divorce *q*\*
- 13. 4 School Enrolments *a* (1967)\*
- 13. 5 Schools *a* (1967)\*
- 13. 6 Universities (Preliminary) *a*—Students and Staff (1968); Finance (1967)\*
- 13. 7 University Statistics, Part 1. Students and Degrees Conferred *a* (1967)\*
- 13. 8 University Statistics, Part 2. Staff and Libraries *a* (1967)\*
- 13. 9 University Statistics, Part 3. Finance *a* (1966)\*

**Transport and Communication—**

- 14. 1 Motor Vehicle Registrations *a* (1967)\*
- 14. 2 Motor Vehicle Registrations *m*\*
- 14. 3 Motor Vehicle Usage, Survey of (Preliminary) *irr* (1963)\*
- 14. 4 Motor Vehicle Usage, Survey of (Preliminary) States and Territories *irr* (1963)\*
- 14. 5 Motor Vehicles, Census of *irr* (31 December 1962)—  
Preliminary Statements Nos 1–9 (Australia, States and Territories)\*  
Bulletins Nos 1–9 (Australia, States and Territories)
- 14. 6 New Motor Vehicles, Registrations of (Preliminary) *m*\*
- 14. 7 New Motor Vehicles, Registrations of, Make of Vehicle (Preliminary) *a* (1967)\*
- 14. 8 New Motor Vehicles, Registrations of, Make of Vehicle (Preliminary) *m*\*
- 14. 9 Road Traffic Accidents Involving Casualties *q*\*
- 14. 10 Shipping Cargo, Overseas *m*\*
- 14. 11 Transport and Communication *a* (No. 58, 1966–67)

University Statistics (*see* Social Statistics, 13.6 to 13.9)

Value of Production (*see* Primary Industries, 10.24 to 10.27)

Vital Statistics (*see* Demography, 4.4, 4.7 to 4.11)

Wages (*see* Labour, Wages and Employment)

**Information on current or recent Bureau publications**

Further information on current or recent publications of the Commonwealth Bureau of Census and Statistics is contained in *Publications of the Commonwealth Bureau of Census and Statistics*, April 1968, available free on request from the Commonwealth Statistician, Canberra. This contains a list of all Bureau publications, a subject index to show the Central Office publications in which information on the various subjects dealt with by the Bureau is to be found, and short descriptions of major Central Office publications. The information on issues in this publication is supplemented in monthly statements.

**Publications issued by the Deputy Commonwealth Statisticians**

A list of the current publications issued by the Deputy Commonwealth Statistician of each State appears in *Publications of the Commonwealth Bureau of Census and Statistics*, April 1968, and this information is supplemented also in the monthly statements mentioned above.

**Commonwealth and State Parliamentary and Departmental Reports and Papers**

No comprehensive list of current publications of this nature is available, but the National Library of Australia issues an annual publication *Australian Government Publications*, a list of official publications of the Commonwealth, States and Territories, compiled from records of material received by the Library during the year.

The Publications Branch of the Commonwealth Government Printing Office, Canberra, issues a monthly publication *Australian Government Publications* and at irregular intervals Consolidated Lists. These publications list Commonwealth publications currently becoming available or in stock, showing the titles and prices of Parliamentary Papers, Parliamentary Debates (Hansard), records of Parliamentary proceedings, Acts, Statutory Rules, Ordinances, and departmental bulletins and reports issued annually or irregularly.

Australian Government publications may be obtained from the Director of Publications, Commonwealth Government Printing Office, Canberra, A.C.T. 2600; and from or through the Publications Branch Book Counter, The Foyer, Commonwealth Centre, Sydney; the Commonwealth Sub-Treasury in each State capital city; the New South Wales Government Information and Sales Centre, Sydney; the Commonwealth Government Bookshop, 347 Swanston Street, Melbourne; or booksellers.

The National Library of Australia issues annually a publication *Australian Books*, a reprint of the 1966 issue of which is included on pages 1231-77 of Year Book No. 53. See page 557 of the chapter Education, Cultural Activities and Research for further information concerning the National Library's publishing of Australian publications.



## CHRONOLOGICAL TABLE

### CHIEF EVENTS IN AUSTRALIA SINCE 1955

NOTES. In issues of the Year Book up to No. 48 (see No. 48, page 1201) this table covered events back to the establishment of settlement in Australia in 1788. Later issues up to No. 50 (see No. 50, page 1289) covered events back to 1945. This issue covers the years 1955 to 1967 and the first half of 1968.

For each earlier year this Table rarely contains more than two or three items; for recent years, however, in order to provide a wide cover of events, etc., it includes a much greater number. Both the nature of the Table and considerations of space render necessary a continual reduction in these items, and for more information the reader should therefore consult earlier issues.

- 1955 First power generated by Snowy Mountains Hydro-electric Authority. Australian population reached 9,000,000. Cocos (Keeling) Islands became Territory under authority of Commonwealth.
- 1956 Amendment to Conciliation and Arbitration Act altered the structure of the arbitration machinery by separating judicial functions from conciliation and arbitration functions.
- 1957 High Court ruled that interstate vehicles could not be compelled to register in New South Wales, but upheld validity of Victorian tax on commercial vehicles, including those engaged in interstate trade, imposed solely for the maintenance of roads. National Capital Development Commission set up to co-ordinate development of Canberra as centre of government.
- 1958 Prime Minister officially opened Australia's first nuclear reactor at Lucas Heights, near Sydney. Christmas Island (Indian Ocean) transferred to Australian Administration.
- 1959 Annual Holidays Act, 1944-1958 provided for three weeks' annual holiday for all New South Wales workers. Population reached 10,000,000.
- 1960 Provision made for Social Service benefits to be paid to Australian Aborigines. *Commonwealth Banks Act* 1959 and *Reserve Bank Act* 1959 proclaimed (see page 639). Goods comprising 90 per cent of Australia's current imports exempted from licensing provisions. National Service training suspended. Commonwealth Government announced special economic measures designed to counter inflationary trend and safeguard overseas funds.
- 1961 Australia's first guided missile base established at Williamstown (New South Wales). *Commonwealth Matrimonial Causes Act* 1959 unifying State Acts became operative (see page 602). Commonwealth Government announced tax concessions to exporters for promotional expenses in developing overseas export markets. Oil discovered in south-west Queensland. Australian population census taken. Iron ore deposits estimated at 1,800 million tons discovered at Pilbara (Western Australia).
- 1962 Commonwealth and Western Australian Electoral Acts amended to provide for votes for Aborigines. Work began on standardisation of rail gauge from Kwinana to Kalgoorlie (Western Australia). Commonwealth provided \$3,530,000 grants to States for assistance to universities in development of training facilities for medical students in teaching hospitals. First production of bauxite ore from Weipa deposits. Aborigines exercised voting rights in Northern Territory for first time.
- 1963 Commonwealth Committee of Economic Enquiry appointed to investigate broad aspects of the Australian economy. Approval given to agreement for United States to operate a naval communications station at North West Cape, Western Australia. Western Australian Government signed \$156 million contract for the establishment and development of a new iron and steel industry in the State. Decimal currency legislation introduced into House of Representatives (see Year Book 52, page 672). Australian population reached 11,000,000.
- 1964 R.A.N. Destroyer *Voyager* sunk in collision off Jervis Bay with loss of eighty-two lives. First general election from common roll in Papua-New Guinea. New South Wales Government employees granted four weeks' annual leave. Commonwealth Government announced programme of assistance for schools for teaching of science. Moonie to Brisbane oil pipeline opened and Australia's first commercial oil production started. Northern Territory Legislative Council passed legislation removing discrimination against Aborigines. Northern Territory *Social Welfare Ordinance* 1964 (see page 1182) repealed *Welfare Ordinance* 1953-1963 and provided for assistance without control for any person socially or economically in need of it. Commonwealth Government established licensing system for intrastate civil aviation. Australian forces saw action in Malaysia. Prime Minister announced expansion of defence provisions involving additional defence expenditure of \$2,440 million over three years, resumption

- 1964 of National Service Training and establishment of special Reserve Forces (*see* page 76).  
 -cont *National Service Act* 1964 passed. Commonwealth Government allowed export of iron ore to Japan from fields in Western Australia.
- 1965 Full High Court judgement on intra-state airlines case held that New South Wales Air Transport Act requiring intra-state services to hold a State licence was valid, but also that four out of five relevant Commonwealth regulations were valid, so that airlines needed Commonwealth licence as well. Australia signed major defence agreement to buy \$312 million of aircraft and other military equipment in next three years. Martin Report on tertiary education tabled in House of Representatives (Commonwealth will provide grants, subject to matching grants by States, rising from \$5 million to \$50 million over six-year period for development of technical education at tertiary level and will award 1,000 additional scholarships, to total of 6,000). New steelworks opened at Whyalla (South Australia). Report of Vernon Committee of Economic Enquiry tabled in House of Representatives. First trade agreement between Australia and U.S.S.R. signed in Moscow. Economic sanctions imposed on Rhodesia. Mills Cross radio telescope opened by Prime Minister near Hoskinstown (N.S.W.). Largest Australian built ship, the 49,000 ton bulk ore carrier *Darling River*, launched.
- 1966 Mr Harold Holt sworn in as Prime Minister. Dame Annabelle Rankin included in new ministry, first woman to administer a Commonwealth Government department in Australia. Australia adopted dollar-cent system of decimal currency. Immigration laws amended to provide for relaxation of restrictions on entry of persons of non-European race (*see* page 165). The Australian Army battalion in Vietnam replaced by an Army Task Force of two battalions and support units. H.M.A.S. *Perth*, Australia's new guided missile destroyer, arrived in Sydney. Member for Australian Capital Territory given full voting rights. Oil flowed from well 27 miles off-shore from Lakes Entrance (Victoria). Australia's third commercial oilfield declared at Barrow Island, 50 miles off Western Australian coast. First shipment of iron ore from Mount Goldsworthy field. Australia joined eight other nations in forming Asian and Pacific Co-operation Council (ASPAC). 1966 census taken. Increase of \$2 a week granted in the Basic Wage. First President of Trade Practices Tribunal appointed. Commonwealth Government signed \$8 million contract for 1,500 mile trans-continental telephone link from Northam, Western Australia to Kimba, South Australia. Burrinjuck Reservoir only one-third full. First shipment of iron ore (52,000 tons from Mount Tom Price) for Japan. Prime Minister left for conference of Commonwealth Prime Ministers in London. Viscount aircraft crashed in Queensland with loss of twenty-four lives. First migrants arrived under new Special Passage Assistance Programme (*see* pages 162-3). President Johnson of United States of America made four-day visit to Australia. Permanent employment of married women by Commonwealth Government proclaimed. Announced that National Servicemen would be eligible for re-establishment loans of up to \$6,000 at 4½ per cent interest on discharge. Minimum housing and food standards for Aboriginal employees in Northern Territory gazetted. New minimum wage rate for Aborigines employed under Northern Territory Wards Employment Ordinance became effective. First television programmes interchanged direct between Britain and Australia by means of the orbiting satellite INTELSAT II. Posthumous Victoria Cross awarded to Warrant Officer K. A. Wheatley for gallantry in Vietnam. Australia made gift of 150,000 tons of wheat and flour to India. New Commonwealth Department of Education and Science established. Australia's commitment in Vietnam increased.
- 1967 *January*. Marshal Ky, Prime Minister of South Vietnam, made official visit to Australia. Worst bushfires in history of Tasmania caused loss of 51 lives and property damage estimated to be more than \$20 million in Hobart environs and southern Tasmania.  
*February*. Prime Minister made seven-day visit to New Zealand. Australian Agricultural Council decided to maintain existing margarine quota limits.  
*March*. Honeysuckle Creek space tracking station for Apollo moon-probe opened by Prime Minister. Queen Elizabeth opened SEACOM communications cable linking Australia with south-east Asia. Prime Minister made two-week visit to south-east Asia.  
*April*. Commonwealth and State Governments reached agreement on off-shore oil and gas legislation. Under new regulations for export of uranium, exporters must find new deposits at least equal in quantity to proposed exports. United Nations World Symposium on Man-made Forests held in Canberra. First tanker loaded with oil from Barrow Island W.A.). Referendum in northern New South Wales concerning proposed new State of New England resulted in defeat of proposal.  
*May*. Agreement made between Australia and United Kingdom for building of 150-inch optical telescope at Siding Springs, New South Wales. Two Commonwealth referendums held—proposal to abolish link between size of Senate and House of Representatives defeated; removal from Constitution approved of discriminatory wording concerning Aborigines. (*See* page 66.)

1967 *June.* Announced that Snowy Mountains Hydro-electric Authority would be disbanded as an integrated construction force on completion of scheme. First direct satellite telecast from North America to Australia marked Australia's day at Montreal Expo '67. Senate, recalled during recess, disallowed post and telephone charge increases.

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*July.* Report of the National Capital Development Commissioner on New South Wales project for re-development of 'The Rocks' area of Sydney issued by State Parliament. Second Royal Commission into loss of H.M.A.S. *Voyager* (statement of Lieut.-Commander Cabban) commenced. Commonwealth Government announced gift to India of 150,000 tons of wheat (worth about \$9 million). Minister for Labour and National Service announced that Commonwealth Government had approved of two-year trial for permanent employment scheme for waterside workers proposed in Woodward report.

*August.* End of transition period to decimal currency after changeover on 14 February 1966 (see page 633). Government announced approval of leave-in-Australia scheme for Australian and United States troops from Vietnam. Major alumina plant opened at Gladstone, Queensland. Representatives of nine Asian and Pacific nations attended meeting of the Asian and Pacific Council. *Defence Forces Protection Act 1967* came into operation, making it an offence to give, to collect, to solicit, to send or to take moneys or goods to certain named bodies that support forces opposed to Australian troops in or near Vietnam or to similar bodies which may be proclaimed. H.M.A.S. *Oxley*, first of Australia's new submarines, arrived at new submarine base, H.M.A.S. *Platypus*. 36th Session of International Statistical Institute opened.

*September.* *Trade Practices Act 1965-1967*, designed to preserve competition in Australian trade and commerce to the extent required by the public interest, came into force. Establishment by Australia and New Zealand of Anzac Fellowship scheme announced by Prime Minister. Commonwealth Attorney-General announced that Government would limit appeals from High Court to Privy Council, as first step towards making High Court the final Court of Appeal for Australia (see June 1968). Announced that Commonwealth Government would establish an Office of Aboriginal Affairs to co-ordinate policy and to provide the machinery necessary for joint consultations with the States. Qantas Empire Airways began jet service between Port Moresby and Hong Kong via Manila. Victoria introduced legislation to implement direct State aid to church schools in Victoria. President Saragat of Italy made six-day visit to Australia; a new migration agreement signed between Italy and Australia (see page 161).

*October.* Agreement signed between Australian and Turkish Governments concerning the residence and employment of Turkish citizens in Australia (see page 162). Daylight saving became effective in Tasmania. Increases in postal, telegraph and telephone charges. New Zealand Prime Minister made three-day visit to Canberra for defence talks. Prime Minister of Japan made four-day visit to Canberra, Melbourne and Sydney. Posthumous award of Victoria Cross made to Major P. J. Badcoe for outstanding heroism in Vietnam. Prime Minister announced that Australia's forces in Vietnam would be increased by more than 1,700 in November-December. Drought in Victoria became increasingly severe. Progressive water restrictions imposed in Melbourne area. Snowy Mountains Hydro-electric Authority let \$41.9 million contract for building of Talbingo Dam and Tumut 3 Power Station. Former New Zealand ferry *Hinemoa* bought by Tasmanian Government and installed at Bell Bay for use as floating power generator to relieve critical power shortage, because of drought, in Tasmania's hydro-electric system. Prince Souvanna Phouma, Prime Minister of Laos, made twelve-day visit to Australia.

*November.* Commonwealth Government agreed to restricted charter flights to and from Australia, with fare reduction of up to 50 per cent designed primarily to assist migrant groups wishing to visit former homelands. Commonwealth Government approval announced of proposal by Qantas Airways Limited to order four Boeing 747 'Jumbo Jet' aircraft for delivery in 1971 and to obtain options on a further two for possible requirements after 1972. Australian Resources Development Bank formed by Australia's Major Trading Banks and Reserve Bank to finance Australian participation in projects of national importance. Prime Minister announced Government's decision not to devalue Australian dollar with pound sterling. Subscriber trunk dialling system extended to provide direct dialling between most cities of eastern Australia. Legislation for control of off-shore oil and gas leases received Royal Assent. Australia launched its first satellite at Woomera.

*December.* Senate select committee recommended that Australia change over to metric system of weights and measures. Commonwealth Conciliation Commission awarded increases of up to \$7.40 in margins to metal trade workers. Lone yachtsman, Alec Rose, reached Australia from England. Prime Minister, Rt Hon. Harold Holt, disappeared while swimming off Portsea, Victoria; Rt Hon. J. McEwen sworn in as Prime Minister.

1968 *January.* Legislation permitting Tasmanian shops to remain open twenty-four hours a day seven days a week came into operation. Uniform Commonwealth-State censorship laws (to June) came into force. A United States Government Mission discussed with the Australian Government the restriction of overseas investment from the United States of America. Senator J. G. Gorton elected leader of Liberal Party and sworn in as Prime Minister. Industrial dispute involving Sydney mail drivers subsequently extended to all postal workers in Australia. The Leader of the Opposition visited south-east Asian countries. The first of the two B.A.C. 111's for V.I.P. Squadron arrived in Canberra. Memorial service for late Prime Minister Holt held in Westminster Abbey. Agreement signed between Western Australian Government and operating company for exploitation of Kambalda nickel deposits (*see* page 1072). Twelve-mile fishing limit around Australia, Nauru, Papua and New Guinea, and Cartier Islands operated from 30 January. Nauru became an independent nation on 31 January.

*February.* New Victorian stamp duty on receipts. Second Papua and New Guinea general election held from 17 February to 15 March. Foreign Minister of Cambodia visited Australia and following his visit the Australian Government agreed to recognise Cambodian borders. The full bench of the Arbitration Court decided that thirty per cent of wage increases exceeding \$1.60 per week granted to metal trade employees in December 1967 will be deferred until August. Announced that an agreement had been signed between the Commonwealth Government and a consortium of Swiss and Australian companies for the development of the bauxite deposits at Gove, Northern Territory (*see* page 1070). By-election for seat of Higgins in the House of Representatives won by Prime Minister Gorton. Report of the second Royal Commission into loss of H.M.A.S. *Voyager* (*see* July). Second Gorton Ministry appointed— included provision for Minister in Charge of Aboriginal Affairs (*see* September). Commonwealth and State authorities agreed on measures to be adopted to combat hazards from operations of oil tankers, such as oil pollution and collisions.

*March.* Minister for Health appointed Chairman of a Select Committee on Social Services to become the co-ordinator between all Departments concerned with social services. Commonwealth Government approved in principle the transfer of the principal seat of the High Court to Canberra. The Prime Minister made a three-day visit to New Zealand.

*April.* Joint Commonwealth-State off-shore petroleum legislation operated from 1 April. New Zealand was guaranteed a preferred position for its paper products under the New Zealand-Australia Free Trade Agreement. United States Secretary of State, Mr Dean Rusk visited Australia. Announced that Australia would give 500,000 tons of grain to India. Twenty-fourth session of E.C.A.F.E., which lasted two weeks, held in Canberra. Indonesian Foreign Minister visited Australia for four days. First liver transplant operation in Australia performed in Sydney. Indonesia offered \$12.9 million by Australian Government, in addition to the grant of \$5.2 million announced in previous September, to help stabilise its economy; this offer is Australia's share of \$216 million being pledged by fourteen nations. Population reached 12,000,000.

*May.* Commonwealth Government granted States \$30 million for technical and agricultural colleges over next three years in addition to \$40 million dollars granted over past four years. National servicemen granted eligibility under Defence Forces Retirements Benefits Fund and Repatriation Act retrospective to June 1965. Australia sent envoy to Vietnam peace talks in Paris. Duke of Edinburgh visited Australia from 10 May to 5 June to open and participate in his third Commonwealth Study Conference. Emperor of Ethiopia made a five-day visit to Australia. The first total energy gas plant in Australia commenced operations in Melbourne. A direct shipping service between Australia and Chile commenced. Mrs Gandhi, Prime Minister of India, made a seven-day visit to Australia. Prime Minister made a five-day visit to the United States of America. National Service Bill increasing penalties for evasion of national service passed by House of Representatives after being amended by Senate. Northern Territory member in House of Representatives given full voting rights. Report of United Nations mission to Territory of New Guinea issued by Trusteeship Council.

*June.* Prime Minister announced the appointment of the ten members of The Australian Council for the Arts. Prime Minister made a twelve-day visit to the countries of south-east Asia. Melbourne became one of the three vital links in World Weather Watch, the other two being Washington and Moscow. President of Nauru made an eleven-day visit to Australia. The \$25 million Warringah Expressway opened in Sydney. Vietnam Medal for Australian Armed Forces instituted and created by Queen. Major reorganisation of planning and staff arrangements in Department of Defence announced. *Privy Council (Limitation of Appeals) Act 1968* assented to by the Queen (to operate from 1 September 1968).

## DIARY OF PRINCIPAL ECONOMIC EVENTS, 1967-68

The principal economic events in earlier years were shown in the following issues:

<i>Years</i>	<i>Year</i>	<i>Book No.</i>	<i>Pages</i>
1931 to 1938 . . .	33	.	968-77
1939 to 1944 . . .	36	.	1129-41
1945 to 1948 . . .	37	.	1235-45
1949 to 1951 . . .	39	.	1331-40
1952 to 1955 . . .	42	.	1149-60
1956 to 1958 . . .	46	.	1185-92
1958-59 to 1961-62	48	.	1188-1200
1962-63 . . .	49	.	1253-56
1963-64 . . .	50	.	1283-88
1964-65 . . .	51	.	1269-74
1965-66 . . .	52	.	1185-88
1966-67 . . .	53	.	1279-82

The year 1967-68 was one of drought for south-eastern Australia, and there was a fall of 21 per cent in gross farm product at factor cost. However, in the remainder of the economy activity was at a high level, the increase in non-farm product at current prices being as high, at 9 per cent, as in 1966-67. Overall economic growth, as measured by the increase in gross national product at constant (average 1959-60) prices, was about 4 per cent, and lower than the 6 per cent increase estimated for 1966-67.

Nevertheless domestic demand remained high. The increase in personal consumption expenditure was slightly higher at 8 per cent than in 1966-67 (with a most marked increase in motor vehicle sales), while current expenditure by public authorities maintained its 13 per cent rate of increase. The rate of increase of the public sector's gross fixed capital expenditure was 9 per cent in 1967-68 compared with 6 per cent for the previous year. Gross fixed capital expenditure in the private sector recovered strongly, increasing by 8 per cent compared with less than 1 per cent in 1966-67, new building and construction other than dwellings being the fastest growing component. Mining, in a variety of minerals such as iron ore, bauxite, nickel, copper, oil, and natural gas, featured prominently in this expenditure. Construction began of pipelines for the transportation of natural gas in Queensland and Victoria, and mineral exploration proceeded on a larger and wider scale. Discoveries of natural gas, oil and other minerals, notably nickel, were reflected in stock exchange activity during the year. The Sydney Stock Exchange Price Index for ordinary shares rose by 69 per cent while that for non-ferrous metal shares rose by 122 per cent.

Imports of goods and services increased by 12 per cent to help meet the strong domestic demand. On the other hand, exports of goods and services increased by only 2 per cent. Factors in the slower growth of exports were the drought, lower overseas prices for farm products, and devaluation of sterling and other currencies which reduced returns from some major exports. As an offset, there was a substantial increase in the value of mineral exports. The effect on the balance of payments was that the current account deficit increased from \$657 million to \$1,058 million. However, this was more than offset by a substantial increase in net apparent capital inflow, giving a favourable net monetary movement of \$78 million (this excludes a loss of \$113 million in international reserves caused by devaluation).

An important element in the balance of payments and in the level of investment activity in 1967-68 was the considerable inflow of portfolio investment and institutional loans. Investment spending was helped by continued generally expansive financial conditions, as the amount of money at the disposal of the public increased by \$982 million or 8.3 per cent, slightly more than in the previous year. There was a larger increase in the banking system's holdings of Government debt, a record increase in loans and advances in respect of cheque-paying banks and a firmer trend in the Reserve Bank's holdings of gold and foreign exchange. Outside of the banking system there were increases in the amount financed by finance companies in respect of all types of agreement, and balances outstanding rose from \$2,088 million to \$2,421 million. The amount financed by finance companies and all other lenders in respect of instalment credit for retail sales was 13.2 per cent higher than in the previous year.



Noteworthy in the field of public finance and Commonwealth-State financial relations was the introduction by the Victorian Government of a stamp tax to be levied on receipts, including wages, following a similar move earlier by Western Australia.

Although demand gained strength through 1967-68, there were no serious strains evident on the labour market or on domestic resources generally, and price levels were fairly stable. The Consumer Price Index increased by 2.8 per cent from June 1967 to June 1968 compared with an increase of 3 per cent in the previous year. The index of average weekly earnings increased by 5.7 per cent during 1967-68 compared with 7.9 per cent and 3.6 per cent in 1966-67 and 1965-66 respectively.

The number of persons in civilian employment and defence forces increased by 131,300 or 3.4 per cent compared with 2.2 per cent in 1966-67. The number of registered job vacancies decreased from 29,335 to 28,722 from June 1967 to June 1968, while the number of people registered for unemployment decreased from 68,491 to 65,253.

During 1967-68 industrial disputes occurred amongst employees engaged in engineering industries, communications, and metalliferous mining.

Following a work value inquiry concerning classifications appearing in the Metal Trades Award, the Commonwealth Conciliation and Arbitration Commission, in January 1968, granted wage increases ranging between 10 cents and \$10.05 per week, with tradesmen generally receiving \$7.40 per week increase. Subsequently, payment of up to 30 per cent of these increases was deferred until August 1968.

The year concluded on a generally buoyant note, with good autumn rains encouraging the sowing of a record acreage to crops.

#### 1967-68

13 *July*. Australia's biggest particle board factory (a \$4.5 million plant) commenced production at Tumut, New South Wales.

14 *July*. Special Bonds Series O issued at par with interest rates ranging from 4.4 to 5.2 per cent and optional redemption prices ranging from par to 103 per cent at maturity.

Six-month Commonwealth Treasury Notes introduced, priced at 97.87 to yield 4.365 per cent to maturity.

20 *July*. Commonwealth cash loan issued with yields of 4.62 per cent for 3 years 1 month, 5 per cent for 10 years, 5.25 per cent for 22 years, and 5.25 per cent for 36 years. An amount of \$129 million was raised.

22 *July*. Murray I Power Station, with a capacity of 950,000 kilowatts, opened by Prime Minister. It is the first completed project in the second half of the two-pronged Snowy Development—i.e. Snowy-Murray diversion.

30 *July*. Announced that Commonwealth Government had approved of two-year trial for permanent employment scheme for waterside workers proposed in Woodward Report.

1 *August*. End of transition period to decimal currency after changeover on 14 February 1966 (see page 633).

4 *August*. Major alumina plant opened at Gladstone, Queensland.

7 *August*. Domestic air fares increased by five per cent.

Terms of six-month Commonwealth Treasury notes adjusted, price 97.86, to yield 4.386 per cent to maturity.

15 *August*. Commonwealth Budget for 1967-68 introduced into House of Representatives. In 1966-67 receipts of the Consolidated Revenue Fund were \$5,227.7 million, and expenditure (excluding payments of \$227.7 million to the Loan Consolidation and Investment Reserve) amounted to \$5,000.1 million. The main items of revenue (1965-66 figures shown in parentheses) were: income taxes, \$2,729.8 million (\$2,549.7 million); excise duties, \$805.0 million (\$751.2 million); customs duties, \$277.0 million (\$272.4 million); sales tax, \$379.3 million (\$369.4 million); and pay-roll tax, \$172.2 million (\$161.9 million). The main items of expenditure were: payments to or for the States, \$1,220.1 million (\$1,117.8 million); social and health services, \$1,031.1 million (\$941.6 million); defence services, \$659.2 million (\$657.6 million); war and repatriation services, \$262.3 million (\$263.7 million); capital works and services, \$467.5 million (\$418.1 million). The budget for 1967-68 provided for an estimated expenditure of \$5,686.3 million, to be provided from Consolidated Revenue Fund.

28 *August-7 September*. The 36th biennial session of The International Statistical Institute held in Sydney at the invitation of the Commonwealth Government—the first occasion that a meeting had been held in Australia.

- 31 *August*. 1967-68 Budget introduced into South Australian House of Assembly. In 1966-67 revenue amounted to \$258,823,000 and expenditure to \$258,717,000, leaving a surplus of \$106,000. For 1967-68 it was estimated that revenue would be \$274,022,000 and expenditure \$277,989,000, leaving a deficit of \$3,967,000.
- 1 *September*. *Commonwealth Trade Practices Act* 1965-1967, designed to preserve competition in Australian trade and commerce to the extent required by the public interest, came into force.
- 12 *September*. 1967-68 Budget introduced into Tasmanian House of Assembly. The transactions of the Consolidated Revenue Fund in 1966-67 resulted in a deficit of \$572,000. Receipts of the Consolidated Revenue Fund totalled \$92,676,000 and expenditure \$93,248,000. For 1967-68 it was estimated that expenditure would be \$102,008,000 and revenue \$99,543,000, leaving a deficit of \$2,465,000.
- 13 *September*. 1967-68 Budget introduced into Victorian Legislative Assembly. In 1966-67 revenue and expenditure were each \$559,600,000. The 1967-68 Budget has also provided for balance, with revenue and expenditure each estimated at \$603,000,000. Railway operating expenses and income were estimated at \$107,485,000 and \$107,899,000 respectively, giving an operating profit of \$414,000.
- 15 *September*. Record oil flow of 3,230 barrels a day reported from new strike in Bass Strait at Halibut 1.  
Nickel discovered at Kambalda, Western Australia.
- 20 *September*. Commonwealth £Stg 14 million loan opened in London, issued at 99 with interest at 7 per cent for a period of 14 years. The loan was fully subscribed.
- 27 *September*. 1967-68 Budget introduced into New South Wales Legislative Assembly. During 1966-67 the transactions of the Consolidated Revenue Fund, Railways, Metropolitan and Newcastle Transport Services, and Maritime Services Board resulted in a deficit of \$7,339,000 (total revenue overall was \$833,385,000, total expenditure \$840,724,000). After providing for debt charges there was a surplus of \$191,000 on the Department of Railways, a deficit of \$5,494,000 on the Metropolitan and Newcastle Transport Services, and a surplus of \$89,000 from the operations of the Maritime Services Board. The 1967-68 Budget provided for an overall deficit of \$10,297,000 (revenue \$875,217,000, expenditure \$885,513,000). After meeting debt charges, it was estimated that there would be a surplus of \$398,000 on the Railways, a deficit of \$6,051,000 on the Metropolitan and Newcastle Transport Services, and a surplus of \$39,000 on the Maritime Services Board.
- 28 *September*. 1967-68 Budget introduced into Queensland Legislative Assembly. In 1966-67 receipts of the Consolidated Revenue Fund amounted to \$323,781,000 and expenditure to \$323,523,000. For 1967-68 it was estimated that revenue would amount to \$344,788,000 and expenditure to \$344,765,000, leaving a surplus of \$23,000.
- 29 *September*. New migration agreement signed between Italy and Australia (*see* page 161).
- 1 *October*. Increases in postage, telegraph, and telephone charges.
- 5 *October*. 1967-68 Budget introduced in Western Australian Legislative Assembly. Financial transactions for the year 1966-67 resulted in a deficit of \$27,000. For 1967-68 it was estimated that expenditure would be \$244,900,000 and revenue \$244,176,000, leaving a deficit of \$724,000. Agreement signed between Australian and Turkish Governments concerning the residence and employment of Turkish citizens in Australia (*see* page 162).
- 6 *October*. Commonwealth cash loan issued with yields of 4.59 per cent for 2 years 10 months, 5 per cent for 9 years 9 months, 5.25 per cent for 21 years 9 months, and 5.25 per cent for 35 years 9 months. An amount of \$146 million was raised.
- 19 *October*. Arrangements made for loan of \$US25 million by Export-Import Bank of Washington to assist in financing importation of capital equipment from United States of America. Issued at par with interest at 6.875 per cent for a period of 15 years.
- 20 *October*. Commonwealth DM100 million (\$22.3 million) loan opened in Frankfurt, issued at 99 with interest at 6.5 per cent for a period of 15 years. The loan was fully subscribed.
- 23 *October*. Discussions held between Commonwealth, Victorian, and South Australian Governments on drought relief, and Commonwealth granted each State immediate assistance of \$1 million. The Commonwealth announced it had provided for \$15 million to be available to the two States.
- 28 *October*. Announced that a contract of \$41.9 million had been let by the Snowy Mountains Authority to build Talbingo Dam and Tumut 3 Power Station.

- 1 *November*. Commonwealth Government announced grants of \$48 million for Ord River project in Western Australia, and \$20 million for Emerald irrigation project in Queensland.
- 2 *November*. Commonwealth Government approval announced of proposal by Qantas Airways Limited to order four Boeing 747 'Jumbo Jet' aircraft for delivery in 1971 and to obtain options on a further two for possible requirements after 1972.
- 21 *November*. Commonwealth Government announced Australian dollar would not be devalued following the Sterling devaluation.
- 24 *November*. Shipping freights from British and European ports to Australia increased by 12½ per cent.  
Commonwealth Treasury note terms adjusted, three-month notes priced at 98.89 to yield 4.502 per cent to maturity, six-month notes priced at 97.76 per cent to yield 4.595 per cent to maturity.
- 5 *December*. Butter subsidy to rise 61c per cwt.
- 8 *December*. Announced that an additional 200 items had been added to the New Zealand—Australia Free Trade Agreement.
- 11 *December*. The High Court dismissed the challenge by the Trade Unions against the abolition of basic wages and the adoption of total wages.
- 1 *January*. Legislation permitting Tasmanian shops to remain open twenty-four hours a day seven days a week came into operation
- 5 *January*. A United States Government Mission discussed with the Australian Government the restriction of overseas investment by America in order to reduce the United States balance of payments deficit.
- 11–23 *January*. Industrial dispute involving Sydney mail drivers. Subsequently extended to postal workers in all States.
- 19 *January*. Agreement signed between Western Australian Government and the operating company for the exploitation of Kambalda nickel deposits (*see* page 1072).
- 26 *January*. Delivery of pipes for Sale–Melbourne gas line begins.
- 30 *January*. Application of twelve-mile fishing limit around Australia, Nauru, Papua and New Guinea, and Cartier Island.
- 1 *February*. Special Bonds Series P issued at par with interest rates ranging from 4.6 to 5.2 per cent and optional redemption prices ranging from par to 103 per cent at maturity.  
New Victorian stamp duty on receipts, including wages and salaries, came into operation.
- 6 *February*. Commonwealth cash loan, issued with yields of 4.89 per cent for 3 years, 5.10 per cent for 9 years 9 months, 5.25 per cent for 22 years, and 5.25 per cent for 36 years. An amount of \$125 million was raised.
- 9 *February*. Announced that New South Wales, Victoria, Queensland, and South Australia would get an extra \$13 million in Commonwealth drought relief grants and that Commonwealth would support an increase of \$20 million in the semi-governmental borrowing programme for 1967–68.
- 22 *February*. The full bench of the Commonwealth Conciliation and Arbitration Commission decided that payment of 30 per cent of wage increases granted to metal trades employees last December would be deferred until August (*see* page 308).
- 23 *February*. Announced that an agreement had been signed between the Commonwealth Government and a consortium of Swiss and Australian companies for the development of the bauxite deposits at Gove, Northern Territory (*see* page 1070).
- 7 *March*. The Savage River, Tasmania, iron ore mines development opened.
- 8 *March*. Commonwealth Treasury note terms adjusted, three-month notes priced at 98.91 to yield 4.42 per cent to maturity, six-month notes priced at 97.8 per cent to yield 4.511 per cent to maturity.
- 16 *March*. Australian Wheat Board negotiated a 1 million tons (\$50 million) sale of wheat to China (mainland).
- 29 *March*. The Australian Resources Development Bank (formed by the eight Major Trading Banks and the Reserve Bank) opened for business with capital of \$30 million.
- 1 *April*. Surcharge on cargoes shipped from Australia to the United Kingdom and Europe increased by 2½ to 6 per cent to cover cost of re-routing ships following the closure of the Suez Canal.

- 4 April. Announced that New Zealand had been guaranteed a preferred position for its paper products under New Zealand-Australia Free Trade Agreement.
- 5 April. Commonwealth Government announced that \$34 million compensation would be paid to statutory marketing authorities because of Sterling devaluation.
- 10 April. Announced that Commonwealth Savings Bank limit for housing loans would be increased from \$7,000 to \$8,000.
- 25 April. Announced that Indonesia would be offered \$12.9 million by the Australian Government, in addition to the grant of \$5.2 million offered in September, to help stabilise its economy. This offer is Australia's share of \$216 million being pledged by 14 nations.
- 2 May. Commonwealth granted States additional \$30 million for technical and agricultural colleges over next three years in addition to \$40 million granted over past four years.
- 7 May. Commonwealth cash loan issued with yields of 4.88 per cent for 2 years 9 months, 5.10 per cent for 10 years, 5.25 per cent for 21 years 9 months, and 5.25 per cent for 35 years 9 months. An amount of \$91 million was raised.
- 9 May. Announced that Japanese car manufacturers had agreed to raise price of their vehicles exported to Australia to avoid the possibility of action under the Australian anti-dumping law.
- 12 May. Announced that price of gold for industrial users would be at market prices.
- 15 May. Announced that a direct shipping service, with quarterly sailings Chile to Australia, would begin this month.
- 17 May. Announced that Commonwealth Government would provide \$10 million for Parkes-Broken Hill railway improvement.
- 27 May. Announced that Commonwealth Government was letting a three-year contract to develop local production of micro-electronic devices for defence applications.
- 7 June. Commonwealth Government approved the extension of north-south runway at Mascot to 13,000 feet.
- 17 June. Commonwealth Act providing for a loan of \$47 million to Tasmania over five years for hydro-electric purposes assented to.
- 25 June. Income tax amendments affecting mining ventures other than petroleum, which resulted from the first major review since the Report of the Commonwealth Committee on Taxation, 1950-54, came into operation. These amendments described the major classes of expenditure for which special deductions may or may not be made.
- 27 June. Interest rates paid on all fixed deposits lodged with Australian trading banks were increased.
- 28 June. Loan Council met in Canberra and approved borrowing programme for 1968-69 of \$710 million (\$584 million for State Works, \$126 million for Commonwealth-State housing).



## STATISTICAL SUMMARY: AUSTRALIA

In earlier issues of the Year Book, it was the practice to include in the Statistical Summary figures for every tenth year of the period 1861 to 1901, plus the latest year for which data were available. In each subsequent issue the latest year available was substituted for the year immediately preceding it until the next tenth year had been reached, and the earliest year in the series was eliminated as space was needed. In consequence of this system no single issue of the Year Book contained a continuous yearly series.

In this issue of the Year Book, this defect has been remedied in part by the inclusion of a continuous series back to the year 1941, with earlier tenth years back to 1901 (the National Accounts series on page 1268 has been carried back to 1900-01 in single years). In issue No. 39, pages xxviii-xxix, some of the series are shown for every tenth year from 1861 to 1941. There are, however, discrepancies between the original series and the series now published.

It is intended that in future issues of the Year Book, as circumstances permit, the continuous series will be carried further back and that other series will be added, although it will not be possible to carry all of them back to the earlier years.

Breaks in series; preliminary figures, etc. are indicated by the symbols shown on page xiii of this Year Book.

## STATISTICAL SUMMARY: AUSTRALIA

### DEMOGRAPHY

Year ended 31 December—	Population(a)			Natural increase	Over-seas migration(b)	Marriages		Divorces(c) and judicial separations	Births		Deaths		Infant deaths	
	Males	Females	Persons			No.	Rate(d)		No.	Rate(d)	No.	Rate(d)	No.	Rate(e)
1901	'000	'000	'000	'000	'000	'000		No.	'000		'000		'000	
1901	2,005	1,820	3,825	56.6	3.0	28	7.3	398	103	27.2	46	12.2	10.7	103.6
1911	2,382	2,192	4,574	74.3	74.4	39	8.8	509	122	27.2	48	10.7	8.4	68.5
1921	2,799	2,712	5,511	82.1	17.5	47	8.6	1,490	136	25.0	54	9.9	9.0	65.7
1931	3,333	3,220	6,553	61.9	-10.1	39	6.0	1,969	119	18.2	57	8.7	5.0	42.1
1941	3,599	3,545	7,144	63.3	5.2	75	10.6	3,351	135	18.9	71	10.0	5.3	39.7
1942	3,620	3,581	7,201	61.5	6.2	86	12.0	3,588	137	19.1	75	10.5	5.4	39.5
1943	3,648	3,621	7,270	74.8	1.3	68	9.4	4,686	149	20.6	74	10.3	5.4	36.3
1944	3,683	3,664	7,347	83.7	-2.2	68	9.3	5,691	153	21.0	70	9.5	4.8	31.3
1945	3,722	3,708	7,430	90.3	-2.6	63	8.5	7,213	161	21.7	70	9.5	4.7	29.4
1946	3,767	3,751	7,518	101.7	-15.1	79	10.6	7,235	176	23.6	75	10.0	5.1	29.0
1947	3,828	3,810	7,638	108.9	10.6	76	10.1	8,803	182	24.1	73	9.7	5.2	28.5
1948	3,909	3,884	7,792	101.1	55.1	75	9.7	7,253	178	23.1	77	10.0	4.9	27.8
1949	4,047	3,998	8,046	106.0	150.0	73	9.2	6,626	181	22.9	75	9.5	4.6	25.3
1950	4,191	4,116	8,307	112.4	152.5	76	9.2	7,428	191	23.3	78	9.6	4.7	24.5
1951	4,311	4,217	8,528	111.5	111.4	77	9.2	7,330	193	23.0	82	9.7	4.9	25.2
1952	4,426	4,314	8,740	120.1	94.0	74	8.6	7,110	202	23.4	82	9.5	4.8	23.8
1953	4,503	4,399	8,903	122.0	42.9	71	8.0	8,043	202	22.9	80	9.1	4.7	23.3
1954	4,598	4,492	9,090	120.5	68.2	71	7.9	6,528	202	22.5	82	9.1	4.5	22.5
1955	4,714	4,598	9,312	125.6	97.3	72	7.8	6,782	208	22.6	82	8.9	4.6	22.0
1956	4,829	4,702	9,531	126.0	94.0	72	7.6	6,492	212	22.5	86	9.1	4.6	21.7
1957	4,930	4,814	9,744	135.4	78.7	74	7.6	6,374	220	22.9	85	8.8	4.7	21.4
1958	5,026	4,921	9,947	138.8	65.4	74	7.5	6,994	223	22.6	84	8.5	4.6	20.5
1959	5,132	5,029	10,161	137.8	76.8	74	7.4	7,370	227	22.6	89	8.9	4.9	21.5
1960	5,253	5,139	10,392	141.9	90.1	75	7.3	6,709	230	22.4	88	8.6	4.6	20.2
1961	(i)	(i)	(i)											
1961	5,374	5,268	10,643	151.0	61.5	77	7.3	6,751	240	22.8	89	8.5	4.7	19.5
1962	5,470	5,376	10,846	143.9	62.5	79	7.4	7,290	237	22.2	93	8.7	4.8	20.4
1963	5,572	5,484	11,055	140.8	71.6	81	7.4	7,515	236	21.6	95	8.7	4.6	19.5
1964	5,683	5,597	11,280	128.6	99.3	86	7.7	7,967	229	20.6	101	9.0	4.4	19.1
1965	5,794	5,712	11,505	123.1	104.9	94	8.2	8,534	223	19.6	100	8.8	4.1	18.5
1966	5,895	5,816	11,710	118.7	86.9	96	8.3	9,921	223	19.3	104	9.0	4.0	18.2
1967	6,005	5,924	11,929	126.6	91.9	(j)	(j)	9,746	(j)	(j)	(j)	(j)	(j)	(j)

(a) At 31 December. (b) Excess of arrivals over departures. Minus sign (-) indicates excess of departures over arrivals. For the years 1901-1933 the figures include adjustments for the differences between the population estimated and recorded at census dates. (c) Decrees made absolute, including decrees for nullity of marriage. (d) Number per 1,000 of mean population. From 1967, number of marriages, births or deaths (including Aboriginal events) per 1,000 of mean population, including Aborigines. (e) Number per 1,000 live births. From 1967, total number of infant deaths (including Aboriginal deaths) per 1,000 of total live births. (f) Excess of births over civilian deaths from September 1939 to June 1947. (g) Excludes movements of defence personnel from September 1939 to June 1947. (h) Excludes deaths of defence personnel from September 1939 to June 1947. (i) Includes Aborigines. (j) Includes Aborigines. See footnotes (d) and (e).

## PRIMARY INDUSTRIES

## AGRICULTURE

Season	Wheat			Oats			Barley			Maize		
	Area	Yield	Average yield	Area	Yield	Average yield	Area	Yield	Average yield	Area	Yield	Average yield
	mil acres	mil bus	bus	'000 acres	mil bus	bus	'000 acres	mil bus	bus	'000 acres	mil bus	bus
1901-02	5.1	39	7.5	461	9.8	21.2	75	1.5	20.4	295	7.0	23.9
1911-12	7.4	72	9.6	617	9.6	15.5	116	2.1	17.7	340	8.9	26.3
1921-22	9.7	129	13.3	733	12.1	16.6	299	6.1	20.4	305	7.8	25.7
1931-32	14.7	191	12.9	1,085	15.2	14.0	342	6.3	18.4	269	7.1	26.2
1941-42	12.0	167	13.9	1,460	22.3	15.3	784	18.0	23.0	301	7.4	24.7
1942-43	9.3	156	16.8	1,497	21.5	14.4	451	8.3	18.4	285	6.9	24.2
1943-44	7.9	110	13.9	1,415	17.7	12.5	443	7.6	17.1	283	7.4	26.3
1944-45	8.5	53	6.3	2,034	9.0	4.4	614	5.0	8.2	257	6.5	25.2
1945-46	11.4	142	12.5	1,949	25.8	13.2	699	11.1	15.9	236	5.7	24.3
1946-47	13.2	117	8.9	1,728	15.6	9.0	748	11.6	15.5	260	5.8	22.4
1947-48	13.9	220	15.9	2,105	40.7	19.3	839	20.9	24.9	223	6.2	27.7
1948-49	12.6	191	15.2	1,770	23.6	13.3	1,012	17.8	17.6	182	5.2	28.5
1949-50	12.2	218	17.8	1,748	27.4	15.7	1,040	19.5	18.8	194	6.0	31.0
1950-51	11.7	184	15.8	1,757	25.1	14.3	1,079	22.9	21.2	169	4.7	27.9
1951-52	10.4	160	15.4	2,365	34.5	14.6	1,118	21.9	19.6	170	4.0	23.7
1952-53	10.2	195	19.1	2,764	43.6	15.8	1,377	35.0	25.5	174	5.0	28.5
1953-54	10.8	198	18.4	2,137	33.0	15.4	1,803	41.3	22.9	179	5.1	28.4
1954-55	10.7	169	15.8	2,574	32.8	12.8	1,691	29.4	17.4	170	5.1	29.9
1955-56	10.2	195	19.2	3,354	56.5	16.8	1,894	41.7	22.0	167	4.8	28.4
1956-57	7.9	134	17.1	2,556	35.4	13.8	2,093	49.3	23.5	182	5.5	30.3
1957-58	8.8	98	11.0	2,959	31.4	10.6	2,121	30.5	14.4	184	5.6	30.6
1958-59	10.4	215	20.7	3,974	86.9	21.9	2,381	63.0	26.5	180	6.7	37.4
1959-60	12.2	199	16.3	3,030	46.8	15.5	2,379	34.2	14.3	185	6.7	36.4
1960-61	13.4	274	20.4	3,637	76.1	20.9	2,830	68.0	24.0	185	6.2	33.8
1961-62	14.7	247	16.8	3,097	55.1	17.8	2,383	41.5	17.4	211	7.3	34.7
1962-63	16.5	307	18.6	3,292	68.8	20.9	2,027	39.6	19.5	209	7.5	35.6
1963-64	16.5	328	19.9	3,392	68.2	20.1	2,013	43.4	21.6	215	6.7	31.3
1964-65	17.9	369	20.6	3,497	70.0	20.0	2,064	49.3	23.9	212	6.9	32.4
1965-66	17.5	260	14.8	3,768	60.7	16.1	2,298	41.8	18.2	197	4.9	25.0
1966-67	20.8	467	22.4	4,258	107.1	25.2	2,498	61.6	24.7	201	7.5	37.2
1967-68p	22.7	277	12.2									

## AGRICULTURE—continued

Season	Hay			Potatoes			Sugar-cane(a)			Vineyards		All crops
	Area	Yield	Average yield	Area	Yield	Average yield	Area	Yield	Average yield	Area	Wine made	Area
	'000 acres	'000 tons	tons	'000 acres	'000 tons	tons	'000 acres	'000 tons	tons	'000 acres	mil gals	mil acres
1901-02	1,688	2,025	1.20	110	323	2.94	87	1,368	15.7	64	5.3	8.4
1911-12	2,518	2,868	1.14	130	301	2.31	101	1,682	16.7	61	5.0	12.1
1921-22	2,995	3,902	1.30	149	388	2.60	128	2,437	19.0	92	8.5	15.4
1931-32	2,635	3,167	1.20	145	397	2.74	242	4,213	17.4	115	14.2	21.2
1941-42	2,758	3,575	1.30	99	333	3.35	255	5,154	20.3	130	15.6	(b)20.5
1942-43	2,359	3,116	1.32	140	484	3.45	241	4,692	19.5	130	19.1	(b)17.5
1943-44	2,044	2,717	1.33	192	599	3.12	229	3,688	16.1	129	19.1	(b)16.1
1944-45	2,409	1,994	0.83	242	881	3.64	226	4,598	20.3	129	13.9	(b)17.7
1945-46	2,757	3,493	1.27	176	646	3.67	236	4,718	20.0	129	24.9	(b)20.6
1946-47	2,006	2,357	1.18	145	544	3.76	227	4,027	17.7	130	32.0	(b)21.3
1947-48	1,970	3,008	1.53	146	498	3.42	222	4,418	19.9	132	32.9	(b)22.5
1948-49	1,580	2,292	1.45	120	460	3.84	266	6,708	25.2	135	32.8	(b)20.9
1949-50	1,605	2,430	1.51	134	471	3.52	281	6,849	24.3	135	32.7	(b)20.8
1950-51	1,377	2,063	1.50	127	412	3.24	272	7,052	25.9	137	26.0	(b)20.1
1951-52	1,549	2,345	1.51	118	509	4.31	282	5,327	18.9	136	35.3	(b)20.0
1952-53	1,761	2,765	1.57	135	431	3.18	280	6,967	24.9	137	30.0	(b)20.7
1953-54	1,935	3,049	1.58	128	548	4.27	340	9,014	26.5	138	31.7	(b)21.5
1954-55	1,984	2,856	1.44	107	468	4.36	374	10,087	27.0	136	24.0	22.3
1955-56	2,241	3,625	1.62	94	402	4.29	373	8,901	23.9	135	22.9	23.0
1956-57	1,861	3,043	1.63	101	519	5.14	370	9,272	25.1	132	30.8	20.0
1957-58	2,237	2,969	1.33	118	575	4.88	376	9,249	24.6	131	33.9	22.2
1958-59	3,018	5,090	1.69	105	575	5.49	370	10,213	27.6	131	32.6	25.6
1959-60	2,105	3,177	1.51	108	579	5.34	314	9,002	28.7	130	28.4	26.1
1960-61	2,973	5,079	1.71	92	451	4.91	341	9,166	26.9	131	33.8	29.6
1961-62	2,274	3,693	1.62	94	526	5.57	387	9,577	24.8	133	41.7	29.6
1962-63	2,720	4,717	1.73	114	667	5.86	402	12,736	31.7	134	29.9	32.1
1963-64	2,602	4,269	1.64	102	562	5.51	418	12,118	29.0	136	37.5	32.0
1964-65	2,793	4,963	1.78	88	508	5.78	470	15,070	32.0	139	38.5	34.7
1965-66	2,780	4,179	1.50	96	639	6.63	503	14,155	28.1	140	34.0	34.5
1966-67	3,496	6,371	1.82	99	643	6.47	557	16,685	29.9	139	41.6	39.6

(a) Cane cut for crushing.

(b) Excludes Northern Territory.

## PRIMARY INDUSTRIES—continued

## PASTORAL, DAIRYING, ETC.

Year ended 30 June—	Livestock(a)				Wool (b)(c)	Butter	Cheese	Meat(d)			Total meat
	Horses	Cattle	Sheep	Pigs				Beef and veal	Mutton and lamb	Pigmeat	
	mil	mil	mil	mil	mil lb	'000 tons	'000 tons	'000 tons	'000 tons	'000 tons	'000 tons
1902 . . .	1.6	8.5	72	0.9	539	(e)46	(e)5.3	n.a.	n.a.	n.a.	n.a.
1912 . . .	2.3	11.8	97	1.1	798	(e)95	(e)7.1	n.a.	n.a.	n.a.	n.a.
1922 . . .	2.4	14.4	86	1.0	723	(e)119	(e)14.6	339	218	50	608
1932 . . .	1.8	12.3	111	1.2	1,007	175	14.0	350	307	70	727
1942 . . .	1.6	13.6	125	1.4	1,167	168	30.1	534	372	122	1,027
1943 . . .	1.5	14.0	125	1.6	1,147	171	36.1	534	413	109	1,057
1944 . . .	1.4	14.2	123	1.7	1,169	156	35.8	501	429	114	1,043
1945 . . .	1.4	14.1	105	1.6	1,016	142	34.6	461	395	127	984
1946 . . .	1.3	13.9	96	1.4	936	150	41.2	407	291	108	805
1947 . . .	1.2	13.4	96	1.3	977	143	42.4	488	303	95	885
1948 . . .	1.2	13.8	103	1.3	1,005	162	41.5	562	295	90	947
1949 . . .	1.1	14.1	109	1.2	1,057	166	43.2	577	320	94	992
1950 . . .	1.1	14.6	113	1.1	1,142	174	44.8	607	358	90	1,055
1951 . . .	1.0	15.2	116	1.1	1,118	164	44.3	652	274	85	1,011
1952 . . .	0.9	14.9	118	1.0	1,080	135	40.6	582	282	85	949
1953 . . .	0.9	15.2	123	1.0	1,281	167	46.6	675	395	83	1,153
1954 . . .	0.8	15.6	127	1.2	1,245	160	49.1	704	365	84	1,153
1955 . . .	0.8	15.8	131	1.3	1,283	191	45.2	720	388	99	1,207
1956 . . .	0.8	16.5	139	1.2	1,417	209	38.7	751	380	94	1,225
1957 . . .	0.7	17.3	150	1.3	1,564	193	45.2	815	367	89	1,270
1958 . . .	0.7	16.9	149	1.4	1,434	176	36.0	791	421	102	1,315
1959 . . .	0.7	16.3	153	1.3	1,591	194	43.5	906	492	102	1,501
1960 . . .	0.6	16.5	155	1.4	1,680	198	44.9	752	573	101	1,426
1961 . . .	0.6	17.3	153	1.6	1,625	182	47.1	633	574	107	1,315
1962 . . .	0.6	18.0	158	1.7	1,699	199	55.7	791	587	120	1,498
1963 . . .	0.5	18.5	159	1.4	1,673	202	58.7	914	593	114	1,622
1964 . . .	0.5	19.1	165	1.5	1,785	204	58.2	985	586	111	1,683
1965 . . .	0.5	18.8	171	1.7	1,784	203	61.6	1,010	585	120	1,715
1966 . . .	n.a.	17.9	158	1.7	1,663	206	58.6	931	599	133	1,663
1967 . . .	0.5	18.3	164	1.8	1,762	218	68.7	865	587	140	1,591
1968p . .	n.a.	19.2	167	2.0	1,768	193	70.0	895	649	149	1,693

(a) At 31 December of previous year for years to 1942, at 31 March thereafter. (b) In terms of greasy. (c) 1901-02 and 1911-12, year ended previous December; then until 1946-47, year ended March; 1947-48 onwards, year ended June. (d) Carcass weight in terms of fresh meat. (e) Year ended previous December.

## MINERALS

## FORESTRY

Year ended 31 December—	Copper(a)	Gold(a)	Lead(a)	Zinc(a)	Black coal	Brown coal	Year ended 30 June—	Sawn output of Aust. grown timber
	'000 tons	'000 fine oz	'000 tons	'000 tons	mil tons	mil tons		mil super feet
1901 . . .	n.a.	3,300	n.a.	(b)	6.9	..	1902 . . .	(c)452
1911 . . .	n.a.	2,484	222.0	190.3	10.5	(b)	1912 . . .	(c)605
1921 . . .	n.a.	758	57.7	20.7	12.8	0.1	1922 . . .	590
1931 . . .	13.5	595	162.6	97.5	8.4	2.2	1932 . . .	237
1941 . . .	20.9	1,497	275.5	170.0	14.2	4.6	1942 . . .	914
1942 . . .	20.4	1,154	263.2	221.8	14.9	4.9	1943 . . .	856
1943 . . .	24.3	751	206.4	182.8	14.1	5.1	1944 . . .	850
1944 . . .	28.1	657	189.5	174.4	13.7	5.0	1945 . . .	842
1945 . . .	24.5	657	164.7	150.3	12.8	5.4	1946 . . .	895
1946 . . .	17.8	824	183.8	160.6	13.9	5.7	1947 . . .	1,050
1947 . . .	13.1	938	196.6	171.0	14.8	6.1	1948 . . .	1,117
1948 . . .	12.4	886	217.0	178.5	14.8	6.7	1949 . . .	1,184
1949 . . .	13.5	889	290.3	176.0	14.1	7.4	1950 . . .	1,223
1950 . . .	17.6	870	225.4	197.8	16.5	7.3	1951 . . .	1,261
1951 . . .	18.1	896	212.0	189.2	17.6	7.8	1952 . . .	1,393
1952 . . .	18.9	980	228.3	196.5	19.4	8.1	1953 . . .	1,340
1953 . . .	37.5	1,075	269.3	239.4	18.4	8.3	1954 . . .	1,400
1954 . . .	41.9	1,118	284.9	252.7	19.8	9.3	1955 . . .	1,449
1955 . . .	47.3	1,049	295.9	256.6	19.3	10.1	1956 . . .	1,451
1956 . . .	54.5	1,030	299.5	278.1	19.3	10.6	1957 . . .	1,419
1957 . . .	59.3	1,084	333.8	318.9	19.9	10.7	1958 . . .	1,391
1958 . . .	75.7	1,104	328.3	293.7	20.4	11.6	1959 . . .	1,460
1959 . . .	95.0	1,085	316.3	275.4	20.3	13.0	1960 . . .	1,521
1960 . . .	109.4	1,087	308.2	317.5	22.6	15.0	1961 . . .	1,418
1961 . . .	95.6	1,076	269.7	311.2	24.0	16.3	1962 . . .	1,352
1962 . . .	107.0	1,069	370.1	337.5	24.5	17.1	1963 . . .	1,416
1963 . . .	113.0	1,024	410.3	351.5	24.9	18.5	1964 . . .	1,487
1964 . . .	104.1	964	374.9	344.6	27.4	19.0	1965 . . .	1,533
1965 . . .	90.4	878	362.1	349.2	31.4	20.7	1966 . . .	1,518
1966 . . .	109.5	917	364.9	369.3	33.3	21.8	1967 . . .	1,469
1967 . . .	90.3	801	375.0	398.9	34.7	23.4	1968 . . .	1,461

(a) Mine production, i.e. metal content of minerals produced. (b) Less than 0.05. (c) Year ended previous December.



## SECONDARY INDUSTRIES

## FACTORIES(a)

Year ended 30 June—	Persons employed (b)	Salaries and wages paid(c)	Net value of production(d)							Value of		
			Chemical- s, etc.	Indus- trial metals, etc.	Textiles, etc.	Clothing	Food, etc.	Paper, etc.	All groups	Plant and mach- inery(e)	Land and build- ings(e)	
	Number											
	'000 (g)	'000 (g)	\$m (g)	\$m n.a.	\$m n.a.	\$m n.a.	\$m n.a.	\$m n.a.	\$m n.a.	\$m 58.2	\$m n.a.	\$m n.a.
1902(f)												
1912(f)	14.5	312	55	2.2	24.1	15.0		23.6	8.5	108.3	63.2	65.0
1922	18.0	379	136	6.4	47.2	38.4		54.4	18.0	225.0	156.2	134.6
1932	21.7	337	112	15.8	45.6	13.8	22.2	57.4	19.2	222.0	243.1	213.2
1942	27.0	725	360	59.6	239.8	42.0	47.2	106.4	34.2	633.0	338.4	312.7
1943	26.4	759	418	58.2	296.4	43.6	46.4	113.7	34.5	704.0	353.9	335.2
1944	27.7	767	434	51.9	314.8	45.5	49.8	118.3	36.7	732.5	362.0	354.3
1945	28.9	751	415	47.0	295.2	44.6	55.3	124.9	39.3	724.6	367.8	365.2
1946	31.2	745	412	45.2	259.4	44.1	59.7	124.0	41.0	704.6	371.1	373.2
1947	34.8	805	474	49.0	292.8	53.9	73.7	138.3	52.2	821.7	379.4	386.9
1948	37.4	849	572	57.3	362.6	64.2	86.7	156.3	59.2	978.6	427.4	422.3
1949	40.1	890	678	67.1	421.7	71.7	104.5	179.6	70.6	1,137.5	493.0	465.5
1950	41.6	917	772	81.3	492.5	85.9	115.4	202.0	86.0	1,323.1	571.2	519.1
1951	43.1	969	983	105.4	654.0	109.2	143.5	236.6	109.5	1,687.7	673.2	605.6
1952	45.8	978	1,224	127.4	826.2	113.2	162.2	282.2	136.4	2,049.7	820.3	719.0
1953	47.7	933	1,270	135.7	842.6	129.7	165.6	328.7	136.6	2,165.7	987.1	828.9
1954	49.6	990	1,410	164.6	936.6	157.1	187.1	355.8	158.6	2,454.1	1,161.4	966.9
1955	51.1	1,031	1,563	196.3	1,065.9	156.8	196.8	373.1	181.1	2,731.0	1,396.6	1,112.0
1956	52.4	1,060	1,707	238.3	1,193.9	163.6	204.9	395.6	198.1	3,001.4	1,595.7	1,307.1
1957	53.2	1,063	1,782	273.8	1,281.7	182.9	211.0	428.9	217.4	3,244.2	1,834.1	1,519.4
1958	54.0	1,074	1,859	291.3	1,389.0	183.0	216.1	449.9	241.4	3,457.4	2,025.5	1,698.1
1959	54.9	1,088	1,941	322.4	1,471.6	191.3	221.5	469.1	263.4	3,685.2	2,216.8	1,895.8
1960	56.7	1,132	2,173	360.3	1,700.4	216.7	237.7	520.1	298.2	4,161.1	2,443.2	2,129.2
1961	57.8	1,145	2,289	366.1	1,795.9	213.6	247.2	542.5	318.6	4,349.8	2,785.6	2,389.1
1962	58.5	1,121	2,287	364.3	1,770.3	211.2	252.4	495.5	326.9	4,394.6	3,052.1	2,809.6
1963	59.1	1,168	2,447	411.4	1,954.7	233.8	266.3	636.9	350.9	4,795.2	3,286.5	3,006.8
1964	59.4	1,210	2,652	449.5	2,174.0	252.5	281.4	700.5	379.7	5,270.0	3,480.7	3,204.7
1965	61.0	1,269	2,994	504.8	2,486.1	279.6	302.3	757.1	426.9	5,896.8	3,766.3	3,505.9
1966	61.7	1,294	3,163	570.1	2,647.8	282.8	319.9	818.5	459.5	6,251.9	4,154.7	3,776.6
1967	62.5	1,309	3,408	637.6	2,913.0	303.1	341.5	892.5	503.3	6,887.3	4,708.8	4,064.2

(a) Excludes Northern Territory and Australian Capital Territory before 1 July 1964. (b) Average over whole year; includes working proprietors. (c) Excludes amounts drawn by working proprietors. (d) Value added in process of manufacture (i.e. value of output less value of materials and fuel used). (e) Depreciated or book value at end of year, including estimated value of rented premises and machinery. (f) Year ended previous December. (g) Owing to variation in classification, effective comparison is not possible.

## PRIMARY AND SECONDARY INDUSTRIES

## NET VALUE OF PRODUCTION OF PRIMARY INDUSTRIES AND FACTORIES(a)

Year ended 30 June—	Agriculture	Pastoral	Dairying	Poultry	Bee-farming	Total rural	Trapping	Forestry
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
1902	47.6	54.4	15.2	4.0	0.2	121.4	n.a.	(b) 5.6
1912	77.6	105.4	32.2	8.0	0.2	223.4	n.a.	9.6
1922	163.8	150.2	70.6	18.0	0.2	402.8	n.a.	18.2
1932	99.4	86.0	45.2	11.4	0.2	242.2	3.0	7.8
1942	128.0	170.8	68.6	13.0	0.8	381.2	10.0	20.4
1943	161.2	202.0	84.8	21.1	0.7	469.8	7.1	21.6
1944	165.3	216.8	89.7	25.4	0.8	498.1	13.4	23.0
1945	140.7	196.9	92.4	29.6	1.0	460.6	12.4	23.1
1946	219.1	172.6	99.1	30.3	0.8	521.8	17.1	25.1
1947	206.5	260.4	99.7	29.4	1.7	597.7	18.8	29.4
1948	451.6	387.9	121.1	33.5	1.5	995.4	14.6	35.5
1949	328.7	481.7	135.1	40.4	3.0	989.0	15.6	40.6
1950	437.4	674.2	162.2	44.5	1.5	1,319.8	11.4	46.4
1951	416.3	1,409.6	178.7	49.2	1.7	2,055.5	13.3	56.9
1952	493.4	801.0	207.6	63.1	1.5	1,566.6	13.4	75.8
1953	552.8	987.5	271.5	70.4	2.1	1,884.3	11.2	80.1
1954	536.9	983.4	273.9	69.6	2.9	1,866.7	10.1	88.0
1955	487.8	922.9	271.6	59.6	2.8	1,744.7	9.9	93.2
1956	558.9	893.6	309.8	60.4	3.5	1,826.2	12.1	103.6
1957	509.7	1,195.4	281.6	56.8	4.5	2,048.0	12.0	108.3
1958	489.1	894.5	255.2	54.7	3.1	1,696.6	12.1	106.9
1959	657.9	887.2	283.9	54.7	3.2	1,886.9	12.7	108.7
1960	583.9	1,072.4	304.4	60.8	4.1	2,025.7	13.8	105.5
1961	783.7	916.3	284.3	62.0	2.9	2,049.2	13.2	102.4
1962	733.0	962.7	273.0	49.7	3.2	2,021.6	11.8	95.2
1963	830.4	1,078.7	307.4	52.8	3.0	2,272.3	11.4	96.1
1964	917.4	1,340.6	330.2	61.5	5.1	2,654.8	13.4	102.6
1965	975.2	1,221.3	360.7	50.9	4.1	2,612.2	13.1	111.1
1966	860.4	1,188.5	349.9	62.6	3.5	2,465.0	13.8	114.6
1967	1,214.5	1,181.8	372.1	69.9	3.3	2,841.6	11.9	111.9

(a) Gross value, 1901 to 1921-22. Before 1922, year ended previous December. (b) Includes Fisheries.

## PRIMARY AND SECONDARY INDUSTRIES—continued

## BUILDING

NET VALUE OF PRODUCTION OF PRIMARY INDUSTRIES AND FACTORIES(a)—continued

NEW HOUSES AND  
FLATS COMPLETED(b)

Year ended 30 June—	Fisheries	Mining and quarrying (c)	Total, non-rural	Total, primary	Factories	Grand total	Number	Value
	\$m	\$m	\$m	\$m	\$m	\$m	'000	\$m
1902 . . . . .	(d)	44.0	49.6	171.0	(c)58.2	229.2	n.a.	n.a.
1912 . . . . .	2.2	46.6	58.4	281.8	(c)108.3	390.1	n.a.	n.a.
1922 . . . . .	2.8	40.0	61.0	463.8	225.0	688.8	n.a.	n.a.
1932 . . . . .	2.8	27.0	40.6	282.8	222.0	504.8	n.a.	n.a.
1942 . . . . .	3.6	66.8	100.8	482.0	633.0	1,115.0	n.a.	n.a.
1943 . . . . .	3.9	61.5	94.1	563.8	704.0	1,267.8	n.a.	n.a.
1944 . . . . .	3.9	55.2	95.5	593.6	732.5	1,326.0	n.a.	n.a.
1945 . . . . .	4.5	53.7	93.6	554.2	724.6	1,278.8	n.a.	n.a.
1946 . . . . .	5.2	52.5	99.9	621.7	704.6	1,326.4	15.4	29.0
1947 . . . . .	6.6	65.0	119.7	717.4	821.7	1,539.2	32.9	72.1
1948 . . . . .	7.0	85.2	142.3	1,137.7	978.6	2,116.3	44.3	108.6
1949 . . . . .	8.3	96.7	161.2	1,150.2	1,137.5	2,287.7	52.7	150.9
1950 . . . . .	8.5	104.7	170.9	1,490.7	1,323.1	2,813.8	57.0	184.7
1951 . . . . .	9.7	142.3	222.2	2,277.6	1,687.7	3,965.4	69.3	255.6
1952 . . . . .	11.5	194.4	295.1	1,861.7	2,049.7	3,911.4	80.1	354.1
1953 . . . . .	13.8	219.3	324.5	2,208.8	2,165.7	4,374.5	80.2	394.5
1954 . . . . .	15.5	209.8	323.4	2,190.1	2,454.1	4,644.2	77.6	398.2
1955 . . . . .	17.5	236.2	356.7	2,101.5	2,731.0	4,832.5	82.1	444.2
1956 . . . . .	17.8	265.0	398.5	2,224.7	3,001.4	5,226.1	78.5	452.3
1957 . . . . .	21.0	280.0	421.3	2,469.2	3,244.2	5,713.5	68.4	419.3
1958 . . . . .	20.8	253.6	393.4	2,090.0	3,457.4	5,547.4	74.6	463.0
1959 . . . . .	22.5	236.7	380.6	2,267.5	3,685.2	5,952.7	84.2	527.3
1960 . . . . .	24.7	252.3	396.2	2,421.9	4,161.1	6,583.0	90.0	571.0
1961 . . . . .	25.6	278.1	419.3	2,468.5	4,349.8	6,818.4	94.5	627.4
1962 . . . . .	28.6	274.5	410.1	2,431.7	4,394.6	6,826.4	86.3	593.2
1963 . . . . .	30.6	291.0	429.2	2,701.5	4,795.2	7,496.7	87.7	610.2
1964 . . . . .	31.7	327.7	475.3	3,130.2	5,270.0	8,400.2	96.7	685.8
1965 . . . . .	38.7	400.1	563.0	3,175.2	5,896.8	9,072.0	112.7	823.0
1966 . . . . .	41.7	443.9	614.0	3,079.0	6,251.9	9,330.8	112.8	869.9
1967 . . . . .	44.6	516.2	684.6	3,526.2	6,887.3	10,413.5	111.9	914.8

(a) Gross value, 1901 to 1921–22. Before 1922, year ended previous December. (b) Series commenced 1945–46. Partly estimated before July 1951, and excludes Northern Territory before July 1954. (c) Year ended previous December. (d) Included in Forestry.

## WAGES AND PRICES

Year ended 31 December—	Weekly wage rates index adult males(a)	Retail price index numbers, six State capital cities combined(b)	Year ended 31 December—	Weekly wage rates index adult males(a)	Retail price index numbers, six State capital cities combined(b)
1901 . . . . .	n.a.	88	1953 . . . . .	99.2	383
1911 . . . . .	n.a.	100	1954 . . . . .	101.6	386
1921 . . . . .	n.a.	(c)168	1955 . . . . .	105.2	394
1931 . . . . .	n.a.	145	1956 . . . . .	110.8	419
1941 . . . . .	38.5	167	1957 . . . . .	112.4	429
1942 . . . . .	41.6	181	1958 . . . . .	114.3	435
1943 . . . . .	42.5	188	1959 . . . . .	122.0	443
1944 . . . . .	42.6	187	1960 . . . . .	125.7	459
1945 . . . . .	42.7	187	1961 . . . . .	129.5	471
1946 . . . . .	45.7	190	1962 . . . . .	129.8	469
1947 . . . . .	49.8	198	1963 . . . . .	133.0	472
1948 . . . . .	55.4	218	1964 . . . . .	140.4	483
1949 . . . . .	59.7	240	1965 . . . . .	144.3	502
1950 . . . . .	71.5	262	1966 . . . . .	152.4	517
1951 . . . . .	85.8	313	1967 . . . . .	159.1	534
1952 . . . . .	96.7	367			

(a) At 31 December. Base: year 1954 = 100, weighted average. Excludes rural industry. (b) Base: year 1911 = 100. The index numbers are presented as a continuous series, but they give only a broad indication of long-term trends in retail price levels. They are derived by linking a number of indexes that differ greatly in scope. The successive indexes used are: from 1901 to 1914, the 'A' Series Retail Price Index; from 1914 to 1946–47, the 'C' Series Retail Price Index; from 1946–47 to 1948–49, a composite of Consumer Price Index Housing Group (partly estimated) and 'C' Series Index excluding Rent; and from 1948–49 onwards, the Consumer Price Index. (c) November.

## STATISTICAL SUMMARY: AUSTRALIA

## OVERSEAS TRADE

Year ended 30 June—	TOTALS		PRINCIPAL EXPORTS(a)					
	Imports	Exports	Wool		Wheat		Flour(b)	
			Quantity	Value	Quantity	Value	Quantity	Value
	\$m f.o.b.	\$m f.o.b.	mil lb(c)	\$m f.o.b.	'000 tons	\$m f.o.b.	'000 short tons	\$m f.o.b.
1902(d)	76	100	387.5	30	543	5.6	97	1.2
1912(d)	122	158	728.1	52	873	12.8	176	2.8
1922	188	256	971.3	96	2,677	57.2	360	11.0
1932	104	216	941.6	74	3,413	38.4	611	7.6
1942	348	338	939.8	112	598	9.2	414	8.4
1943	492	251	628.6	84	604	9.7	342	7.0
1944	489	293	598.6	85	902	16.5	591	13.4
1945	430	311	683.5	92	868	19.5	560	13.5
1946	358	447	930.9	132	334	12.4	519	22.7
1947	419	618	1,454.6	244	326	12.7	765	45.1
1948	679	820	1,132.9	289	1,612	105.6	784	63.6
1949	830	1,085	1,324.9	454	2,224	129.4	855	67.4
1950	1,076	1,227	1,427.4	618	2,101	124.3	771	52.7
1951	1,488	1,964	1,193.7	1,253	2,309	148.3	883	65.8
1952	2,107	1,350	1,041.3	636	1,685	110.6	789	66.0
1953	1,028	1,743	1,207.7	788	1,594	103.9	870	74.8
1954	1,363	1,657	1,206.0	805	966	61.9	761	59.4
1955	1,687	1,548	1,182.8	693	1,691	90.4	656	40.6
1956	1,642	1,564	1,295.8	653	1,903	92.9	667	39.4
1957	1,438	1,986	1,450.8	930	2,440	120.1	750	43.3
1958	1,584	1,636	1,329.7	720	1,060	57.0	460	28.7
1959	1,593	1,623	1,448.7	578	1,463	76.8	447	26.7
1960	1,854	1,875	1,592.6	742	2,444	123.4	536	30.3
1961	2,175	1,938	1,557.7	649	4,098	204.9	658	38.0
1962	1,769	2,155	1,628.7	720	5,442	284.9	579	34.8
1963	2,163	2,152	1,594.3	733	4,071	216.9	524	31.4
1964	2,373	2,782	1,669.6	926	6,796	362.0	685	42.2
1965	2,905	2,651	1,610.2	781	5,624	297.2	572	37.3
1966	2,939	2,721	1,601.5	757	5,075	264.1	390	24.8
1967	3,045	3,024	1,631.1	p777	6,403	361.2	357	23.1
1968	3,269	3,046	1,678.3	(e)693	6,409	343.5	381	23.5

(a) Australian produce. (b) Flour, plain white. (c) Greasy equivalent (includes greasy wool, slip, wool scoured and carbonised, wool exported on skins). (d) Year ended previous December. (e) Estimated.

## PRINCIPAL EXPORTS(a)—continued

Year ended 30 June—	Butter(b)		Hides and skins		Meats(c)	Fruit(d)	Sugar	Gold	Ores and concentrates	
	Quantity	Value	Value	Value					Iron	Other(e)
	mil lb	\$m f.o.b.	\$m f.o.b.	\$m f.o.b.	\$m f.o.b.	\$m f.o.b.	\$m f.o.b.	\$m f.o.b.	\$m f.o.b.	\$m f.o.b.
1902(f)	35	2.8	2.6	5.2	0.4	(g)	28.6	..	..	(g)
1912(f)	102	9.2	6.4	8.6	1.0	(g)	24.0	..	..	8.1
1922	127	16.0	6.2	11.0	6.0	(g)	7.0	..	..	1.3
1932	202	20.6	4.6	12.8	9.6	5.0	23.8	..	..	0.3
1942	130	16.2	12.0	28.2	10.6	5.2	18.4	..	..	1.9
1943	130	17.1	7.4	21.2	7.0	2.0	(g)	..	..	2.5
1944	105	13.8	13.5	26.1	10.2	3.0	(g)	..	..	3.1
1945	94	16.5	13.2	28.2	11.0	3.7	(g)	..	..	3.4
1946	139	24.8	23.7	28.0	12.2	6.1	52.8	..	..	3.2
1947	135	25.4	30.9	42.3	19.7	5.4	(g)	..	..	5.6
1948	187	41.8	24.7	45.1	25.5	6.1	7.7	..	..	9.2
1949	185	48.3	24.4	59.5	30.3	26.4	(g)	..	..	11.8
1950	182	50.8	30.3	70.0	30.2	28.3	(g)	..	..	12.3
1951	123	37.8	54.4	60.8	37.6	29.6	(g)	..	..	21.4
1952	28	10.2	34.3	71.0	44.4	13.8	14.0	..	..	39.9
1953	112	40.9	40.3	131.6	61.2	43.3	40.8	..	..	38.9
1954	90	33.1	38.9	113.8	67.9	63.2	27.5	..	..	25.6
1955	142	50.0	39.4	127.0	68.0	62.3	27.4	..	..	28.1
1956	186	58.7	41.8	119.1	67.4	49.4	16.6	..	..	38.2
1957	173	52.9	48.5	100.1	52.9	57.6	28.5	..	..	51.4
1958	116	32.3	50.8	110.5	72.0	70.0	12.7	..	..	42.4
1959	176	50.9	47.1	194.4	73.1	64.3	6.6	..	..	32.7
1960	175	58.4	63.6	177.0	64.3	53.3	20.4	..	..	43.5
1961	141	40.9	54.4	144.6	61.1	70.1	79.9	..	..	54.4
1962	178	48.5	64.3	179.4	73.5	67.8	18.0	..	..	47.7
1963	179	49.3	73.7	225.7	73.3	91.0	12.9	..	..	43.5
1964	202	57.0	91.7	243.7	92.3	156.5	14.3	..	..	54.4
1965	214	67.4	80.1	286.2	86.1	112.7	18.4	0.8	..	76.6
1966	186	57.7	89.2	287.7	107.3	93.9	24.4	2.7	..	87.5
1967	230	64.8	86.3	285.5	94.5	99.5	18.1	46.0	..	101.0
1968	173	47.0	62.4	284.9	104.8	97.6	15.4	101.3	..	122.7

(a) Australian produce. (b) Includes concentrates and ghee. (c) Includes sausage casings, natural. (d) Includes juices and fruit preparations. (e) Excludes iron ore and iron ore concentrates. (f) Year ended previous December. (g) Less than 0.05.

## OVERSEAS TRADE—continued

## PRINCIPAL IMPORTS

Year ended 30 June—	<i>Vegetable foodstuffs, etc.</i>	<i>Apparel, etc.</i>	<i>Oil, etc.</i>	<i>Metals, etc.</i>	<i>Rubber</i>	<i>Paper, etc.</i>
	\$m f.o.b.	\$m f.o.b.	\$m f.o.b.	\$m f.o.b.	\$m f.o.b.	\$m f.o.b.
1902(a)	7.2	21.8	2.4	15.6	1.0	3.2
1912(a)	7.4	32.4	3.2	28.0	2.8	5.2
1922	8.0	62.0	9.4	45.6	3.4	8.8
1932	5.2	30.8	11.0	14.8	1.6	8.8
1942	12.3	65.3	32.4	143.6	6.0	8.7
1943	14.5	59.0	35.0	203.1	4.4	4.7
1944	10.5	77.2	47.5	215.4	6.0	11.8
1945	13.0	90.7	41.3	150.4	3.5	14.8
1946	17.6	63.4	41.5	92.5	5.9	16.3
1947	18.9	97.8	41.3	105.2	10.9	26.8
1948	33.0	192.1	69.5	170.8	9.8	46.8
1949	27.9	218.4	86.4	256.1	12.6	42.1
1950	41.4	199.5	104.8	454.7	21.4	37.8
1951	49.6	277.3	139.7	479.7	59.3	58.0
1952	50.1	407.1	174.9	786.8	68.0	137.5
1953	37.0	96.5	148.5	452.0	17.4	44.9
1954	51.4	227.6	167.0	504.4	23.7	68.2
1955	71.9	253.5	193.8	638.3	34.1	92.8
1956	44.1	222.7	199.3	644.1	44.1	87.2
1957	51.6	182.7	191.1	530.1	33.4	83.5
1958	51.5	217.0	203.4	564.4	33.3	89.8
1959	55.3	193.9	209.0	585.6	33.6	96.1
1960	54.9	222.1	213.5	710.1	48.5	103.8
1961	60.5	264.9	223.3	871.3	47.3	133.8
1962	56.3	208.4	219.8	630.3	35.5	109.6
1963	55.5	233.3	246.3	850.0	46.7	133.5
1964	61.6	234.0	251.5	947.1	51.2	141.7
1965	66.2	272.1	260.0	1,275.2	66.3	156.5

Year ended 30 June—	<i>Food and live animals</i>	<i>Beverages and tobacco</i>	<i>Crude materials, inedible, except fuels</i>	<i>Mineral fuels, lubricants and related materials</i>	<i>Animal and vegetable oils and fats</i>	<i>Chemicals</i>	<i>Manu- factured goods classified chiefly by material</i>	<i>Machinery and transport equipment</i>	<i>Miscel- laneous and manu- factured articles</i>	<i>Com- modities and trans- actions of merchan- dise trade not elsewhere classified</i>
	\$m f.o.b.	\$m f.o.b.	\$m f.o.b.	\$m f.o.b.	\$m f.o.b.	\$m f.o.b.	\$m f.o.b.	\$m f.o.b.	\$m f.o.b.	\$m f.o.b.
1966	110	37	197	252	15	266	590	1,121	220	89
1967	118	38	206	247	15	297	586	1,144	243	110
1968	117	36	224	241	14	309	644	1,254	270	110

(a) Year ended previous December.

## STATISTICAL SUMMARY: AUSTRALIA

## TRANSPORT AND COMMUNICATION

## SHIPPING

Year ended 30 June—	Overseas vessels				Overseas cargo		Interstate vessels— entrances		Interstate cargo shipped
	Entrances		Clearances		Dis- charged	Shipped	No.	Net tonnage	
	No.	Net tonnage	No.	Net tonnage					
		mil tons		mil tons	mil tons	mil tons		mil tons	
1902 . . .	(b)	(b)	(b)	(b)	n.a.	n.a.	n.a.	n.a.	(a)
1912 . . .	(c)2,081	(c)5.0	(c)2,093	(c)5.0	n.a.	n.a.	(c)5,000	(c)6.8	n.a.
1922 . . .	1,567	4.6	1,544	4.5	2.4	5.8	4,897	6.4	5.5
1932 . . .	1,519	5.7	1,538	5.7	3.0	6.7	3,958	5.5	4.0
1942 . . .	1,276	5.2	1,268	5.6	5.5	4.2	4,860	6.6	10.0
1943 . . .	956	3.8	1,069	4.3	5.1	3.6	3,596	4.6	9.4
1944 . . .	1,094	4.5	1,286	5.2	5.9	5.1	3,731	5.2	9.2
1945 . . .	1,059	4.5	1,088	4.6	6.1	4.9	3,543	5.1	9.3
1946 . . .	1,146	5.3	1,225	5.4	6.2	3.9	3,108	4.4	7.4
1947 . . .	1,202	5.2	1,287	5.2	5.6	4.5	3,084	4.7	8.5
1948 . . .	1,470	6.1	1,479	5.8	6.9	5.8	2,943	4.2	8.4
1949 . . .	1,706	7.5	1,780	7.5	8.4	6.8	3,091	4.7	7.4
1950 . . .	1,942	8.7	1,965	8.7	11.3	6.4	3,228	5.3	7.6
1951 . . .	1,911	8.6	1,992	8.7	13.1	6.7	3,301	5.8	8.0
1952 . . .	2,038	9.0	2,098	9.3	14.4	5.7	3,750	7.9	9.0
1953 . . .	1,988	8.7	2,053	8.9	9.7	7.5	4,555	9.2	9.7
1954 . . .	2,054	8.9	2,073	8.9	11.3	7.1	4,759	9.6	10.6
1955 . . .	2,245	9.9	2,260	10.1	14.4	7.5	4,644	9.4	11.7
1956 . . .	2,425	11.2	2,457	11.1	15.9	8.2	4,626	9.5	12.9
1957 . . .	2,628	11.8	2,662	11.8	15.3	10.1	4,805	9.5	13.2
1958 . . .	2,656	12.4	2,598	12.1	16.6	8.9	5,127	9.8	13.8
1959 . . .	2,706	12.9	2,757	13.1	16.9	10.1	5,012	9.5	13.4
1960 . . .	2,976	14.5	2,969	14.4	18.7	11.6	5,004	9.5	14.3
1961 . . .	3,382	17.3	3,396	17.0	21.1	15.3	4,860	9.6	15.2
1962 . . .	3,599	18.9	3,611	18.0	20.3	18.7	5,032	9.8	14.8
1963 . . .	3,411	19.0	3,351	18.6	22.8	17.0	4,845	9.7	15.4
1964 . . .	3,714	20.7	3,763	20.9	24.7	21.6	5,067	10.1	16.8
1965 . . .	3,813	21.7	3,788	21.7	27.7	22.4	5,263	13.2	17.8
1966 . . .	3,929	23.0	4,029	23.3	28.3	23.8	5,480	15.1	17.7
1967 . . .	3,977	27.4	4,017	27.6	31.3	34.6	4,937	15.3	17.4

(a) Tons weight plus tons measurement. (b) Separate details not available. Total entrances and clearances for year ended December 1901, 4,028 vessels, 6.5 million tons. (c) Year ended previous December.

## GOVERNMENT RAILWAYS(a)

## REGULAR INTERNAL AIR SERVICES

Year ended 30 June—	Route-miles (b)	Train mileage	Pas-senger journeys	Freight—tons carried	Freight—net ton-miles	Passengers			Freight		Mail	
						Miles flown	Embark-ations	Pas-senger miles	Tons up-lifted	Ton-miles	Tons up-lifted	Ton-miles
1902 . . .	'000	mil	mil	mil	mil	mil	'000	mil	'000(c)	mil(d)	'000(c)	mil(d)
1912 . . .	12.8	38.2	115	15.5	n.a.	..	..	..	..	..	..	..
1922 . . .	16.8	55.2	228	25.5	n.a.	..	..	..	..	..	..	..
1932 . . .	23.4	56.1	335	31.5	n.a.	..	..	..	..	..	..	..
1942 . . .	27.0	63.8	303	26.1	n.a.	0.9	6	3	0.04	n.a.	0.02	n.a.
1943 . . .	27.2	88.5	475	38.9	n.a.	7.8	151	76	1.3	1.0	n.a.	0.5
1944 . . .	27.2	96.1	518	42.5	n.a.	7.0	135	64	1.1	0.9	2.3	1.5
1945 . . .	27.2	91.8	533	42.0	n.a.	9.7	216	100	1.5	0.9	3.6	2.7
1946 . . .	27.2	90.2	535	40.8	n.a.	12.6	320	141	2.6	1.3	4.2	2.8
1947 . . .	27.2	86.7	546	36.7	n.a.	17.7	509	225	5.6	2.6	2.4	1.7
1948 . . .	27.2	85.5	503	37.8	5,605	23.0	850	366	13.7	6.7	1.3	0.7
1949 . . .	27.1	87.7	511	40.0	5,934	32.4	1,208	503	28.9	13.4	1.4	0.8
1950 . . .	27.0	92.3	507	41.4	6,212	35.2	1,409	566	37.4	17.1	1.8	0.9
1951 . . .	27.0	93.4	505	40.6	6,203	36.5	1,500	590	49.4	22.3	2.9	1.4
1952 . . .	27.0	88.7	476	40.9	6,277	40.7	1,685	669	59.4	27.1	3.2	1.5
1953 . . .	26.8	93.4	501	44.3	6,755	41.8	1,829	722	57.5	26.7	2.7	1.3
1954 . . .	26.8	88.7	498	44.0	6,574	39.1	1,706	667	57.6	27.2	2.3	1.2
1955 . . .	26.6	93.5	511	46.8	6,953	41.0	1,772	702	69.5	32.7	2.3	1.2
1956 . . .	26.6	94.8	517	47.7	7,295	43.5	1,918	766	78.7	37.0	2.3	1.3
1957 . . .	26.5	96.2	515	46.8	7,274	43.7	2,020	828	84.4	38.9	2.5	1.4
1958 . . .	26.5	95.1	499	47.5	7,463	42.1	2,125	891	75.1	36.3	2.5	1.4
1959 . . .	26.4	90.3	494	45.3	6,808	40.5	2,123	899	70.0	33.0	2.6	1.4
1960 . . .	26.3	91.3	485	48.0	7,320	40.3	2,235	944	62.8	28.8	2.7	1.5
1961 . . .	26.2	92.7	479	51.2	8,006	42.3	2,660	1,133	65.4	29.2	4.8	2.6
1962 . . .	26.1	93.0	463	55.4	8,788	43.2	2,639	1,110	63.0	28.2	6.0	3.1
1963 . . .	25.6	92.6	461	55.6	8,823	41.2	2,666	1,119	57.2	26.1	6.3	3.2
1964 . . .	25.5	92.9	465	55.9	9,253	43.7	2,833	1,221	59.4	28.3	6.5	3.3
1965 . . .	25.2	96.5	471	61.7	10,501	49.0	3,257	1,408	63.2	30.5	7.1	3.7
1966 . . .	25.0	96.6	464	64.8	11,145	52.3	3,764	1,639	70.0	33.9	7.7	4.1
1967 . . .	25.0	94.3	460	64.4	11,038	55.0	4,158	1,831	76.1	37.6	8.6	4.6
1967 . . .	25.1	93.7	455	68.5	11,517	56.8	4,425	1,972	82.1	40.1	9.6	5.1

(a) Particulars of train-mileages, passenger-journeys, freight tons carried, and freight net ton-miles refer only to operations for which revenue is received. (b) At end of period. (c) Short tons (2000 lb). (d) In terms of short tons.

## TRANSPORT AND COMMUNICATION—continued

## ROAD TRANSPORT

## COMMUNICATION

Year ended 30 June—	Tramway, trolley-bus and omnibus services(a)	Motor vehicles on the register(b)			Postal matter dealt with(c)	Telephones		Telegrams(e)	Broadcasting and television licences in force(b)	
		Motor cars and station wagons	Utilities, panel vans, etc, trucks and omnibuses	Total motor vehicles (excluding motor cycles)		Instruments in service(b)	Services in operation (b)(d)		Broadcast listeners'	Television viewers'
	Passenger journeys				mil articles	'000	'000	mil	'000	'000
1902	n.a.	..	..	..	(f)384	(f)36	(f)28	(f)8.2	..	..
1912	360	n.a.	n.a.	n.a.	(f)698	(f)118	(f)96	(f)13.9	..	..
1922	569	102		102	778	259	196	16.8	(g) 1	..
1932	589	420	96	516	887	485	364	13.9	369	..
1942	(h)1,067	451	251	702	1,124	739	531	26.1	1,320	..
1943	1,189	472	256	728	1,082	767	540	32.5	1,370	..
1944	1,281	493	274	767	1,114	800	557	35.8	1,395	..
1945	1,290	506	289	795	1,155	828	578	37.6	1,415	..
1946	1,275	522	330	852	1,166	856	608	38.0	1,437	..
1947	1,216	550	373	923	1,235	905	648	35.7	1,678	..
1948	1,199	592	412	1,004	1,307	963	688	36.8	1,704	..
1949	1,185	650	455	1,105	1,375	1,028	734	37.9	1,763	..
1950	1,076	763	504	1,267	1,466	1,110	795	38.0	1,841	..
1951	1,092	878	553	1,431	1,526	1,209	870	37.2	1,885	..
1952	1,019	1,026	585	1,611	1,482	1,301	939	29.8	1,961	..
1953	988	1,103	584	1,687	1,506	1,383	1,001	25.9	1,986	..
1954	981	1,195	612	1,807	1,604	1,476	1,070	25.1	2,042	..
1955	966	1,342	655	1,997	1,653	1,587	1,153	25.5	2,035	..
1956	927	1,430	693	2,123	1,741	1,704	1,240	25.4	2,089	..
1957	833	1,537	710	2,248	1,784	1,814	1,318	24.0	2,107	74
1958	803	1,661	731	2,392	1,895	1,937	1,407	22.9	2,138	291
1959	778	1,784	755	2,539	1,951	2,056	1,491	22.5	2,264	578
1960	758	1,938	784	2,722	1,953	2,164	1,562	22.2	2,283	955
1961	726	2,070	800	2,870	2,048	2,266	1,631	21.8	2,256	1,217
1962	718	2,201	815	3,015	2,101	2,382	1,719	21.6	2,220	1,424
1963	712	2,381	833	3,214	2,202	2,523	1,812	21.8	2,240	1,655
1964	703	2,595	851	3,445	2,342	2,670	1,919	23.4	2,302	1,882
1965	685	2,811	865	3,676	2,443	2,811	2,010	24.3	2,358	2,045
1966	653	2,975	878	3,852	2,556	2,978	2,120	25.0	2,526	2,226
1967	621	3,140	893	4,033	2,683	3,178	2,235	25.6	2,538	2,405

(a) Government and municipal. (b) At end of period. (c) Letters, postcards, letter-cards, newspapers, packets, parcels, and registered articles. (d) All single lines plus one half the number of duplex lines. Until the introduction of duplex services in December 1948, statistics of exchange lines and telephone services were identical. (e) Telegrams despatched to places within Australia and despatched to or received from overseas. (f) Year ended previous December. (g) Year 1923-24. First year licences issued. (h) Tramway passenger journeys only before 1942.

## NATIONAL ACCOUNTS

## GROSS NATIONAL PRODUCT

## GROSS FIXED CAPITAL EXPENDITURE

Year	At current prices			At constant prices		At current prices		At constant prices	
	(a)	(b)	(c)	1953-54 prices(c)	1959-60 prices(c)	(d)	(e)	1953-54 prices(c)	1959-60 prices(c)
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
1900-01	419	..	..	..	..	56	..	..	..
1901-02	444	..	..	..	..	74	..	..	..
1902-03	428	..	..	..	..	65	..	..	..
1903-04	449	..	..	..	..	51	..	..	..
1904-05	445	..	..	..	..	50	..	..	..
1905-06	478	..	..	..	..	53	..	..	..
1906-07	538	..	..	..	..	72	..	..	..
1907-08	536	..	..	..	..	75	..	..	..
1908-09	583	..	..	..	..	76	..	..	..
1909-10	624	..	..	..	..	80	..	..	..
1910-11	683	..	..	..	..	98	..	..	..
1911-12	733	..	..	..	..	125	..	..	..
1912-13	802	..	..	..	..	146	..	..	..
1913-14	865	..	..	..	..	154	..	..	..
1914-15	833	..	..	..	..	132	..	..	..
1915-16	909	..	..	..	..	125	..	..	..
1916-17	943	..	..	..	..	123	..	..	..
1917-18	963	..	..	..	..	112	..	..	..
1918-19	1,089	..	..	..	..	146	..	..	..
1919-20	1,257	..	..	..	..	209	..	..	..
1920-21	1,426	..	..	..	..	245	..	..	..
1921-22	1,378	..	..	..	..	261	..	..	..
1922-23	1,510	..	..	..	..	273	..	..	..
1923-24	1,569	..	..	..	..	290	..	..	..
1924-25	1,722	..	..	..	..	303	..	..	..
1925-26	1,659	..	..	..	..	308	..	..	..
1926-27	1,729	..	..	..	..	328	..	..	..
1927-28	1,739	..	..	..	..	329	..	..	..
1928-29	1,711	..	..	..	..	309	..	..	..
1929-30	1,566	..	..	..	..	240	..	..	..
1930-31	1,288	..	..	..	..	166	..	..	..
1931-32	1,209	..	..	..	..	119	..	..	..
1932-33	1,264	..	..	..	..	134	..	..	..
1933-34	1,356	..	..	..	..	156	..	..	..
1934-35	1,422	..	..	..	..	203	..	..	..
1935-36	1,574	..	..	..	..	226	..	..	..
1936-37	1,717	..	..	..	..	253	..	..	..
1937-38	1,857	..	..	..	..	306	..	..	..
1938-39	1,847	1,860	(1,800)	..	..	298	(316)	..	..
1939-40	..	2,040	..	..	..	..	..	..	..
1940-41	..	2,174	..	..	..	..	..	..	..
1941-42	..	2,548	..	..	..	..	..	..	..
1942-43	..	2,936	..	..	..	..	..	..	..
1943-44	..	2,986	..	..	..	..	..	..	..
1944-45	..	2,906	..	..	..	..	..	..	..
1945-46	..	3,006	..	..	..	..	..	..	..
1946-47	..	3,234	..	..	..	..	..	..	..
1947-48	..	3,988	..	..	..	..	..	..	..
1948-49	..	4,524	4,471	7,354	..	..	781	1,334	..
1949-50	..	..	5,355	7,894	..	..	1,043	1,624	..
1950-51	..	..	7,174	8,348	..	..	1,495	2,014	..
1951-52	..	..	7,686	8,578	..	..	1,921	2,175	..
1952-53	..	..	8,353	8,503	..	..	1,911	1,956	..
1953-54	..	..	9,027	9,046	10,512	..	2,107	2,107	2,488
1954-55	..	..	9,750	9,542	11,140	..	2,318	2,259	2,660
1955-56	..	..	10,574	10,053	11,671	..	2,527	2,342	2,770
1956-57	..	..	11,464	10,321	11,910	..	2,623	2,340	2,775
1957-58	..	..	11,598	10,454	12,157	..	2,815	2,462	2,912
1958-59	..	..	12,492	11,357	13,017	..	2,970	2,565	3,032
1959-60	..	..	13,836	11,790	13,547	..	3,329	2,819	3,329
1960-61	..	..	14,644	..	14,249	..	3,584	..	3,481
1961-62	..	..	14,956	..	14,370	..	3,638	..	3,470
1962-63	..	..	16,234	..	15,222	..	3,947	..	3,747
1963-64	..	..	18,021	..	16,270	..	4,450	..	4,149
1964-65	..	..	19,838	..	17,468	..	5,170	..	4,682
1965-66	..	..	20,886	..	17,739	..	5,664	..	4,980
1966-67	..	..	22,782	..	18,776	..	5,822	..	4,946

(a) N. G. Butlin, *Australian Domestic Product, Investment and Foreign Borrowing 1861—1938—39*, Cambridge University Press, Cambridge, 1962. Gross domestic product excluding livestock accumulation, approximates conceptually gross national product as defined in the Australian National Accounts. (b) Published by the Commonwealth Statistician. Figures prior to 1948—49 are from *National Income and Expenditure* 1955—56 and are not strictly comparable with subsequent figures because of a number of definitional changes and statistical revisions; see pages 18—19, 117—20, *Australian National Accounts 1948—49 to 1961—62*, Commonwealth Bureau of Census and Statistics. (c) *Australian National Accounts 1953—54 to 1966—67*, Commonwealth Bureau of Census and Statistics. The figures of \$1,800m for gross national product and \$316m for gross fixed capital expenditure in 1938—39 are based on a reconstruction of earlier estimates, and are approximately consistent with the present Australian National Account series. Mr B. D. Haig ('1938—39 National Income Estimates', *Australian Economic History Review*, Vol. vii, No. 2, September 1967) has adjusted components of gross national expenditure and imports and exports for changes in prices. Using these adjustments, an indication can be obtained of the approximate magnitude, at constant 1938—39 prices, of 1948—49 gross national product and gross fixed capital expenditure. The figures so derived are \$2,384m and \$434m respectively. (d) N. G. Butlin, *op. cit.* For a variety of reasons, Professor Butlin's gross domestic capital formation figures given here differ conceptually from those for gross fixed capital expenditure in the Australian National Accounts.

## PRIVATE FINANCE

Year ended 30 June—	NOTE ISSUE		BANKING		
	Common- wealth note issue(a)	Cheque-paying banks		Bank clearings (c)	Savings Banks Deposits(d)
		Advances (b)	Deposits (b)		
	\$m	\$m	\$m	\$m	\$m
1902 . . . . .	..	188	186	13	62
1912 . . . . .	16	238	300	25	118
1922 . . . . .	107	364	578	65	308
1932 . . . . .	103	522	638	55	396
1942 . . . . .	205	648	965	142	549
1943 . . . . .	280	583	1,233	156	716
1944 . . . . .	382	542	1,389	158	943
1945 . . . . .	373	503	1,525	149	1,134
Debits to customers' accounts(c)					
1946 . . . . .	400	519	1,397	(e)296	1,327
1947 . . . . .	405	672	1,445	349	1,320
1948 . . . . .	393	824	1,598	451	1,363
1949 . . . . .	426	966	1,830	514	1,428
1950 . . . . .	463	1,148	2,264	655	1,524
1951 . . . . .	551	1,357	2,826	897	1,675
1952 . . . . .	605	1,656	2,564	866	1,784
1953 . . . . .	657	1,450	2,856	877	1,895
1954 . . . . .	688	1,690	3,061	1,100	2,020
1955 . . . . .	726	1,982	3,089	1,127	2,145
1956 . . . . .	745	1,945	2,992	1,123	2,282
1957 . . . . .	763	1,897	3,231	1,250	2,455
1958 . . . . .	775	2,060	3,240	1,282	2,594
1959 . . . . .	790	2,007	3,362	1,432	2,783
1960 . . . . .	843	2,211	3,611	1,737	3,045
1961 . . . . .	839	2,238	3,600	1,654	3,155
1962 . . . . .	856	2,287	3,837	1,848	3,470
1963 . . . . .	869	2,465	4,064	2,028	3,940
1964 . . . . .	870	2,610	4,649	2,318	4,476
1965 . . . . .	862	2,955	5,038	2,653	4,887
1966 . . . . .	849	3,183	5,308	2,672	5,254
1967 . . . . .	938	3,548	5,614	2,978	5,765
1968 . . . . .	1,006	4,022	6,087	3,588	6,222

(a) Last Wednesday in June. (b) June quarter up to and including 1945; month of June from 1946 onwards. (c) Weekly average, June month. (d) End of June. (e) Bank clearings, \$179m.

## LIFE INSURANCE(a)

Year ended 31 December(b)—	Ordinary(c)		Industrial		Total	
	Policies	Sum assured	Policies	Sum assured	Policies	Sum assured
	'000	\$m	'000	\$m	'000	\$m
1901 . . . . .	414	216	236	10	650	226
1911 . . . . .	484	218	467	20	951	238
1921 . . . . .	730	362	973	60	1,703	422
1931 . . . . .	871	570	1,550	134	2,421	704
1941 . . . . .	1,340	926	2,780	254	4,120	1,180
1942 . . . . .	1,384	956	2,899	268	4,283	1,223
1943 . . . . .	1,433	998	3,026	285	4,459	1,284
1944 . . . . .	1,506	1,071	3,158	306	4,664	1,376
1945 . . . . .	1,587	1,157	3,279	327	4,866	1,484
1946 . . . . .	1,730	1,310	3,429	357	5,159	1,667
1947 . . . . .	1,902	1,481	3,541	386	5,442	1,867
1948 . . . . .	2,071	1,669	3,643	418	5,714	2,087
1949 . . . . .	2,224	1,862	3,725	448	5,949	2,310
1950 . . . . .	2,377	2,094	3,793	477	6,170	2,571
1951 . . . . .	2,554	2,424	3,843	507	6,396	2,931
1952 . . . . .	2,731	2,757	3,873	541	6,604	3,298
1953 . . . . .	2,893	3,105	3,881	571	6,774	3,677
1954 . . . . .	3,033	3,482	3,827	594	6,860	4,076
1955 . . . . .	3,184	3,942	3,766	615	6,949	4,556
1956 . . . . .	3,319	4,447	3,702	631	7,021	5,077
1957 . . . . .	3,446	5,067	3,615	645	7,061	5,712
1958 . . . . .	3,577	5,747	3,531	657	7,108	6,404
1959 . . . . .	3,710	6,571	3,443	665	7,154	7,236
1960 . . . . .	4,110	7,690	3,340	686	7,450	8,376
1961 . . . . .	4,201	8,743	3,199	707	7,400	9,450
1962 . . . . .	4,291	9,854	3,076	743	7,366	10,597
1963 . . . . .	4,401	11,010	2,953	777	7,354	11,787
1964 . . . . .	4,539	12,481	2,851	823	7,390	13,304
1965 . . . . .	4,705	14,057	2,755	871	7,460	14,928
1966 . . . . .	4,873	15,750	2,644	918	7,517	16,668
1967 . . . . .	5,051	17,762	2,603	981	7,654	18,743

(a) Existing business in Australia. (b) Companies' financial years which ended during the year. (c) Includes superannuation business.



COMMONWEALTH					STATE				GOVERNMENT SECURITIES ON ISSUE(a)				
Year ended 30 June—	Consolidated revenue fund		Net loan fund expenditure (b)	Taxation collections	Consolidated revenue fund		Net loan fund expenditure (b)	Taxation collections	Commonwealth	State	Total	Overseas	In Australia
	Revenue	Expenditure			Revenue	Expenditure							
1902	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
1912	23	8	2	18	56	58	19	5		429	429	n.a.	n.a.
1922	41	29	2	32	83	82	33	11	12	557	569	388	181
1932	128	128	10	99	170	175	67	36	708	1,039	1,747	823	924
1942	143	143	8	108	199	242	12	65	692	1,800	2,492	1,320	1,172
1943	420	420	426	359	305	299	17	115	1,340	2,038	3,378	1,312	2,066
1944	589	589	806	514	337	333	8	53	2,117	2,013	4,131	1,308	2,823
1945	684	684	755	607	338	334	6	43	2,850	1,994	4,844	1,262	3,582
1946	754	754	532	676	338	334	12	44	3,355	2,008	5,364	1,231	4,133
1947	782	782	319	706	332	331	14	50	3,670	2,005	5,675	1,142	4,533
1948	863	863	98	771	346	350	48	57	3,733	2,044	5,777	1,130	4,647
1949	932	932	26	845	394	398	75	64	3,702	2,119	5,821	1,117	4,704
1950	1,109	1,109	—	982	452	456	102	73	3,685	2,202	5,887	1,088	4,798
1951	1,161	1,161	85	1,038	521	525	147	83	3,731	2,367	6,098	1,099	4,999
1952	1,684	1,684	101	1,554	613	613	257	103	3,777	2,619	6,396	1,067	5,329
1953	2,034	2,034	63	1,868	777	783	395	126	3,838	2,993	6,830	1,113	5,717
1954	2,080	2,080	71	1,791	876	877	322	142	3,893	3,288	7,181	1,142	6,038
1955	2,046	2,046	83	1,801	941	935	335	161	3,964	3,573	7,537	1,165	6,372
1956	2,135	2,135	66	1,875	991	998	321	179	3,998	3,846	7,844	1,216	6,628
1957	2,277	2,277	88	2,008	1,052	1,082	312	196	4,031	4,121	8,151	1,269	6,882
1958	2,624	2,624	88	2,197	1,154	1,168	317	229	3,957	4,396	8,353	1,216	7,137
1959	2,648	2,648	90	2,323	1,210	1,224	314	256	3,670	4,686	8,356	1,248	7,108
1960	2,592	2,592	132	2,267	1,280	1,295	338	276	3,512	4,988	8,499	1,319	7,180
1961	2,877	2,877	119	2,500	1,399	1,404	357	322	3,334	5,301	8,635	1,389	7,246
1962	3,277	3,277	83	2,850	1,511	1,513	384	337	3,215	5,630	8,845	1,413	7,433
1963	3,282	3,283	182	2,833	1,609	1,617	395	355	3,119	5,963	9,082	1,424	7,658
1964	3,371	3,371	274	2,882	1,694	1,696	405	393	3,121	6,314	9,434	1,522	7,912
1965	3,809	3,809	226	3,220	1,829	1,829	438	451	3,172	6,691	9,863	1,545	8,318
1966	4,418	4,418	167	3,788	1,947	1,965	475	496	3,134	7,091	10,225	1,529	8,695
1967	4,879	4,879	260	4,188	2,095	2,120	496	539	3,145	7,495	10,639	1,505	9,134
1968	5,228	5,228	360	4,455	2,286	2,290	530	602	3,275	7,934	11,209	1,532	9,677
1968	5,760	5,760	497	4,917					3,600	8,317	11,917	1,558	10,358

(a) At 30 June. Expressed in Australian currency equivalents at ruling rates of exchange.

(b) Loan expenditure on works, services etc.

### SOCIAL PENSIONS, BENEFITS, ETC.

Year ended 30 June—	Age and invalid pensions		Child endowment		Widows' pensions		Unemployment benefits	
	Pensioners (a)	Amount paid	Children endowed (a)	Endowment paid	Pensioners (a)	Amount paid	No. on benefit—weekly average	Amount paid
	'000	\$m	'000	\$m	'000	\$m	'000	\$m
1902	90	4.3	..	..	..	..	..	..
1912	147	10.8	..	..	..	..	..	..
1922	261	22.3	..	..	..	..	..	..
1932	341	38.5	910	22.6	..	..	..	..
1942	331	44.6	908	23.3	38	4.7	..	..
1944	320	43.4	922	(b)24.5	42	5.6	..	..
1945	316	43.4	939	24.1	44	5.9	..	..
1946	333	53.9	965	36.0	45	6.5	6	1.0
1947	364	58.8	1,007	(b)39.7	43	6.7	9	1.8
1948	381	73.1	1,050	38.9	43	7.8	4	0.7
1949	403	83.4	1,105	48.6	43	8.8	2	(c)
1950	414	89.1	1,836	(b)60.7	43	8.8	13	2.5
1951	417	99.0	2,389	87.2	42	9.7	1	(c)
1952	426	119.6	2,518	93.2	41	11.2	2	(c)
1953	451	144.8	2,624	(b)106.5	41	12.7	30	9.1
1954	478	162.6	2,717	101.5	41	13.2	14	5.0
1955	510	176.0	2,789	105.1	42	13.7	4	1.4
1956	535	203.3	2,876	(b)120.8	43	15.4	4	1.4
1957	554	218.4	2,978	114.1	45	17.7	12	4.2
1958	574	243.2	3,074	117.5	47	19.7	24	9.8
1959	598	259.1	3,172	(b)135.1	50	21.6	28	11.9
1960	619	294.0	3,252	125.1	52	24.3	21	9.0
1961	651	315.9	3,340	(b)148.6	55	26.9	22	8.9
1962	691	360.5	3,420	132.8	57	30.2	53	25.3
1963	711	375.5	3,458	135.4	58	31.4	40	21.3
1964	725	399.9	3,631	(b)168.8	62	41.6	26	13.5
1965	736	426.6	3,711	172.8	65	47.0	14	6.8
1966	744	442.4	3,763	176.4	69	50.0	15	7.8
1967	764	481.8	3,835	(b)199.3	73	56.4	21	11.2
1968	797	514.1	3,891	187.9	75	61.1	22	11.2

(a) At 30 June.

(b) Five 12-weekly payments made during the year instead of the normal four.

(c) Less than \$0.05m.

## SOCIAL—continued

## PENSIONS, BENEFITS, ETC.—continued

Year ended 30 June—	Hospital and nursing home benefits— amount paid	Medical benefits— amount paid	Phar- maceu- tical benefits— amount paid	Total Common- wealth expenditure on pensions, benefits, etc.(a)	War pensions		Service pensions	
					No.(b)	Amount paid	No.(b)	Amount paid
	\$m	\$m	\$m	\$m	'000	\$m	'000	\$m
1902 . . . . .	..	..	..	4.3	..	..	..	..
1912 . . . . .	..	..	..	12.1	225	14.0	..	..
1922 . . . . .	..	..	..	23.0	274	14.9	..	..
1932 . . . . .	..	..	..	61.8	220	15.0	14	1.2
1942 . . . . .	..	..	..	73.2	227	16.8	13	1.3
1943 . . . . .	..	..	..	78.3	245	20.8	13	1.3
1944 . . . . .	..	..	..	78.4	281	22.9	13	1.3
1945 . . . . .	2.2	..	..	106.4	360	26.6	13	1.6
1946 . . . . .	8.8	..	..	124.0	395	30.2	14	1.8
1947 . . . . .	8.9	..	..	137.2	416	32.7	16	2.5
1948 . . . . .	11.8	..	..	161.6	440	37.9	16	2.7
1949 . . . . .	12.6	..	0.1	185.6	471	42.1	16	2.9
1950 . . . . .	13.1	..	5.9	230.0	503	53.1	17	3.0
1951 . . . . .	13.4	2.1	15.4	275.2	525	66.7	17	3.6
1952 . . . . .	14.4	3.5	14.4	331.0	544	72.6	19	4.5
1953 . . . . .	16.7	7.2	18.5	353.1	564	78.1	21	5.4
1954 . . . . .	18.6	13.5	21.5	378.6	584	87.8	22	6.0
1955 . . . . .	19.1	14.6	23.8	429.7	600	91.3	35	8.3
1956 . . . . .	19.6	18.3	23.4	447.8	614	95.6	39	9.8
1957 . . . . .	21.6	20.6	30.1	495.0	629	106.6	42	11.3
1958 . . . . .	29.6	23.2	41.9	556.5	643	109.0	44	12.4
1959 . . . . .	37.2	26.8	48.7	598.7	655	117.5	46	13.5
1960 . . . . .	41.3	28.4	55.8	661.2	662	132.6	50	15.6
1961 . . . . .	44.4	30.6	70.4	730.4	671	135.1	58	19.4
1962 . . . . .	47.3	32.6	76.9	758.6	671	140.7	62	21.7
1963 . . . . .	56.2	34.4	78.8	832.7	669	154.5	65	24.2
1964 . . . . .	58.8	44.6	82.2	890.4	660	153.5	65	25.5
1965 . . . . .	60.7	54.6	91.8	941.6	646	170.1	66	28.2
1966 . . . . .	67.4	58.2	101.3	1,031.1	631	161.4	67	29.1
1967 . . . . .	74.8	62.5	105.1	1,075.0	617	164.4	69	31.8

(a) From National Welfare Fund only, and includes, in addition to the items shown in the preceding columns, expenditure on—the Rehabilitation Service; milk for school children; Tuberculosis Campaign; sickness, social and funeral benefits and some miscellaneous health services. Excludes war and service pensions, telephone rental concessions for pensioners, and some minor welfare and health services. (b) At 30 June.

## EDUCATION

## POLICE AND PRISONS

Year(a)	Schools				Universities		Police and Prisons		
	Government		Non-government				Police	Prisons	Convicted prisoners
	Schools	Pupils	Schools	Pupils	Number	Students			
	'000	'000	'000	'000		'000	'000	No.	'000
1902 . . . . .	7.2	637	2.4	144	4	2.8	5.9	n.a.	4.2
1912 . . . . .	8.4	663	1.9	164	5	3.8	6.6	101	3.4
1922 . . . . .	9.6	837	1.7	202	6	7.8	7.0	92	3.0
1932 . . . . .	10.2	934	1.8	221	6	9.9	8.5	85	4.2
1942 . . . . .	9.0	868	1.8	250	6	10.6	9.7	70	3.5
1943 . . . . .	8.8	874	1.8	264	6	11.4	9.6	70	3.5
1944 . . . . .	8.7	878	1.8	275	6	14.7	9.3	70	3.9
1945 . . . . .	8.4	875	1.8	273	6	17.8	9.4	71	3.9
1946 . . . . .	8.3	887	1.8	277	7	25.0	9.7	71	3.6
1947 . . . . .	8.2	906	1.9	281	7	30.0	10.2	73	3.8
1948 . . . . .	8.0	928	1.8	281	7	31.9	10.4	72	3.5
1949 . . . . .	7.9	971	1.8	293	8	31.1	10.8	72	3.7
1950 . . . . .	7.8	1,027	1.9	310	8	30.0	11.3	71	4.0
1951 . . . . .	7.6	1,078	1.9	326	8	31.1	11.7	71	4.2
1952 . . . . .	7.6	1,145	1.9	348	8	29.1	12.6	70	4.8
1953 . . . . .	7.6	1,206	2.0	366	9	28.3	12.7	71	4.8
1954 . . . . .	7.6	1,275	2.0	388	9	28.9	12.6	72	4.8
1955 . . . . .	7.6	1,337	2.1	410	9	30.3	12.9	74	5.1
1956 . . . . .	7.7	1,355	2.1	433	9	34.0	13.5	73	6.0
1957 . . . . .	7.7	1,425	2.0	451	9	36.6	14.1	73	6.4
1958 . . . . .	7.7	1,496	2.0	471	10	41.5	14.5	73	6.6
1959 . . . . .	7.8	1,558	2.1	489	10	47.2	14.9	74	6.6
1960 . . . . .	7.9	1,613	2.1	511	10	53.4	15.3	77	6.8
1961 . . . . .	8.0	1,664	2.1	527	10	57.7	15.9	75	7.2
1962 . . . . .	7.9	1,713	2.2	540	10	63.3	16.3	74	7.4
1963 . . . . .	7.9	1,757	2.2	553	10	69.1	16.7	73	7.7
1964 . . . . .	7.9	1,801	2.2	565	10	76.2	17.1	74	7.7
1965 . . . . .	7.8	1,857	2.2	581	11	83.3	17.6	74	7.7
1966 . . . . .	7.8	1,921	2.2	583	12	91.3	18.3	76	8.1
1967 . . . . .	7.8	1,994	2.2	595	14	95.4	18.8		

(a) Years ended at varying dates.



## APPENDIX

Some recent information which has come to hand since the various chapters were sent to press is given in summarised form in the following pages, but for later statistics on the subjects dealt with in chapters reference should in general be made to other publications issued by this Bureau, e.g. the *Monthly Review of Business Statistics*, the *Quarterly Summary of Australian Statistics*, the *Digest of Current Economic Statistics*, and the various mimeographed statements issued on particular subjects (see Publications issued by the Commonwealth Statistician, pages 1236-47 of the chapter Miscellaneous).

### CHAPTER 3. GENERAL GOVERNMENT

#### Parliamentary government

Commonwealth Ministries, page 54

#### SECOND GORTON MINISTRY—28 FEBRUARY 1968

- |   |   |
|---|---|
| <p><b>*Prime Minister—</b><br/>THE RT HON. J. G. GORTON, M.P. (Vic.) (Lib.)</p> <p><b>*Deputy Prime Minister and Minister for Trade and Industry—</b><br/>THE RT HON. J. McEWEN, M.P. (Vic.) (C.P.)</p> <p><b>*Treasurer—</b><br/>THE RT HON. WILLIAM McMAHON, M.P. (N.S.W.) (Lib.)</p> <p><b>*Minister for External Affairs—</b><br/>THE RT HON. PAUL HASLUCK, M.P. (W.A.) (Lib.)</p> <p><b>*Minister for Defence—</b><br/>THE HON. ALLEN FAIRHALL, M.P. (N.S.W.) (Lib.)</p> <p><b>*Minister for Primary Industry—</b><br/>THE HON. J. D. ANTHONY, M.P. (N.S.W.) (C.P.)</p> <p><b>*Postmaster-General and Vice-President of the Executive Council—</b><br/>THE HON. A. S. HULME, M.P. (Qld) (Lib.)</p> <p><b>*Minister for National Development—</b><br/>THE HON. DAVID FAIRBAIRN, D.F.C., M.P. (N.S.W.) (Lib.)</p> <p><b>*Minister for Labour and National Service—</b><br/>THE HON. L. H. E. BURY, M.P. (N.S.W.) (Lib.)</p> <p><b>*Minister for Shipping and Transport and Assisting the Minister for Trade and Industry—</b><br/>THE HON. IAN SINCLAIR, M.P. (N.S.W.) (C.P.)</p> <p><b>*Minister for Supply and Leader of the Government in the Senate—</b><br/>SENATOR THE HON. KEN ANDERSON (N.S.W.) (Lib.)</p> <p><b>*Minister for Education and Science—</b><br/>THE HON. MALCOLM FRASER, M.P. (Vic.) (Lib.)</p> <p><b>Minister for Air and Assisting the Treasurer—</b><br/>THE HON. GORDON FREETH, M.P. (W.A.) (Lib.)</p> | <p><b>Minister for External Territories—</b><br/>THE HON. C. E. BARNES, M.P. (Qld) (C.P.)</p> <p><b>Minister for Civil Aviation—</b><br/>THE HON. R. W. C. SWARTZ, M.B.E., E.D., M.P. (Qld) (Lib.)</p> <p><b>Minister for Immigration and Leader of the House—</b><br/>THE HON. B. M. SNEDDEN, Q.C., M.P. (Vic.) (Lib.)</p> <p><b>Minister for Health—</b><br/>THE HON. A. J. FORBES, M.C., M.P. (S.A.) (Lib.)</p> <p><b>Minister for Repatriation—</b><br/>SENATOR THE HON. G. COLIN McKELLAR (N.S.W.) (C.P.)</p> <p><b>Minister for Housing—</b><br/>SENATOR THE HON. DAME ANNABELLE RANKIN, D.B.E. (Qld) (Lib.)</p> <p><b>Attorney-General—</b><br/>THE HON. N. H. BOWEN, Q.C., M.P. (N.S.W.) (Lib.)</p> <p><b>Minister for the Navy—</b><br/>THE HON. C. R. KELLY, M.P. (S.A.) (Lib.)</p> <p><b>Minister for the Interior—</b><br/>THE HON. P. J. NIXON, M.P. (Vic.) (C.P.)</p> <p><b>Minister for the Army—</b><br/>THE HON. PHILLIP LYNCH, M.P. (Vic.) (Lib.)</p> <p><b>Minister for Customs and Excise—</b><br/>SENATOR THE HON. MALCOLM SCOTT (W.A.) (Lib.)</p> <p><b>Minister for Social Services and under the Prime Minister, Minister-in-Charge of Aboriginal Affairs—</b><br/>THE HON. W. C. WENTWORTH, M.P. (N.S.W.) (Lib.)</p> <p><b>Minister for Works and under the Minister for Trade and Industry, Minister-in-Charge of Tourist Activities—</b><br/>SENATOR THE HON. R. C. WRIGHT (Tas.) (Lib.)</p> |
|---|---|

\* Minister in the Cabinet.

## State Ministries, page 57

STATE MINISTRIES  
NEW SOUTH WALES

(From 5 March 1968)

*Premier and Treasurer—*

THE HON. R. W. ASKIN, M.L.A. (Lib.)

*Deputy Premier, Minister for Education, and Minister for Science—*

THE HON. C. B. CUTLER, E.D., M.L.A. (C.P.)

*Minister for Labour and Industry, Chief Secretary, and Minister for Tourism—*

THE HON. E. A. WILLIS, M.L.A. (Lib.)

*Minister for Public Works—*

THE HON. D. HUGHES, M.L.A. (C.P.)

*Attorney-General—*

THE HON. K. M. McCAW, M.L.A. (Lib.)

*Minister for Local Government and Minister for Highways—*

THE HON. P. H. MORTON, M.L.A. (Lib.)

*Minister for Decentralisation and Development—*

THE HON. J. B. M. FULLER, M.L.C. (C.P.)

*Minister for Transport—*

THE HON. M. A. MORRIS, M.L.A. (Lib.)

*Minister for Lands—*

THE HON. T. L. LEWIS, M.L.A. (Lib.)

*Minister for Conservation—*

THE HON. J. G. BEALE, M.L.A. (Lib.)

*Minister for Agriculture—*

THE HON. G. R. CRAWFORD, M.L.A. (C.P.)

*Minister for Housing and Minister for Co-operative Societies—*

THE HON. S. T. STEPHENS, M.L.A. (C.P.)

*Minister for Justice—*

THE HON. J. C. MADDISON, M.L.A. (Lib.)

*Minister for Health, Minister for Child Welfare, and Minister for Social Welfare\*—*

THE HON. A. H. JAGO, M.L.A. (Lib.)

*Minister for Mines—*

THE HON. W. C. FIFE, M.L.A. (Lib.)

\* Hon. A. H. Jago took up the last two portfolios on 23 May 1968, following the death of the Hon. A. D. Bridges.

On 3 September 1968 the Hon. F. M. Hewitt, M.L.C. (Lib.), was sworn in as Minister for Child Welfare and Minister for Social Welfare.

## VICTORIA

(From 8 June 1968)

*Premier and Treasurer—*

THE HON. SIR HENRY BOLTE, K.C.M.G., M.P. (Lib.)

*Chief Secretary—*

THE HON. SIR ARTHUR RYLAH, K.B.E., C.M.G., E.D., M.P. (Lib.)

*Minister of Agriculture—*

THE HON. G. L. CHANDLER, C.M.G., M.L.C. (Lib.)

*Minister of Education—*

THE HON. L. H. S. THOMPSON, M.L.C. (Lib.)

*Attorney-General, and Minister of Immigration—*

THE HON. G. O. REID, M.P. (Lib.)

*Minister of Public Works—*

THE HON. M. V. PORTER, M.P. (Lib.)

*Minister of Housing, Minister of Forests and Minister for Aboriginal Affairs—*

THE HON. E. R. MEAGHER, M.B.E., E.D., M.P. (Lib.)

*Minister for Local Government—*

THE HON. R. J. HAMER, E.D., M.L.C. (Lib.)

*Minister for Fuel and Power, and Minister of Mines—*

THE HON. J. C. M. BALFOUR, M.P. (Lib.)

*Minister of Labour and Industry and Assistant Minister of Education—*

THE HON. J. F. ROSSITER, M.P. (Lib.)

*Minister of Transport—*

THE HON. V. F. WILCOX, M.P. (Lib.)

*Minister of Health—*

THE HON. V. O. DICKIE, M.L.C. (Lib.)

*Minister of State Development—*

THE HON. J. W. MANSON, M.P. (Lib.)

*Minister of Lands, Minister of Soldier Settlement, and Minister for Conservation—*

THE HON. SIR WILLIAM McDONALD, M.P. (Lib.)

*Minister of Water Supply—*

THE HON. W. A. BORTHWICK, M.P. (Lib.)

STATE MINISTRIES—*continued*

## QUEENSLAND

(From 17 January 1968)

<i>Premier and Minister for State Development—</i> THE HON. J. C. A. PIZZHEY, M.L.A. (C.P.)	<i>Minister for Primary Industries—</i> THE HON. J. A. ROW, M.L.A. (C.P.)
<i>Treasurer—</i> THE HON. G. W. W. CHALK, M.L.A. (Lib.)	<i>Minister for Health—</i> THE HON. S. D. TOOTH, M.L.A. (Lib.)
<i>Minister for Works and Housing—</i> THE HON. J. BJELKE-PETERSEN, M.L.A. (C.P.)	<i>Minister for Labour and Tourism—</i> THE HON. J. D. HERBERT, M.L.A. (Lib.)
<i>Minister for Justice and Attorney-General—</i> THE HON. P. R. DELAMOTHE, O.B.E., M.L.A. (Lib.)	<i>Minister for Mines, Main Roads, and Electricity—</i> THE HON. R. E. CAMM, M.L.A. (C.P.)
<i>Minister for Education and Cultural Activities—</i> THE HON. A. R. FLETCHER, M.L.A. (C.P.)	<i>Minister for Transport—</i> THE HON. W. E. KNOX, M.L.A. (Lib.)
<i>Minister for Local Government and Conservation—</i> THE HON. H. RICHTER, M.L.A. (C.P.)	<i>Minister for Industrial Development—</i> THE HON. F. A. CAMPBELL, M.L.A. (Lib.)
	<i>Minister for Lands—</i> THE HON. V. B. SULLIVAN, M.L.A. (C.P.)

(From 8 August 1968)

<i>Premier and Minister for State Development—</i> THE HON. J. BJELKE-PETERSEN, M.L.A. (C.P.)	<i>Minister for Primary Industries—</i> THE HON. J. A. ROW, M.L.A. (C.P.)
<i>Treasurer—</i> THE HON. G. W. W. CHALK, M.L.A. (Lib.)	<i>Minister for Health—</i> THE HON. S. D. TOOTH, M.L.A. (Lib.)
<i>Minister for Mines, Main Roads, and Electricity—</i> THE HON. R. E. CAMM, M.L.A. (C.P.)	<i>Minister for Labour and Tourism—</i> THE HON. J. D. HERBERT, M.L.A. (Lib.)
<i>Minister for Justice and Attorney-General—</i> THE HON. P. R. DELAMOTHE, O.B.E., M.L.A. (Lib.)	<i>Minister for Transport—</i> THE HON. W. E. KNOX, M.L.A. (Lib.)
<i>Minister for Education and Cultural Activities—</i> THE HON. A. R. FLETCHER, M.L.A. (C.P.)	<i>Minister for Industrial Development—</i> THE HON. F. A. CAMPBELL, M.L.A. (Lib.)
<i>Minister for Local Government and Conservation—</i> THE HON. H. RICHTER, M.L.A. (C.P.)	<i>Minister for Lands—</i> THE HON. V. B. SULLIVAN, M.L.A. (C.P.)
	<i>Minister for Works and Housing—</i> THE HON. A. M. HODGES, M.L.A. (C.P.)

## SOUTH AUSTRALIA

(From 17 April 1968)

<i>Premier and Minister of Industrial Development—</i> THE HON. R. S. HALL, M.P. (L.C.L.)	<i>Minister of Agriculture and Minister of Forests—</i> THE HON. C. R. STORY, M.L.C. (L.C.L.)
<i>Chief Secretary, Minister of Health and Minister of Mines—</i> THE HON. R. C. DEGARIS, M.L.C. (L.C.L.)	<i>Minister of Works, Minister of Marine and Minister of Labour and Industry—</i> THE HON. J. W. H. COUMBE, M.P. (L.C.L.)
<i>Treasurer and Minister of Housing—</i> THE HON. G. G. PEARSON, M.P. (L.C.L.)	<i>Attorney-General, Minister of Social Welfare and Minister of Aboriginal Affairs—</i> THE HON. R. R. MILLHOUSE, M.P. (L.C.L.)
<i>Minister of Lands, Minister of Repatriation, Minister of Irrigation and Minister of Immigration and Tourism—</i> THE HON. D. N. BROOKMAN, M.P. (L.C.L.)	<i>Minister of Education—</i> THE HON. JOYCE STEELE, M.P. (L.C.L.)
	<i>Minister of Local Government, Minister of Roads and Transport—</i> THE HON. C. M. HILL, M.L.C. (L.C.L.)

## WESTERN AUSTRALIA

(From 16 February 1967)

<i>Premier, Treasurer, and Minister for Tourists—</i> THE HON. D. BRAND, M.L.A. (L.C.L.)*	<i>Minister for Works and Minister for Water Supplies—</i> THE HON. R. HUTCHINSON, D.F.C., M.L.A. (L.C.L.)*
<i>Deputy Premier, Minister for Agriculture, and Minister for Electricity—</i> THE HON. C. D. NALDER, M.L.A. (C.P.)	<i>Minister for Local Government, Minister for Town Planning, and Minister for Child Welfare—</i> THE HON. L. A. LOGAN, M.L.C. (C.P.)†
<i>Minister for Industrial Development and Minister for the North-West—</i> THE HON. C. W. M. COURT, O.B.E., M.L.A. (L.C.L.)*	<i>Chief Secretary, Minister for Police, and Minister for Traffic—</i> THE HON. J. F. CRAIG, M.L.A. (C.P.)†
<i>Minister for Education and Minister for Native Welfare—</i> THE HON. E. H. M. LEWIS, M.L.A. (C.P.)	<i>Minister for Housing and Minister for Labour—</i> THE HON. D. H. O'NEIL, M.L.A. (L.C.L.)*
<i>Minister for Mines, Minister for Justice, and Leader of the Government in the Legislative Council—</i> THE HON. A. F. GRIFFITH, M.L.C. (L.C.L.)*	<i>Minister for Transport and Minister for Railways—</i> THE HON. R. J. O'CONNOR, M.L.A. (L.C.L.)*
<i>Minister for Lands, Minister for Forests, and Minister for Immigration—</i> THE HON. W. S. BOVELL, M.L.A. (L.C.L.)*	<i>Minister for Health, and Minister for Fisheries and Fauna—</i> THE HON. G. C. MACKINNON, M.L.C. (L.C.L.)*

\* The Liberal and Country League (L.C.L.) changed its name on 15 July 1968 to the Liberal Party of Australia (Western Australian Division) Incorporated. † Incorrectly shown as (L.C.L.) on page 58.

## TASMANIA

No change as from page 59.

## Commonwealth Government Departments (page 74)

On 28 February 1968 approval was given to the abolition of the Department of Territories and the establishment of the Department of External Territories. The consequential administrative arrangements of the Department of the Interior (which was affected by the change) and the new Department of External Territories are shown below.

<i>Name of Department</i>	<i>Principal matters dealt with</i>	<i>Acts administered by Minister</i>
The Department of the Interior	Administration of Australian Capital Territory, Jervis Bay Territory, Northern Territory of Australia and the Territory of Ashmore and Cartier Islands Acquisition and leasing of land and property for Commonwealth purposes; management of Commonwealth property Meteorology Ionospheric Prediction Service Civil Defence Parliamentary Elections and Referendums Publicity and Information War Graves Surveys—land, engineering and topographical for Commonwealth purposes	<i>Ashmore and Cartier Islands Acceptance Act 1933–1938</i> <i>Australian Capital Territory Electricity Supply Act 1962–1966</i> <i>Australian Capital Territory Representation Act 1948–1966</i> <i>Australian War Memorial Act 1962–1966</i> <i>Commonwealth Electoral Act 1918–1966</i> <i>Darwin Lands Acquisition Act 1945</i> <i>Defence (Transitional Provisions) Act 1946–1966 and Defence Transition (Residual Provisions) Act 1952, insofar as they relate to National Security (General) Regulations 54, 55A, 55A, 60B, 60G and 60J–60M</i> <i>Jervis Bay Territory Acceptance Act 1915–1955</i> <i>Lands Acquisition Act 1955–1966</i> <i>Meteorology Act 1955</i> <i>Mount Stromlo Observatory Act 1956</i> <i>National Capital Development Commission Act 1957–1960</i> <i>Northern Territory Acceptance Act 1910–1952</i> <i>Northern Territory (Administration) Act 1910–1966</i> <i>Northern Territory Representation Act 1922–1959</i>

<i>Name of Department</i>	<i>Principal matters dealt with</i>	<i>Acts administered by Minister</i>
Department of the Interior— <i>continued</i>		<i>Referendum (Constitution Alteration) Act</i> 1906–1966 <i>Removal of Prisoners (Territories) Act</i> 1923–1962, in relation to prisoners sentenced in the Northern Territory of Australia or the Territory of Ashmore and Cartier Islands <i>Representation Act</i> 1905–1964 <i>Representation Act</i> 1948–1949 Seat of Government Acceptance Acts <i>Seat of Government Act</i> 1908–1955 Seat of Government (Administration) Acts <i>Senate Elections Act</i> 1903–1948 <i>Senate Elections Act</i> 1966
The Department of External Territories	Territories under the authority of the Commonwealth, other than the Australian Capital Territory, the Jervis Bay Territory, the Northern Territory of Australia, the Territory of Ashmore and Cartier Islands, the Australian Antarctic Territory and the Territory of Heard Island and McDonald Islands	<i>Christmas Island Act</i> 1958–1966 <i>Christmas Island Agreement Act</i> 1958 <i>Cocos (Keeling) Islands Act</i> 1955–1966 <i>Native Members of the Forces Benefits Act</i> 1957–1966, in relation to native members of the Forces who are or were Aboriginal natives of the Territory of Papua or the Territory of New Guinea or of an island in the Pacific Ocean and their dependants <i>Nauru Independence Act</i> 1967 Nauru Island Agreement Acts <i>New Guinea Timber Agreement Act</i> 1952–1953 <i>Norfolk Island Act</i> 1957–1966 <i>Norfolk Island Ordinances Act</i> 1957 <i>Papua and New Guinea Act</i> 1949–1966 <i>Papua and New Guinea (Validation of Appointments) Act</i> 1953 <i>Removal of Prisoners (Territories) Act</i> 1923–1962, in relation to prisoners sentenced in the Territory of Papua, the Territory of New Guinea, the Territory of Christmas Island, the Territory of Cocos (Keeling) Islands or Norfolk Island <i>Treaty of Peace (Germany) Act</i> 1919–1966, in relation to regulations concerning Papua and New Guinea (Treaty of Peace Regulations, Part II.)

On 11 March 1968 approval was given to the establishment of the Department of the Cabinet Office. The consequential administrative arrangements of the Prime Ministers' Department (which was affected by the change) and the new Department of the Cabinet Office are shown below.

<i>Name of Department</i>	<i>Principal matters dealt with</i>	<i>Acts administered by Minister</i>
The Prime Minister's Department	Secretariat to the Executive Council Communications between the Commonwealth and State Governments High Commissioner's Office, London Communications with the British Government Support for the arts National Archives Government hospitality and State ceremonial	<i>Commonwealth Grants Commission Act</i> 1933–1966 <i>Commonwealth Salaries Act</i> 1907 <i>Flags Act</i> 1953–1954 <i>High Commissioner (United Kingdom) Act</i> 1909–1966 <i>Ministers of State Act</i> 1952–1967 <i>National Library Act</i> 1960–1967 <i>Officers' Rights Declaration Act</i> 1928–1959 <i>Parliamentary Allowances Act</i> 1952–1966 <i>Parliamentary Presiding Officers Act</i> 1965 <i>Public Accounts Committee Act</i> 1951–1966 <i>Public Service Act</i> 1922–1967 <i>Public Works Committee Act</i> 1913–1966 <i>Royal Commissions Act</i> 1902–1966 <i>Royal Powers Act</i> 1953 <i>Royal Style and Titles Act</i> 1953 Special Annuity Acts
The Department of the Cabinet Office	Secretariat to Cabinet and to Cabinet Committees	..



## CHAPTER 10. LABOUR, WAGES AND PRICES

### WAGES, EARNINGS AND HOURS

#### Determination of Wage Rates in Australia, page 305

##### National Wage Case, 1968

In its decision in this case (4 October 1968) the Commonwealth Conciliation and Arbitration Commission increased all wage rates for adults (male and female) in Commonwealth awards by \$1.35 a week. The minimum wage for adult males was increased by the same amount. Male and female juniors including apprentices would receive proportionate increases. The variations came into operation from the beginning of the first pay-period to commence on or after 25 October 1968.

## CHAPTER 19. PUBLIC FINANCE

### COMMONWEALTH FINANCE

#### Commonwealth Budget, 1968-69

(See page 1254 for particulars of 1967-68 Budget)

The 1968-69 Commonwealth Budget introduced measures broadly to restrain the rate of growth in government expenditure while providing for an estimated outlay of \$6,649 million (\$6,184 million in 1967-68) and estimated receipts of \$6,103 million (\$5,540 million in 1967-68). The deficit for 1968-69 was thus estimated at \$547 million (\$644 million in 1967-68).

##### Outlay

The main increases in Budget allocation in 1968-69 over 1967-68 were in the fields of cash benefits to persons (from \$1,294 million to \$1,406 million), defence (from \$1,040 million to \$1,141 million), grants to the States (from \$1,312 million to \$1,407 million) and subsidies (from \$153 million to \$193 million). The estimated increase in cash benefits to persons is due mainly to increased pensions and allowances. The main increases were as follows:

*Health benefits.* From 1 January 1969, a supplementary benefit of \$3 a day in addition to nursing home benefits of \$2 a day will be payable for patients in approved nursing homes who are medically classified as in need of, and receiving, intensive care.

A benefit of \$1.50 per day is payable for a handicapped child under sixteen years of age accommodated in a private non-profit institution where the child receives medical or para-medical treatment and nursing care.

Tuberculosis allowances for a single person, man and wife, and each child under sixteen years are to be raised to \$17.25 per week, \$28.25 per week, and \$2.50 per week respectively. (See Chapter 14, Public Health, Commonwealth Government Activities, page 490.)

*Social services benefits.* The standard rate on age and invalid pensions was increased by \$1 per week to \$14 per week, and the rate for married couples (both pensioners) by \$0.75 per week to \$12.50 each per week. Rate increases in widows pensions were \$1 per week for Class 'A' widows (\$18 per week including \$4 per week mother's allowance) and \$0.75 per week for Class 'B' and Class 'C' widows (\$12.50 per week). Similar increases were also provided in sheltered employment allowances. (See Chapter 13, Welfare Service, Commonwealth Social Services, pages 465 and 475.)

*Repatriation benefits.* The maximum rates payable to Special (T.P.I.) and Intermediate, were increased by \$3 per week to \$33.50 and \$24.25 respectively. The maximum rate for those general rate pensioners with a 75 per cent to 100 per cent assessed incapacity was increased by \$3 per week to \$15. (See Chapter 5, Repatriation, War pensions, page 92.)

##### Receipts

Of the expected increase of \$563 million in receipts, it was estimated that \$497 million would be derived from increased taxation collections, mainly at the same rates as in 1967-68. The rate for Income Tax on Companies was increased by 2.5 cents to a maximum of 45 cents in the dollar and the general rate of 12½ per cent for Sales Tax was increased to 15 per cent (see Chapter 19, Public Finance, Taxes on Income, page 803, and All Commonwealth Funds: receipts, page 751). Increases in fees and charges included rises in broadcasting and television licence fees, certain postal charges, air navigation charges, light dues paid by shipping companies, and a new passenger service charge on both domestic and international air services.

## LIST OF SPECIAL ARTICLES AND MISCELLANEOUS MATTER CONTAINED IN PREVIOUS ISSUES

This list refers to special articles and other more or less important miscellaneous matter which have appeared in previous issues of the Year Book but which are not included, or are included in abbreviated form only, in the present issue.

The figures below indicate, respectively, the number and page of the Year Book to which reference is made. In cases where matter was published in more than one previous issue, the volume and page for the last issue containing such matter are given. For possible revisions, however, issues immediately following the one referred to should also be consulted.

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