

## 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 900, 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 786-93 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 794 of that section. On pages 779-81 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 1968 the area incorporated was 272,000 square miles, or nearly nine-tenths of the total area of the State. All cities, municipalities and shires 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 1968 there were fifty-three county councils, including the Sydney County Council (constituted under the Gas and Electricity Act).

**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 Koroit. 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, Launceston, and Glenorchy 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 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 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. Particulars of population refer to estimates made for capital city statistical division and outside this division in accordance with the definition of boundaries used in the 1966 census and exclude migratory population and population in unincorporated areas.

**LOCAL GOVERNMENT AUTHORITIES: AREA, POPULATION, DWELLINGS, AND  
VALUE OF RATEABLE PROPERTY, STATES, 1966-67**

Location	Number	Area acres	Popula- tion '000 (a)	Dwellings		Value of rateable property		
				Occupied No. (b)	Unoccu- pied No. (b)	Unim- proved capital value \$'000	Improved capital value \$'000	Annual value \$'000
<b>New South Wales(c)—</b>								
Sydney Statistical Division . . . . .	39	974	2,592	730,877	39,701	3,504,792	8,699,706	291,938
Other . . . . .	185	173,383	1,704	458,069	61,577	1,596,728	n.a.	n.a.
<i>Total, New South Wales</i>	<i>224</i>	<i>174,357</i>	<i>4,296</i>	<i>1,188,946</i>	<i>101,278</i>	<i>5,101,520</i>	<i>n.a.</i>	<i>n.a.</i>
<b>Victoria(d)—</b>								
Melbourne Statistical Di- vision . . . . .	55	1,933	2,277	626,343	35,445	n.a.	8,373,128	433,080
Other(e) . . . . .	155	54,177	990	262,617	29,302	n.a.	4,000,419	201,272
<i>Total, Victoria</i>	<i>210</i>	<i>56,110</i>	<i>3,267</i>	<i>888,960</i>	<i>64,747</i>	<i>n.a.</i>	<i>12,373,547</i>	<i>634,352</i>
<b>Queensland(a)—</b>								
Brisbane Statistical Di- vision . . . . .	n.a.	n.a.	795	215,669	10,777	n.a.	n.a.	n.a.
Other . . . . .	n.a.	n.a.	900	232,752	30,945	n.a.	n.a.	n.a.
<i>Total, Queensland</i>	<i>131</i>	<i>426,226</i>	<i>1,695</i>	<i>448,421</i>	<i>41,722</i>	<i>1,209,436</i>	<i>n.a.</i>	<i>n.a.</i>
<b>South Australia(a)—</b>								
Adelaide Statistical Di- vision . . . . .	31	573	784	217,590	12,089	n.a.	2,530,000	126,490
Other . . . . .	111	36,454	310	81,662	12,502	n.a.	1,047,000	52,375
<i>Total, South Australia</i>	<i>142</i>	<i>37,028</i>	<i>1,094</i>	<i>299,252</i>	<i>24,591</i>	<i>n.a.</i>	<i>3,577,000</i>	<i>178,865</i>
<b>Western Australia(a)—</b>								
Perth Statistical Division . . . . .	27	1,326	580	154,984	8,211	285,177	n.a.	27,050
Other . . . . .	117	623,263	293	69,675	9,751	200,457	n.a.	5,328
<i>Total, Western Australia</i>	<i>144</i>	<i>624,589</i>	<i>873</i>	<i>224,659</i>	<i>17,962</i>	<i>485,634</i>	<i>n.a.</i>	<i>32,378</i>

For footnotes see next page.

LOCAL GOVERNMENT AUTHORITIES: AREA, POPULATION, DWELLINGS, AND  
VALUE OF RATEABLE PROPERTY, STATES, 1966-67—*continued*

Location	Number	Area	Population	Dwellings		Value of rateable property		
				Occupied	Unoccupied	Unimproved capital value	Improved capital value	Annual value
				'000 (a)	No. (b)			
Tasmania(a)—								
Hobart Statistical Division .	5	392	143	37,947	2,836	158,364	536,124	31,126
Other . . . . .	44	16,493	233	61,418	7,964	192,446	814,619	48,210
<i>Total, Tasmania . . . . .</i>	<i>49</i>	<i>16,885</i>	<i>376</i>	<i>99,365</i>	<i>10,800</i>	<i>350,810</i>	<i>1,350,742</i>	<i>79,337</i>

(a) Year ended 30 June 1967. Total population less migratory and unincorporated. (b) Particulars as at Census 30 June 1966. (c) Year ended 31 December 1965. (d) Year ended 30 September 1967. (e) Excludes Yallourn Works Area under the jurisdiction of the State Electricity Commission.

### Local government finances

The following tables show the latest available financial statistics for local government authorities. The figures relate to the year 1966-67 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. 6, 1967-68, 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, 1966-67

	N.S.W. (a)	Vic. (b)	Qld (c)	S.A. (c)	W.A. (c)	Tas. (c)	Total
REVENUE (EXCLUDING LOAN RECEIPTS) (\$'000)							
<b>Taxation—</b>							
Rates (net) . . . . .	113,975	80,804	39,838	22,875	15,039	8,584	282,565
Penalties . . . . .	1,118	331	..	222	..		
Licences . . . . .	2,311	518	670	222	277		
Vehicle registration fees and taxes . . . . .	..	..	..	..	4,463	..	4,463
<i>Total, taxation. . . . .</i>	<i>117,404</i>	<i>81,653</i>	<i>40,508</i>	<i>23,097</i>	<i>19,779</i>	<i>8,714</i>	<i>291,156</i>
<b>Public works and services—</b>							
Sanitary and garbage services . . . . .	9,607	3,594	7,740	340	1,344	61	22,685
Council properties . . . . .	10,436	(d)15,172	2,247	1,660	4,196	1,199	34,911
Street construction . . . . .	6,886	(b)23,815	..	4,863	3,371	181	39,116
Other . . . . .	12,915	4,332	1,564	388	1,149	406	20,753
<i>Total, public works etc. . . . .</i>	<i>39,844</i>	<i>46,912</i>	<i>11,550</i>	<i>7,251</i>	<i>10,060</i>	<i>1,847</i>	<i>117,465</i>
<b>Government grants—</b>							
Roads . . . . .	32,161	714	5,044	(e)8,769	7,987	1,374	56,049
Other . . . . .	4,977	4,625	2,547	491	411	267	13,317
<i>Total government grants . . . . .</i>	<i>37,138</i>	<i>5,339</i>	<i>7,591</i>	<i>9,260</i>	<i>8,398</i>	<i>1,640</i>	<i>69,367</i>
<b>Profits from business undertakings</b>	..	783	..	168	..	..	951
Fees and fines . . . . .	..	1,236	..	537	287	..	2,057
All other . . . . .	..	1,308	(f)18,864	..	1,191	649	24,074
<i>Total revenue . . . . .</i>	<i>194,387</i>	<i>137,232</i>	<i>78,514</i>	<i>40,314</i>	<i>39,716</i>	<i>12,850</i>	<i>503,012</i>

For footnotes see next page.

## LOCAL GOVERNMENT AUTHORITIES: ORDINARY SERVICES—REVENUE AND EXPENDITURE, STATES, 1966-67—continued

	N.S.W. (a)	Vic. (b)	Qld (c)	S.A. (c)	W.A. (c)	Tas. (c)	Total
<b>EXPENDITURE (EXCLUDING LOAN EXPENDITURE) (\$'000)</b>							
General administration . . . . .	13,427	16,340	7,244	3,568	3,403	1,593	45,574
Debt services (excluding business undertakings)—							
Interest . . . . .	7,879	(b)9,162	9,568	2,089	2,462	1,341	32,501
Redemption . . . . .	13,652	(b)11,094	9,578	2,652	3,854	1,381	42,211
Exchange . . . . .	..	..	196	..	..	..	196
Other . . . . .	..	(b)91	120	..	..	..	211
<i>Total, debt, etc.</i> . . . . .	21,531	20,347	19,462	4,741	6,316	2,722	75,118
Public works and services—							
Roads, streets and bridges . . . . .	83,343	(b)49,142	21,799	21,768	13,710	4,429	194,191
Health administration . . . . .	5,198	1,266	8,538	716	644	247	39,801
Sanitary and garbage services . . . . .	13,004	6,804	1,243	1,648	493	..	9,758
Street lighting . . . . .	4,349	2,404	1,214	886	547	359	71,724
Council properties . . . . .	25,929	(g)21,054	8,746	4,326	9,719	1,949	25,590
Other . . . . .	10,896	9,541	939	821	3,238	155	..
<i>Total, public works, etc.</i> . . . . .	142,719	90,211	41,236	29,760	29,506	7,632	341,063
Grants—							
Fire brigades . . . . .	1,043	1,809	551	309	364	151	4,226
Hospitals and ambulances . . . . .	627	352	..	781	26	122	14,535
Other charities . . . . .	..	..	16	..	..	..	..
Other . . . . .	(h)6,170	(i)3,689	2,367	94	195	95	..
<i>Total, grants</i> . . . . .	7,840	5,850	2,918	1,201	585	368	18,761
All other . . . . .	7,487	(b)4,237	(j)12,289	11	525	96	24,645
<b>Total expenditure</b> . . . . .	<b>193,004</b>	<b>136,984</b>	<b>83,150</b>	<b>39,280</b>	<b>40,334</b>	<b>12,411</b>	<b>505,162</b>

(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 1967. Figures for Victoria now include transactions of Private Street Accounts. (c) Year ended 30 June 1967. (d) Includes \$7,386,000 plant hire. (e) Includes \$5,016,000 reimbursement from Highways Department. (f) Includes the following reimbursements: \$4,810,000 from Main Roads Department, \$1,485,000 from other State Government Departments, and \$5,907,000 from other sources. (g) Includes \$1,504,000 plant and equipment. (h) To Main Roads Department. (i) Includes \$1,763,000 to Country Roads Board. (j) Includes expenditure on work done for reimbursement: for Main Roads Department \$4,818,000; for other State Government Departments \$1,422,000; other \$5,722,000.

## LOCAL GOVERNMENT AUTHORITIES: ORDINARY SERVICES—REVENUE AND EXPENDITURE, STATES, 1962-63 TO 1966-67

(\$'000)

Year	N.S.W. (a)	Vic. (b)	Qld (c)	S.A. (c)	W.A. (c)(d)	Tas. (c)	Total
<b>Revenue(e)—</b>							
			(d)				
1962-63 . . . . .	159,998	95,293	60,250	27,589	25,163	9,796	378,089
1963-64 . . . . .	169,130	103,289	61,846	31,836	28,036	10,478	404,615
1964-65 . . . . .	187,689	116,405	66,088	32,360	34,921	10,930	448,393
1965-66 . . . . .	194,387	125,017	73,655	36,190	34,274	11,818	475,340
1966-67 . . . . .	(f)	137,232	78,514	40,314	39,716	12,850	(f)
<b>Expenditure(e)—</b>							
1962-63 . . . . .	159,515	92,582	61,901	27,341	24,902	9,434	375,676
1963-64 . . . . .	165,695	103,320	64,337	32,018	28,476	10,282	404,128
1964-65 . . . . .	181,265	119,013	70,730	33,147	31,588	11,278	447,022
1965-66 . . . . .	193,004	130,392	77,713	37,136	35,400	11,585	485,230
1966-67 . . . . .	(f)	136,984	83,150	39,280	40,334	12,411	(f)

(a) Years ended previous 31 December. (b) Years ended 30 September. Figures for Victoria now include transactions of Private Street Accounts. (c) Years ended 30 June. (d) Revised. (e) Excludes loan receipts or expenditure. (f) Not yet available.

**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, 1966-67**  
(S'000)

	N.S.W. (a)	Vic. (b)	Qld (c)	S.A. (c)	W.A. (c)	Tas. (c)	Total
<b>REVENUE (EXCLUDING LOAN RECEIPTS)</b>							
Water supply and sewerage—							
Rates	9,831		(d)12,315	..	226	4,245	
Charges for services and sales of products	3,203	643	8,483	1	41	544	39,531
Other (including grants)	(e)3,131	15	1,700	..	51	894	5,791
Total, water supply, etc.	16,165	657	22,498	1	318	5,683	45,323
Electricity and gas—							
Rates	1,208		24	..	..	..	
Charges for services and sales of products	202,755	47,431	32,428	1,116	2,621	..	287,583
Other (including grants)	(e)6,557	347	3,959	500	..	..	11,363
Total, electricity, etc.	210,520	47,778	36,411	1,616	2,621	..	298,947
Railways, tramways and omnibuses—							
Charges for services and sales of products	..	..	8,438	..	..	..	8,438
Other (including grants)	..	..	317	..	..	..	317
Total, railways, etc.	..	..	8,755	..	..	..	8,755
Other—	(f)	(g)	(h)	(i)	(j)	(k)	
Rates	27	..	22	..	..	..	49
Charges for services and sales of products	14,538	2,392	1,621	471	355	543	19,921
Other (including grants)	98	56	33	86	..	..	273
Total, other	14,663	2,448	1,677	557	355	543	20,243
Grand total	241,348	50,884	69,341	2,174	3,295	6,226	373,267
<b>EXPENDITURE (EXCLUDING LOAN EXPENDITURE)</b>							
Water supply and sewerage—							
Working expenses	6,549	467	7,320	1	214	2,760	17,311
Depreciation	(l)–353	56	..	..	..	..	–298
Debt charges	6,118	137	6,452	..	127	2,554	15,388
Other (including transfers to general revenue and construction)	..	3	3,683	..	..	61	3,747
Total, water supply, etc.	12,313	663	17,454	1	342	5,375	36,148
Electricity and gas—							
Working expenses	170,471	43,789	25,561	1,169	1,803	..	242,793
Depreciation	3,401	1,432	..	..	372	..	5,205
Debt charges	25,864	1,720	7,457	305	449	..	35,794
Other (including transfers to general revenue and construction)	..	704	3,472	262	..	..	4,439
Total, electricity, etc.	199,736	47,645	36,491	1,736	2,623	..	288,231
Railways, tramways and omnibuses—							
Working expenses	..	..	8,265	..	..	..	8,265
Debt charges	..	..	1,057	..	..	..	1,057
Other (including transfers to general revenue and construction)	..	..	223	..	..	..	223
Total, railways, etc.	..	..	9,545	..	..	..	9,545
Other—	(f)	(g)	(h)	(i)	(j)	(k)	
Working expenses	13,319	2,069	674	561	263	408	17,295
Depreciation	142	105	..	..	..	..	247
Debt charges	955	229	109	..	..	72	1,366
Other (including transfers to general revenue and construction)	..	251	676	..	..	1	928
Total, other	14,417	2,655	1,460	561	263	481	19,836
Grand total	226,466	50,963	64,950	2,297	3,227	5,856	353,760

(a) Year ended 31 December 1965. (b) Year ended 30 September 1967. (c) Year ended 30 June 1967. (d) Includes Sewerage and Cleansing Rates. (e) 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. (f) Abattoirs. (g) Abattoirs, hydraulic power undertakings, quarries, iceworks, and reinforced concrete pipe and culvert works. (h) Off-street car parking, municipal markets, hostels, hotels and cinemas. (i) Quarries and hospitals. (j) Quarries, canteens and abattoirs. (k) Abattoirs. (l) 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, 1962-63 TO 1966-67**  
(\$'000)

Year	N.S.W. (a)	Vic. (b)	Qld (c)	S.A. (c)	W.A. (c)	Tas. (c)	Total
<b>Revenue(d)—</b>							
1962-63 . . . . .	194,460	38,305	44,573	1,505	2,028	3,969	284,840
1963-64 . . . . .	212,020	40,067	53,105	1,889	2,327	4,314	313,722
1964-65 . . . . .	226,234	45,352	58,500	1,621	2,364	5,320	339,392
1965-66 . . . . .	241,348	47,604	64,035	1,852	2,825	5,578	363,242
1966-67 . . . . .	(e)	50,884	69,341	2,174	3,295	6,226	(e)
<b>Expenditure(d)—</b>							
1962-63 . . . . .	183,801	37,982	41,631	1,539	1,957	3,823	270,733
1963-64 . . . . .	199,171	39,883	50,167	1,745	2,142	4,372	297,481
1964-65 . . . . .	210,052	45,117	54,816	1,682	2,318	4,898	318,883
1965-66 . . . . .	226,466	47,962	61,193	1,806	2,773	5,500	345,700
1966-67 . . . . .	(e)	50,963	64,950	2,297	3,227	5,856	(e)

(a) Years ended previous 31 December. (b) Years ended 30 September. (c) Years ended 30 June. (d) Excludes loan receipts or expenditure. (e) Not yet available.

*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  
1966-67**  
(\$'000)

	N.S.W. (a)	Vic. (b)	Qld (c)	S.A. (c)	W.A. (c)	Tas. (c)	Total
<b>Ordinary services—</b>							
Roads, bridges, streets, foot-paths, drainage, and sewerage	11,673	(b)14,892	25,021	6,707	2,097	2,221	62,611
Council properties . . . . .	(d)9,206	(d)5,808		2,081	(d)3,544	(d)927	
Parks, gardens, and recreational reserves . . . . .	2,672	3,196	(d)5,273	602	1,977	586	35,873
Other . . . . .	(e)2,267	1,521	1,464	10	266	155	5,683
<i>Total, ordinary services</i> . . . . .	25,817	25,417	31,757	9,400	7,884	3,890	104,167
<b>Business undertakings—</b>							
Water supply . . . . .	6,698	250	12,866	..	98	1,595	21,507
Sewerage . . . . .	4,008	..	..	..	..	2,529	6,537
Electricity and gas . . . . .	28,622	3,148	4,434	60	667	..	36,930
Railways, tramways and omnibuses . . . . .	..	..	1,018	..	..	..	1,018
Abattoirs . . . . .	2,383	591	..	..	..	76	3,051
Other . . . . .	..	24	41	..	..	..	65
<i>Total, business undertakings</i> . . . . .	41,711	4,013	18,359	60	765	4,201	69,108
<b>Grand total</b> . . . . .	67,528	29,430	50,117	9,460	8,650	8,091	173,275

(a) Year ended 31 December 1965. (b) Year ended 30 September 1967. Figures for Victoria now include transactions of Private Street Accounts. (c) Year ended 30 June 1967. (d) Includes plant. (e) Includes advances for homes.

**LOCAL GOVERNMENT AUTHORITIES: LOAN EXPENDITURE  
STATES, 1962-63 TO 1966-67  
(\$'000)**

Year	N.S.W. (a)	Vic. (b)	Qld (c)	S.A. (c)	W.A. (e)(d)	Tas. (c)	Total
<b>Ordinary services—</b>							
1962-63 .	19,856	17,546	25,974	4,977	6,749	3,862	78,963
1963-64 .	22,725	21,056	32,426	5,383	5,576	4,289	91,455
1964-65 .	25,645	22,052	30,900	5,692	5,849	3,453	93,590
1965-66 .	25,817	24,280	30,959	6,219	7,143	3,655	98,073
1966-67 .	(e)	25,417	31,757	9,400	7,884	3,890	(e)
<b>Business undertakings—</b>							
1962-63 .	36,988	3,665	10,927	114	683	3,350	55,727
1963-64 .	34,142	3,513	12,434	94	622	3,142	53,948
1964-65 .	36,697	3,508	15,042	22	977	2,900	59,146
1965-66 .	41,711	3,570	16,365	20	903	4,687	67,256
1966-67 .	(e)	4,013	18,359	60	765	4,201	(e)

(a) Years ended previous 31 December. (b) Years ended 30 September. Figures for Victoria now include transactions of Private Street Accounts. (c) Years ended 30 June. (d) Revised. (e) Not yet available.

### Local government and semi-governmental authorities' debt

Statistics of local government and semi-governmental debt for 1962-63 to 1966-67 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, Harbours, Grain Elevators, Roads and Bridges, Marketing, Industry Assistance, General Works, and Miscellaneous.

*Victoria.* Water Supply and Sewerage, Irrigation and Drainage, Harbours, Transport, 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, Transport, Electricity Supply, Fire Brigades, Hospitals and Ambulances, Marketing (Agency), Industry Assistance, Banking, Housing, University and Miscellaneous.

*Western Australia.* Water Supply and Sewerage, Harbours, Transport, Electricity Supply, Fire Brigades, Hospitals, Marketing (Agency), Housing, University, 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. 6, 1967-68.

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 1966-67. 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  
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>LOCAL GOVERNMENT AUTHORITIES</b>							
New money loan raisings—							
From government . . . . .	283	279	2,361	2,291	..	21	5,236
From public . . . . .	67,542	28,926	38,285	6,981	8,927	6,950	157,610
<i>Total loan raisings</i> . . . . .	<i>67,825</i>	<i>29,205</i>	<i>40,646</i>	<i>9,272</i>	<i>8,927</i>	<i>6,971</i>	<i>162,845</i>
Funds provided for redemption—							
Government loans . . . . .	835	173	1,716	1,101	3	91	3,919
Loans due to public . . . . .	30,078	12,715	15,556	1,817	4,177	2,094	66,437
<i>Total funds, redemptions</i> . . . . .	<i>30,913</i>	<i>12,888</i>	<i>17,272</i>	<i>2,917</i>	<i>4,180</i>	<i>2,185</i>	<i>70,355</i>
Accumulated sinking fund balance . . . . .	36,889	11,152	24,342	107	143	1,120	73,753
Debt—							
Due to government . . . . .	7,288	7,297	35,416	7,368	64	907	58,340
Due to banks (net overdraft) . . . . .	5,682	3,434	..	..	110	..	9,226
Due to public creditor(a) . . . . .	571,182	179,031	320,099	36,350	52,763	51,976	1,211,401
<i>Total debt(a)</i> . . . . .	<i>584,151</i>	<i>189,762</i>	<i>355,515</i>	<i>43,718</i>	<i>52,937</i>	<i>52,883</i>	<i>1,278,967</i>
Maturing overseas(a)(b) . . . . .	..	..	4,329	..	..	..	4,329
Annual interest payable(a) . . . . .	(c)	10,226	19,187	2,305	2,899	2,884	(c)

**SEMI-GOVERNMENTAL AND OTHER PUBLIC AUTHORITIES**

New money loan raisings—							
From government . . . . .	32,680	43,763	1,546	27,465	16,541	21,131	143,126
From public . . . . .	55,681	101,210	33,926	12,536	12,338	4,800	220,492
<i>Total loan raisings</i> . . . . .	<i>88,361</i>	<i>144,973</i>	<i>35,472</i>	<i>40,001</i>	<i>28,879</i>	<i>25,931</i>	<i>363,618</i>
Funds provided for redemption—							
Government loans . . . . .	7,567	6,236	1,507	3,720	2,953	2,774	24,756
Loans due to public . . . . .	13,966	16,088	8,986	289	2,314	1,439	43,082
<i>Total funds, redemptions</i> . . . . .	<i>21,532</i>	<i>22,323</i>	<i>10,493</i>	<i>4,010</i>	<i>5,267</i>	<i>4,213</i>	<i>67,839</i>
Accumulated sinking fund balance . . . . .	98,718	47,132	21,124	2,634	8,365	3,782	181,755
Debt—							
Due to government . . . . .	543,325	674,191	57,132	386,408	248,293	282,452	2,191,800
Due to banks (net overdraft) . . . . .	4,915	767	..	245	1,535	..	7,463
Due to public creditor(a) . . . . .	614,565	1,489,590	292,153	137,267	90,062	56,381	2,680,017
<i>Total debt(a)</i> . . . . .	<i>1,162,806</i>	<i>2,164,548</i>	<i>349,284</i>	<i>523,919</i>	<i>339,890</i>	<i>338,833</i>	<i>4,879,279</i>
Maturing overseas(a)(b) . . . . .	5,000	6,810	..	..	..	..	11,810
Annual interest payable(a) . . . . .	(c)	107,325	18,489	24,914	15,552	16,672	(c)

(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 £\$1g 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) Not yet available.

NOTE. The considerable changes in the figures for New South Wales in the table above when compared with figures published in Official Year Books prior to No. 54 (1968) 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, 1962-63 TO 1966-67**  
(\$'000)

	1962-63	1963-64	1964-65	1965-66	1966-67
<b>LOCAL GOVERNMENT AUTHORITIES</b>					
New money loan raisings—					
From government . . . . .	5,588	6,865	3,945	6,412	5,236
From public . . . . .	131,451	137,652	136,762	136,148	157,610
<i>Total loan raisings</i> . . . . .	<i>137,040</i>	<i>144,517</i>	<i>140,708</i>	<i>142,560</i>	<i>162,845</i>
Funds provided for redemption—					
Government loans . . . . .	4,646	4,812	4,278	4,281	3,919
Loans due to public . . . . .	44,483	49,105	56,186	59,033	66,437
<i>Total funds, redemptions</i> . . . . .	<i>49,129</i>	<i>53,917</i>	<i>60,464</i>	<i>63,314</i>	<i>70,355</i>
Accumulated sinking fund balance . . . . .	57,482	58,676	59,496	65,226	73,753
Debt—					
Due to government . . . . .	53,694	55,783	55,301	57,342	58,340
Due to banks (net overdraft) . . . . .	6,825	2,678	4,245	7,090	9,226
Due to public creditor(a) . . . . .	865,390	950,513	1,031,619	1,114,762	1,211,401
<i>Total debt(a)</i> . . . . .	<i>925,909</i>	<i>1,008,074</i>	<i>1,091,166</i>	<i>1,179,194</i>	<i>1,278,967</i>
Maturing overseas(a)(b) . . . . .	15,757	15,400	10,043	9,686	4,329
<b>SEMI-GOVERNMENTAL AND OTHER PUBLIC AUTHORITIES</b>					
New money loan raisings—					
From government . . . . .	130,564	147,374	141,998	140,543	143,126
From public . . . . .	190,761	191,275	197,872	194,588	220,492
<i>Total loan raisings</i> . . . . .	<i>321,325</i>	<i>338,649</i>	<i>339,870</i>	<i>335,132</i>	<i>363,618</i>
Funds provided for redemption—					
Government loans . . . . .	16,467	18,324	20,206	23,294	24,756
Loans due to public . . . . .	36,602	33,645	40,006	42,395	43,082
<i>Total funds, redemptions</i> . . . . .	<i>53,069</i>	<i>51,969</i>	<i>60,212</i>	<i>65,689</i>	<i>67,839</i>
Accumulated sinking fund balance . . . . .	118,564	131,631	144,991	162,888	181,755
Debt—					
Due to government . . . . .	1,694,147	1,823,461	1,945,764	2,072,763	2,191,800
Due to banks (net overdraft) . . . . .	2,233	1,318	1,125	652	7,463
Due to public creditor(a) . . . . .	1,963,588	2,139,922	2,311,699	2,481,444	2,680,017
<i>Total debt(a)</i> . . . . .	<i>3,659,968</i>	<i>3,964,700</i>	<i>4,258,588</i>	<i>4,554,859</i>	<i>4,879,279</i>
Maturing overseas(a)(b) . . . . .	15,744	15,722	14,718	12,858	11,810

(a) See footnote (a) page 783. (b) 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 1964-65 to 1968-69. 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, 1963-64 TO 1967-68**  
(\\$'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>
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
1967-68 . .	44,467	31,286	29,266	18,384	28,597	8,000	160,000
1968-69 . .	47,319	33,113	31,098	19,433	30,537	8,500	170,000

### 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 406) 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 (5.8 miles from the Hawkesbury River to Mount White) of the proposed Sydney to Newcastle Expressway was opened for traffic. In October 1966 the toll work was extended to Calga (a further 3.4 miles). A second toll work (5.3 miles) south from the Hawkesbury River was opened for traffic in December 1968. Tolls imposed on vehicles using the toll works will be used to cover the costs of construction and maintenance work.

*Length of roads.* The total length of proclaimed roads (*see* page 406) in New South Wales at 30 June 1968 was 25,508 miles classified as: Expressways, 21 miles; State highways, 6,542 miles; trunk roads, 4,228 miles; ordinary main roads, 11,593 miles; secondary roads, 159 miles; developmental roads, 2,747 miles; and tourist roads, 218 miles. The length of main roads (expressways, highways, trunk and ordinary main roads) maintained by the Department of Main Roads at 30 June 1968 was 6,233 miles (28 per cent) while the length maintained by Councils was 16,151 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 and expressways 79 per cent, 21 per cent; and trunk and ordinary main roads, 4 per cent, 96 per cent. Unclassified roads in the Western Division of the State, totalling 1,530 miles, were maintained by the Department, while developmental roads, (mainly outside the County of Cumberland), totalling 2,747 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, 99 per cent, 1 per cent; and ordinary main roads, 56 per cent, 44 per cent. Secondary roads totalling 159 miles were maintained by Councils. Of the 218 miles of tourist roads throughout the State 198 miles (91 per cent) were maintained by Councils and 20 miles (9 per cent) by the Department. In 1966 the total length of all roads in New South Wales was estimated at 131,330 miles. The lengths of roads, according to their surfaces, were as follows: bitumen or concrete, 28,621 miles; gravel or stone, 44,668 miles; formed only, 26,947 miles; cleared only, 31,094 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 1967-68, 67 new bridges, including 16 major bridges, were constructed. In addition, 126 concrete box culverts each having a waterway width of twenty feet or more were completed. At 30 June 1968 there were 61 bridges (including 22 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, 1958-1965, grants under Commonwealth Aid Roads Act (see page 785 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, 1963-64 TO 1967-68  
(\$'000)**

	1963-64	1964-65	1965-66	1966-67	1967-68
<b>REVENUE(a)</b>					
Motor vehicle taxation, registration and licence fees . . . . .	38,682	41,059	42,471	42,897	45,248
Commonwealth Aid Roads Acts . . . . .	20,617	22,934	24,648	26,313	28,013
State and Commonwealth grants . . . . .	197	70	35	63	..
Contributions by other departments and bodies . . . . .	326	97	377	893	846
Local authorities' contributions—					
Under Section 11 of Main Roads Act . . . . .	5,273	5,768	6,418	7,600	8,241
Other . . . . .	490	91	157	250	385
Sydney-Newcastle Expressway Toll . . . . .	..	..	356	706	892
Other . . . . .	343	531	539	564	652
<b>Total . . . . .</b>	<b>65,929</b>	<b>70,549</b>	<b>75,001</b>	<b>79,285</b>	<b>84,278</b>
<b>EXPENDITURE(b)</b>					
Roads and bridges—					
Construction . . . . .	48,199	56,153	61,714	62,590	64,534
Maintenance . . . . .	16,209	16,514	15,813	17,677	17,352
Administration . . . . .	2,820	3,425	3,757	4,296	4,816
Interest, exchange, etc., on debt . . . . .	986	1,237	1,609	1,856	2,094
Other(c) . . . . .	1,376	1,125	1,467	1,753	1,705
<b>Total . . . . .</b>	<b>69,589</b>	<b>78,454</b>	<b>84,360</b>	<b>88,172</b>	<b>90,501</b>

(a) Excludes repayable advances by the State Government and private loans (\$4,020,000 in 1963-64, \$7,500,000 in 1964-65, \$5,005,000 in 1965-66, \$6,500,000 in 1966-67 and \$8,750,000 in 1967-68), and transfers from Sydney Harbour Bridge Account for Expressway construction (\$3,078,000 in 1963-64, \$2,360,000 in 1964-65, \$4,750,000 in 1965-66, \$3,743,241 in 1966-67 and \$4,775,000 in 1967-68). Expenditure from these amounts is fully reflected in Expenditure.  
 (b) Excludes debt redemption (\$123,992 in 1963-64, \$209,588 in 1964-65, \$441,368 in 1965-66, \$346,449 in 1966-67 and \$477,430 in 1967-68) and repayment of government advances (\$120,000 in 1963-64, \$1,020,000 in 1964-65, and \$200,000 in 1965-66 and later years).  
 (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 786 represent the aggregate revenue and expenditure of five funds: the County 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 1968 was \$33,194,000, but this amount will be reduced slightly on completion of the disposal of the remaining surplus resumed property. The portion met from repayable loan funds, \$29,863,000, is repayable from toll income. Income for 1967-68 amounted to \$4,444,000, including road tolls, \$4,011,000; railway passenger tolls, \$287,000; and omnibus passenger tolls, \$27,000. Expenditure amounted to \$3,323,000, including interest, exchange, flotation expenses, etc., \$1,310,000; sinking fund, \$585,000; maintenance, \$571,000. 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 1967-68 a total of \$2,011,000 was expended on tram track conversion and \$30,767,000 on the bridge expressway-type approaches. The account showed a deficiency of \$1,944,000 at 30 June 1968. During 1967-68, 39,572,876 road vehicles (excluding omnibuses and exempt vehicles), 25,977,097 rail travellers and 12,444,518 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 406) by the Country Roads Board in Victoria at 30 June 1968 was 14,541 miles, classified as follows: State highways, 4,460 miles; main roads, 9,097 miles; by-pass roads, 40 miles; tourist roads, 483 miles; forest roads, 461 miles. The length of the surface sealed (bitumen or concrete) included in the foregoing mileage was 12,883 miles or 89 per cent of the total. In addition to the 14,541 miles of classified roads, there were approximately 86,400 miles of unclassified roads at 30 June 1968. The *total length of roads and streets* in Victoria at 30 June 1968 is estimated as: bitumen or concrete, 29,365 miles; gravel or stone, 29,618 miles; formed only, 20,606 miles; cleared only, 21,333 miles; total, 100,922 miles.

*Country Roads Board—operations.* During 1967-68, 1,829 miles of declared roads under the Board's control were treated with bitumen. In addition, 1,129 miles of undeclared roads, for which the Board contributed funds, were similarly treated. The total length of bitumen treatment carried out in 1967-68 was 3,078 miles (including 120 miles for other authorities). Of the work on the roads under the Board's control in 1967-68, 741 miles related to State highways and by-pass roads. During 1967-68, 154 bridge projects of an estimated total value of \$7,470,000 were initiated. Of these, 89, estimated to cost \$1,930,000, 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 1967-68 loan receipts and payments each amounted to \$987,000. The total loan expenditure to 30 June 1968 was \$35,904,650. 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 1967-68 \$3,145,000 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**  
**1963-64 TO 1967-68**  
 (\$'000)

	1963-64	1964-65	1965-66	1966-67	1967-68
<b>RECEIPTS</b>					
Motor Car Act—registration and licence fees (less cost of collection) . . . . .	23,427	23,378	24,690	25,866	26,784
Municipalities' payments . . . . .	1,579	1,690	1,691	1,824	1,845
Commonwealth Aid Roads Acts . . . . .	22,431	25,182	27,175	29,050	30,895
Roads (Special Projects) Fund . . . . .	..	..	1,654	3,311	2,652
Loans from State Government . . . . .	666	762	1,020	834	987
Road charges, Commercial Goods Vehicles Act . . . . .	5,638	5,926	6,379	6,732	7,248
Public Works Loan Application Act . . . . .	..	700	768	715	700
Other . . . . .	223	889	971	464	402
<b>Total . . . . .</b>	<b>53,964</b>	<b>58,527</b>	<b>64,348</b>	<b>68,796</b>	<b>71,513</b>
<b>PAYMENTS</b>					
Construction and maintenance of roads and bridges—					
State highways . . . . .	19,151	17,081	17,704	19,674	19,003
Main roads . . . . .	14,889	15,189	16,569	16,765	16,769
By-pass roads . . . . .	2,641	4,854	3,745	5,172	7,969
Tourist roads . . . . .	1,425	1,422	1,510	2,312	2,857
Forest roads . . . . .	742	714	699	737	658
Unclassified roads . . . . .	10,107	11,131	12,709	12,798	13,739
Other . . . . .	87	167	140	45	82
Plant purchase . . . . .	1,193	697	1,149	1,388	1,234
Interest, debt redemption, etc. . . . .	1,950	1,988	2,056	2,140	2,190
Office building, Kew—capital cost . . . . .	378	71	12	31	8
Statutory payment to—					
Tourists' Resorts Fund . . . . .	427	469	468	494	517
Transport Regulation Board . . . . .	..	..	178	383	404
Administration and other . . . . .	3,769	4,744	6,339	5,637	7,011
<b>Total . . . . .</b>	<b>56,758</b>	<b>58,525</b>	<b>63,278</b>	<b>67,575</b>	<b>72,443</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 1968 was \$23.6m. Of this amount, \$11.5m was financed from the proceeds of the Board's Metropolitan Improvement Rate and \$12.1m 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 1967-68 was \$851,340, consisting entirely of receipts from additional registration fees. Expenditure from the Fund amounted to \$824,650, of which \$699,154 was incurred by the Railways Department and \$125,496 by the Country Roads Board, leaving a balance carried forward of \$1,229,814.

### 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 406) in Queensland at 30 June 1968 was 24,662 miles; comprising State highways, 6,242 miles; main roads, 5,150 miles; developmental roads, 4,377 miles; and secondary roads, 8,893 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 1968 was: bitumen or concrete, 18,161 miles; gravel or stone, 18,401 miles; formed only, 41,037 miles; cleared only, 40,758 miles; total, 118,357 miles.

*Department of Main Roads—operations.* During 1966–67 the Department completed the following mileages of road works: 458 miles of new bitumen; 241 miles reconstructed to bitumen; 220 miles of re-sealed bitumen; 190 miles of gravel road; 102 miles of newly formed road, and 20 miles of gravel road reconstructed. Bridges of all types to a length of 9,129 linear feet were constructed, bringing the total constructed by the Department at 30 June 1967 to 265,988 feet. In addition, at 30 June 1967, 9,531 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 1962–63 to 1966–67 are shown below.

**DEPARTMENT OF MAIN ROADS, QUEENSLAND: RECEIPTS AND PAYMENTS**  
1962-63 TO 1966-67  
(\$'000)

	1962-63	1963-64	1964-65	1965-66	1966-67
<b>RECEIPTS</b>					
Motor vehicle registration, Transport Acts collections, fees, etc. . . . .	12,339	13,664	15,531	15,704	18,645
Loans from State Government . . . . .	1,668	1,046	1,039	1,330	1,127
Grants from State Government . . . . .	104	260	..	586	1,785
Roads (Contribution to Maintenance) Act . . . . .	2,201	2,558	3,027	3,142	3,592
Commonwealth Aid Roads and Works Acts . . . . .	20,854	24,877	27,919	29,188	31,707
Maintenance repayments—local authorities . . . . .	1,555	1,586	1,125	1,125	1,192
Hire, rent, sales of plant, etc. . . . .	2,966	3,322	3,704	3,449	3,898
Other . . . . .	1,275	2,126	2,043	2,066	2,755
<b>Total . . . . .</b>	<b>42,962</b>	<b>49,439</b>	<b>54,388</b>	<b>56,590</b>	<b>64,701</b>
<b>PAYMENTS</b>					
Permanent road works and surveys(a) . . . . .	28,847	34,345	39,993	35,356	40,141
Maintenance of roads . . . . .	5,939	6,507	6,466	6,876	8,310
Plant, machinery, buildings, etc. (including plant maintenance) . . . . .	2,573	3,351	3,735	4,418	3,716
Loans—					
Interest . . . . .	120	132	203	276	301
Redemption . . . . .	650	666	697	432	396
Administration and other . . . . .	4,063	4,828	5,618	7,104	9,000
<b>Total . . . . .</b>	<b>42,192</b>	<b>49,829</b>	<b>56,712</b>	<b>54,462</b>	<b>61,864</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 406) under the provisions of the Highways Act and all other roads, commonly designated district roads. At 30 June 1968 there were 8,156 miles of *proclaimed main roads* and approximately 66,859 miles of district roads, including roads and tracks outside local government areas, totalling 75,015 miles. *Total lengths of roads*, classified by surface, were estimated to be: bitumen or concrete, 8,547 miles; gravel or stone, 16,834 miles; formed only, 9,347 miles; unformed, 40,287 miles.

*State Highways and Local Government Department—receipts and payments.* The following table shows particulars of receipts and payments, during the years 1963-64 to 1967-68, of funds controlled by the Highways and Local Government Department.

#### HIGHWAYS AND LOCAL GOVERNMENT DEPARTMENT, SOUTH AUSTRALIA RECEIPTS AND PAYMENTS, 1963-64 TO 1967-68 (\$'000)

	1963-64	1964-65	1965-66	1966-67	1967-68
RECEIPTS					
Motor vehicles registration, licences, fees . . . . .	9,981	10,731	11,206	11,506	11,858
Commonwealth Aid Roads Acts . . . . .	13,337	14,903	16,024	17,223	18,384
Loans from State Government . . . . .	950	..	..	..	..
Other(a) . . . . .	1,123	2,696	3,340	3,496	3,693
<b>Total . . . . .</b>	<b>25,391</b>	<b>28,330</b>	<b>30,570</b>	<b>32,225</b>	<b>33,934</b>
PAYMENTS					
Construction and reconstruction of roads and bridges(b) . . . . .	19,517	18,409	20,912	22,834	20,799
Maintenance(a)(b) . . . . .	5,497	5,198	5,375	6,000	7,128
Recoups to Consolidated Revenue Fund—interest, debt redemption and exchange . . . . .	512	1,164	1,167	514	518
Advances to local and semi-governmental authorities . . . . .	1,650	1,126	1,376	1,091	1,386
Repayments to Revenue under Section 31 (a), Highways Act . . . . .	..	..	..	1,000	240
Stores, plant, machinery, suspense accounts, etc.(c) . . . . .	538	919	1,214	1,792	2,866
<b>Total . . . . .</b>	<b>27,715</b>	<b>26,816</b>	<b>30,044</b>	<b>33,231</b>	<b>32,936</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 406). 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, special Commonwealth assistance is given 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. In a further seven year period to 30 June 1974 an additional maximum amount of \$9,500,000 is to be allocated, including \$1,400,000 received in 1967–68. 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 1963–64 to 1967–68 are shown in the following table.

**MAIN ROADS DEPARTMENT, WESTERN AUSTRALIA: RECEIPTS AND  
PAYMENTS, 1963-64 TO 1967-68**  
(\$'000)

	1963-64	1964-65	1965-66	1966-67	1967-68
<b>RECEIPTS</b>					
Motor vehicle registration, licence fees, etc.	2,335	3,370	4,054	3,820	3,868
Commonwealth Aid Roads Acts	16,987	21,945	22,618	23,475	24,307
Commonwealth Aid Roads Acts—matching grants	2,460	..	463	763	1,202
Western Australia Grant (Beef Cattle Roads) Act(a)	1,500	1,500	1,500	1,500	1,400
Road Maintenance (Contribution) Act	..	..	392	2,540	2,873
Recoups from other authorities	1,124	1,455	917	1,821	1,469
Other	71	52	(b)2,024	176	272
<b>Total</b>	<b>(c)24,477</b>	<b>28,322</b>	<b>31,968</b>	<b>34,095</b>	<b>35,391</b>

For footnotes *see* next page.

MAIN ROADS DEPARTMENT, WESTERN AUSTRALIA: RECEIPTS AND  
PAYMENTS, 1963-64 TO 1967-68—*continued*  
(\$'000)

	1963-64	1964-65	1965-66	1966-67	1967-68
<b>PAYMENTS</b>					
Construction and reconstruction of roads and bridges( <i>d</i> ) . . . . .	13,872	18,110	21,012	26,009	24,846
Maintenance of roads and bridges( <i>d</i> ) . . . . .	2,561	2,196	1,856	3,010	3,294
Grants to local authorities, etc. . . . .	2,940	2,939	3,501	3,518	4,307
Transfer to State Consolidated Revenue . . . . .	140	195	253	258	258
Plant, machinery, etc. . . . .	1,146	1,587	1,709	1,789	2,046
Other( <i>d</i> ) . . . . .	1,405	1,530	1,861	1,678	1,642
<b>Total . . . . .</b>	<b>(e)22,064</b>	<b>(f)26,557</b>	<b>30,192</b>	<b>36,262</b>	<b>36,393</b>

(a) For 1967-68 the funds are derived from the *State Grants (Beef Cattle Roads) Act 1968*. (b) Includes \$1,896,000 transferred from an Overhaul Account previously administered by the Public Works Department. (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 1967-68 on the construction and maintenance of roads, tracks and bridges amounted to \$13,051,197 of which \$11,741,413 was charged to road funds, \$28,402 to revenue, \$1,200,455 to loan, and \$80,927 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 406) at 30 June 1968 was 2,296 miles, comprising State highways, 1,206 miles; main roads, 667 miles; secondary roads, 197 miles; tourist roads, 47 miles; and other roads, 179 miles. The mileages of sealed (bitumen or concrete) roads and their proportions to the respective totals were: State highways, 1,008 miles (84 per cent); main roads, 461 miles (69 per cent); secondary, tourist and other roads, 169 miles (40 per cent). The total length of classified sealed roads was 1,638 miles (71 per cent). The total length of local authorities roads at 30 June 1968 was 9,027 miles, comprising bitumen or concrete, 1,677 miles (19 per cent); gravel or stone, 5,955 miles (66 per cent); formed only or cleared only, 1,395 miles (15 per cent). Roads of other authorities (Hydro-Electric Commission, Forestry Commission and the sawmilling industry) totalled 2,089 miles.

The *total length of all roads* in Tasmania at 30 June 1968 was 13,411 miles, comprising bitumen or concrete 3,366 miles (25 per cent); gravel or stone 8,608 miles (64 per cent); formed only or cleared only, 1,437 miles (11 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 1963-64 to 1967-68.

**ROAD FUNDS, TASMANIA: RECEIPTS AND PAYMENTS, 1963-64 TO 1967-68**  
(**\$'000**)

	1963-64	1964-65	1965-66	1966-67	1967-68
<b>RECEIPTS</b>					
Motor vehicle taxation and registration, licences, fees, fines, etc. . . . .	3,019	3,153	3,425	3,961	4,396
Commonwealth Aid Roads and Works Acts	5,800	6,500	7,000	7,500	8,000
Recoups from local authorities, etc. . . . .	14	16	18	38	32
State Loan Fund . . . . .	4,761	3,468	4,446	1,693	1,188
Hire of plant and workshop charges . . . . .	3,165	3,329	3,732	3,824	4,170
Other . . . . .	(a)465	(a)1,295	220	262	565
<b>Total . . . . .</b>	<b>17,224</b>	<b>17,761</b>	<b>18,842</b>	<b>17,279</b>	<b>18,350</b>
<b>PAYMENTS</b>					
Construction and reconstruction of roads and bridges. . . . .	11,239	11,420	11,591	9,445	10,214
Maintenance of roads and bridges . . . . .	2,586	2,552	3,141	3,167	3,436
Other works connected with transport . . . . .	72	76	62	45	48
Grants to local authorities . . . . .	33	15	35	37	46
Purchase, maintenance and operation of plant . . . . .	3,231	3,402	3,751	3,884	4,276
Other . . . . .	220	383	300	759	346
<b>Total . . . . .</b>	<b>17,382</b>	<b>17,848</b>	<b>18,881</b>	<b>17,337</b>	<b>18,367</b>

(a) Includes Commonwealth Employment Stimulation Grant (\$15,302 in 1963-64, and \$14,946 in 1964-65).

#### 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 1964 to 1968. 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, 1963-64 TO 1967-68**  
(\$ million)

Year	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T. and A.C.T.	Aust.
1963-64 . . .	133	105	65	37	28	18	9	395
1964-65 . . .	149	114	71	38	34	17	10	433
1965-66 . . .	164	123	71	41	39	21	15	474
1966-67 . . .	171	128	79	48	46	20	13	505
1967-68 . . .	169	142	91	49	46	20	21	538

### 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 1968).* The storage reservoirs of the metropolitan system with a combined available capacity of 574,335 million gallons, drain catchment areas of 3,890 square miles (including Warragamba, 3,480 square miles, Upper Nepean, 347 square miles, and Woronora, 29 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. At 30 June 1968 there were 174 service reservoirs in use with a combined capacity of 701 million gallons. Rating for water for 1967-68 was 3.75 cents in the \$ of 'assessed annual value'. The payment of the 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. Fluoridation of the metropolitan water supply commenced in April 1968.

The water supply of the *Hunter District system* is drawn principally from three sources: the Chichester Reservoir, with a storage capacity of about 4,320 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 126 million gallons. Water rates were calculated in 1967-68 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 30 cents. For water in excess of this allowance a further charge of 30 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, 1963-64 TO 1967-68**

Year	Improved properties for which water mains available	Estimated population supplied	Average daily consumption	Total consumption for the year	Average daily consumption		Length of mains	Number of meters
					Per property	Per head of estimated population		
		'000	mill gal	mill gal	gallons	gallons	miles	
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
1967-68	756,063	2,816	270	98,981	357	96	8,325	532,859

(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  
1963-64 TO 1967-68**

Year	Properties supplied	Estimated population supplied	Average daily consumption	Total consumption for year	Average daily consumption		Length of mains
					Per property	Per head of estimated population	
			mill gal	mill gal	gallons	gallons	miles
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
1967-68	99,066	335,565	37.4	13,675	377	111	1,740

(a) Newcastle, Maitland and Cessnock areas.

*Metropolitan and Hunter District sewerage and drainage system (to 30 June 1968).* The metropolitan system serving Sydney and suburbs comprises 3 major sewerage systems and 7 minor systems, consisting of 7 outfalls discharging directly into the Pacific Ocean and 3 treatment works. There are also 8 centres outside the metropolitan area of which 5 (Camden, Campbelltown, St Mary's, Richmond and Warragamba township) are served by local treatment works and 3 (Bellambi, Port Kembla and Wollongong) discharge directly into the Pacific Ocean. Stormwater drainage channels under the control of the Metropolitan Water, Sewerage and Drainage Board at 30 June 1968 were 184 miles long. Sewerage rating for 1967-68 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 1967-68 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, 1964 TO 1968**

30 June—	Improved properties for which sewerage available	Estimated population served	Length of sewers	Length of stormwater channels
		'000	miles	miles
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
1968 . . . . .	574,847	2,135	6,166	184

(a) County of Cumberland, City of Greater Wollongong, Shellharbour and Kiama Municipalities, and parts of Colo and Wollondilly Shires.

At 30 June 1968, 78,276 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 1,088 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 1967-68, and for the three services combined for the years 1963-64 to 1967-68.

**METROPOLITAN AND HUNTER DISTRICT WATER SUPPLY, SEWERAGE  
AND DRAINAGE, NEW SOUTH WALES: FINANCES, 1963-64 TO 1967-68  
(\$'000)**

Year	Capital debt at 30 June	Revenue	Expenditure			Total	Surplus (+) or deficit (-)
			Working expenses (a)	Interest and exchange	Debt redemption		
<b>METROPOLITAN(b)</b>							
1967-68—							
Water . . . . .	317,276	38,997	17,694	15,186	6,112	38,992	+ 5
Sewerage . . . . .	224,061	28,436	13,155	10,758	4,521	28,434	+ 2
Drainage . . . . .	9,456	1,484	916	444	121	1,482	+ 2
<b>Total, 1967-68.</b>	<b>550,793</b>	<b>68,917</b>	<b>31,765</b>	<b>26,389</b>	<b>10,754</b>	<b>68,908</b>	<b>+ 9</b>
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
<b>HUNTER DISTRICT(c)</b>							
1967-68—							
Water . . . . .	60,599	5,839	2,476	2,751	600	5,827	+ 12
Sewerage . . . . .	19,960	2,662	1,536	946	236	2,717	- 55
Drainage . . . . .	790	150	94	43	8	144	+ 6
<b>Total, 1967-68.</b>	<b>(d)84,698</b>	<b>8,651</b>	<b>4,106</b>	<b>3,740</b>	<b>843</b>	<b>8,688</b>	<b>- 38</b>
1966-67 . . . . .	(d)79,497	7,928	3,786	3,254	765	7,805	+122
1965-66 . . . . .	(d)74,593	7,804	3,469	3,442	861	7,772	+ 32
1964-65 . . . . .	(d)69,705	6,508	3,099	2,808	701	6,607	- 99
1963-64 . . . . .	(d)64,978	6,205	2,890	2,653	648	6,191	+ 14

(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. (d) Includes General Fund indebtedness not dissected by services.

*Local government country water supply and sewerage systems.* At 31 December 1966, country water supply services were conducted or under construction by 48 municipalities, 92 shires and 6 county councils, and country sewerage services by 51 municipalities and 46 shires. The capital indebtedness of these schemes was \$103,776,000 at 31 December 1966, namely \$69,251,000 for water and \$34,525,000 for sewerage. Debt of the municipalities amounted to \$50,080,000, shires to \$41,200,000, and county councils to \$12,496,000. Government advances amounting to \$622,000 are included in these figures. Aggregate income and expenditure amounted to \$17,702,000 and \$13,510,000, respectively, in 1966.

*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 1967 was \$6,112,000. In 1967, income (excluding subsidies, State Government \$198,000 and mining companies \$505,000) amounted to \$758,000 and expenditure (excluding debt redemption \$272,000) amounted to \$1,182,000. The Cobarr Water Board was constituted in February 1964. At 31 December 1967 its capital indebtedness was \$2,391,000. 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 \$15,093,000 at 31 December 1967. 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 47, with a total capacity of 369 million gallons. The water rate levied by the Board in 1967-68 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 1963-64 to 1967-68.

MELBOURNE WATER SUPPLY: SERVICES, 1963-64 TO 1967-68

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 head of estimated population	Per house		
1963-64	572,431	'000	mill gal	mill gal	gallons	gallons	miles	485,856
1964-65	595,727	2,021	162.9	59,621	285	80.6	5,882	485,856
1965-66	612,844	2,079	168.2	61,409	282	80.9	6,098	511,077
1966-67	626,690	2,120	178.7	65,218	292	84.2	6,280	536,093
1967-68.	642,039	2,143	188.5	68,815	301	88.0	6,517	559,713
		2,170	139.0	50,876	216	64.1	6,791	577,713

*Metropolitan sewerage and drainage.* Particulars of sewerage and drainage services for 1963-64 to 1967-68 are shown on the next page. The rate levied in 1967-68 for sewerage was 4.7 cents in the \$ on the net annual value of the property served. The drainage rate was 1.0 cent in the \$.

## MELBOURNE SEWERAGE AND DRAINAGE: SERVICES, 1963-64 TO 1967-68

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
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
1967-68	509,185	1,719	86.1	31,514	169.1	50.1	4,739	240

The metropolitan sewerage system consists of the main system (serving an area of 111,521 acres) and 6 subsidiary systems—the Braeside system (serving an area of 6,157 acres), the Kew system (serving an area of 112 acres), the Maribyrnong system (serving an area of 182 acres), the Watsonia system (serving an area of 253 acres), the Lower Plenty system (serving an area of 1,099 acres), and the Heatherton system (serving an area of 231 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-seven 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 1968 was \$10,776,059. Revenue during 1967-68 amounted to \$423,031, cost of sewage disposal to \$673,631, trading expenses to \$318,465, interest to \$589,818, and net cost of sewage purification to \$1,158,883. 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 1967-68 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 1963-64 to 1967-68.

**MELBOURNE AND METROPOLITAN BOARD OF WORKS: FINANCES**  
1963-64 TO 1967-68  
(\$'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	163,363	14,957	6,926	8,226	..	15,152	- 195
Sewerage	200,945	17,013	4,989	9,667	..	14,656	+2,357
Drainage	33,149	3,617	1,180	1,365	..	2,545	+1,072
General(b)	13,764	..	1,894	..	2,685	4,579	-4,579
<b>Total—1967-68</b>	<b>411,221</b>	<b>35,587</b>	<b>14,989</b>	<b>19,258</b>	<b>2,685</b>	<b>36,932</b>	<b>-1,345</b>
1966-67	376,271	32,111	12,333	17,834	2,552	32,719	- 608
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

(a) Total loan indebtedness—1967-68, \$384,522,692.

(b) Statutory and general expenditure not distributed over services.

*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 1968 the Commission provided a reticulated water supply from its own works to 148 cities and towns having a combined population of 225,000 persons. The principal systems operated by the Commission serve part of the Mornington Peninsula—Dandenong area (about 107,000 people supplied); Bendigo, Castlemaine, etc. (58,000); and about 8,700 people in the Western District. In addition, 14,000 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 9,000 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 1968 was divided between the several systems as follows: Mornington Peninsula, \$29,527,000, Bendigo-Castlemaine, \$14,021,000 (includes the cost of supplying a comparatively large rural system with water for irrigation, stock and domestic purposes); Bellarine Peninsula, \$3,446,000; Otway System (Western District), \$2,983,000; other, \$2,936,000; total, \$52,913,000. 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 653,000 people in 252 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 400 urban centres containing some 878,000 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 1968.

**TOWN WATER SUPPLY, VICTORIA: CAPITAL LIABILITY**  
30 JUNE 1968  
(\$'000)

	<i>Water supply provided by—</i>		
	<i>Local authorities</i>	<i>State Rivers and Water Supply Commission</i>	<i>Total</i>
Government advances . . . . .	60,000	53,500	113,500
Less redemption . . . . .	4,700	600	5,300
<b>Government advances outstanding . . . . .</b>	<b>55,300</b>	<b>52,900</b>	<b>108,200</b>
Borne by State . . . . .	11,400	23,700	35,100
Borne locally . . . . .	43,900	29,200	73,100

In addition, nearly \$21,000,000 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 \$3,300,000.

*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 1968 92 sewerage authorities had been constituted. Of these 66 had systems in operation and 11 had works under construction.

Expenditure on sewerage in Victorian country towns at 30 June 1968 was approximately \$75,200,000, of which some \$60,400,000 had been advanced by private lenders. The annual State subsidy on country sewerage in Victoria is currently about \$1,550,000, provided mainly in the form of subsidies on interest rates paid along the same lines as for town water supply.

*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 \$30,000,000 for water supply undertakings and \$20,000,000 for sewerage undertakings. The population supplied is estimated by the Trust at 115,094 persons. This and other general information relates to 30 June 1968.

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 8 storage reservoirs and 11 service basins whose total storage capacity is 13,292 million gallons. The length of water mains and reticulation is 567.8 miles. The total expenditure on water supply to 30 June 1968 was \$17,922,017. General fund expenditure for 1967-68 comprised \$479,578 for working expenses and \$1,190,345 for interest, redemption and reserves, while revenue amounted to \$1,658,691. The sinking fund appropriations at 30 June 1968 amounted to \$1,186,805. The replacement and contingencies reserve amounted to \$1,280,427. There is a water rate of 6 cents in the \$ 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 28,497. The total expenditure on sewerage works to 30 June 1968 was \$12,658,883. The revenue in 1967-68 amounted to \$1,084,756, and the general fund expenditure comprised \$274,556 on working expenses and \$782,362 on interest, redemption, and reserves. Sinking fund appropriations at 30 June 1968 were \$618,556. Replacement and contingencies reserve amounted to \$1,285,357. 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 1967-68 amounted to \$52,955.

*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 1968.

The *Ballarat water supply district* comprises an area of about 65 square miles, containing a population of about 63,000. 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 \$6,207,320 to 31 December 1968. The liabilities amounted to \$3,898,555 at 31 December 1968, including loans due to the Government totalling \$3,530,210. The revenue for the year 1968 was \$493,064. Working expenses during 1968 amounted to \$277,917 and interest and other charges to \$241,711. A water rate of 3.4 cents in the \$ on the net annual valuation is levied, with a minimum charge of \$6 per annum on any rateable property; water by measure, 16 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 217 miles of sewers. The capital cost of sewerage construction works to 31 December 1968 was \$5,532,677. Two hundred and ninety-nine sewered areas had been declared as at 31 December 1968. Assessments in the sewerage district numbered 20,654, while those in sewered areas numbered 18,543. There were 15,926 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 1968 amounted to \$4,665,729, redemption payments at that date totalled \$932,098. House connections financed by the Authority numbered 4,565. Revenue during 1968 amounted to \$476,844, and expenditure, which included \$317,227 for interest and redemption, was \$476,535. A sewerage rate of 4.3 cents in the \$ on the net annual valuation is levied, with a minimum charge of \$10 per annum in respect of land on which there is no building and \$12 per annum in respect of any land on which there is a building. The charge for trade wastes is 15 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 \$11,425,537 to 30 June 1968. Liabilities amounted to \$12,024,449, including loans due to the Government totalling \$11,341,602. Revenue for the year was \$720,188. Expenditure during 1967-68 amounted to \$591,884 including interest amounting to \$335,469. 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 1968 was 10,814 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 1968 was \$6,645,845. Liabilities amounted to \$7,244,191, including loans due to the Government totalling \$5,922,576. Revenue in 1967-68 was \$325,402 and expenditure totalled \$418,021, including \$107,517 interest payments. No sewerage rate is levied, but a charge is made by measure for wastes both from industries and public authorities.

### Queensland

*Brisbane City Council (to 30 June 1968).* 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 (5,720 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 1968 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 1963-64 to 1967-68.

BRISBANE WATER SUPPLY(a): SERVICES, 1963-64 TO 1967-68

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
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
1967-68	207,657	759,434	76.7	27,984	369	101.0	2,823

(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 1968 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 1963-64 to 1967-68.

**BRISBANE SEWERAGE: SERVICES, 1963-64 TO 1967-68**

Year	Premises connected	Estimated population served	Total sewage pumped for the year	Length of main, branch, reticulation, etc. sewers
			mill gal	
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
1967-68 . . .	109,364	404,647	8,358	1,607

*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 1963-64 to 1967-68.

**BRISBANE WATER SUPPLY AND SEWERAGE: FINANCES, 1963-64 TO 1967-68**  
((\$'000))

Service and year	Gross capital cost to 30 June	Revenue	Expenditure		Total (a)	Surplus (+) or deficit (-)
			Working expenses	Interest, redemption, etc. charges		
<b>Water supply—</b>						
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
1967-68 . . .	64,626	9,808	3,661	2,760	9,132	+ 676
<b>Sewerage—</b>						
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
1967-68 . . .	69,264	7,237	1,105	2,225	6,619	+ 618

(a) Total, including other expenditure.

*Country towns.* In addition to the City of Brisbane, there were at 30 June 1967, 215 cities and towns in Queensland provided with water supply systems controlled by municipal and shire councils. At 30 June 1967 there were 53 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 \$8,433,087 in 1966-67. Expenditure amounted to \$8,651,141, including \$3,775,915 for debt charges. In addition, expenditure from loans and loan subsidy amounted to \$10,130,478. 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 administered by the Department of Lands in conjunction with 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, 1963-64 TO 1967-68

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	
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
1967-68 . . . . .	421,764	143,217	13,927	45,332	11,447	320,461

(a) Excludes Morgan-Whyalla Water Supply—water sold by measure.

WATERWORKS, SOUTH AUSTRALIA: FINANCES, 1963-64 TO 1967-68  
(\$'000)

Year	Invested capital at 30 June (a)	Revenue	Expenditure			Deficit
			Working expenses (b)	Interest	Total	
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
1967-68 . . . . .	226,477	14,607	12,008	9,684	21,692	7,085

(a) After deduction of depreciation. (b) Includes debt redemption.

*Adelaide waterworks.* At 30 June 1968 the Adelaide waterworks supplied districts covering 377 square miles of the metropolis and extending to near country areas. The capacity of reservoirs and storage tanks was 36,630 million gallons and there were 3,472 miles of metropolitan mains. 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, 1963-64 TO 1967-68  
(\$'000)

Year	Invested capital at 30 June (a)	Revenue	Expenditure			Surplus (+) or deficit (-)
			Working expenses (b)	Interest	Total	
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
1967-68 . . . . .	108,936	10,267	6,746	4,730	11,476	-1,209

(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 1963-64 to 1967-68 are shown hereunder.

ADELAIDE METROPOLITAN SEWERAGE: SUMMARY, 1963-64 TO 1967-68

Year	Length of sewers (b) miles	Number of connections	Invested capital at 30 June (a) \$'000	Expenditure			Total \$'000	Surplus \$'000
				Revenue \$'000	Working expenses (b) \$'000	Interest \$'000		
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
1967-68 . . .	2,125	227,489	74,808	7,156	3,375	2,822	6,197	959

(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 215 miles of sewers and 10,715 connections in the country systems. Sewerage schemes for Whyalla, Mannum and Millicent are under construction and operating in part.

*Country water supply.* Water districts systems at 30 June 1968 comprised an area of 13,685,159 acres. Supply came from reservoirs having a total capacity of 20,995 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 1967-68 supplies made to Mount Gambier, Naracoorte and other towns amounted to 1,313 million gallons, and the Uley-Wanilla, Lincoln and Poldas Basins contributed 788 million gallons to the Tod River Water District.

COUNTRY WATERWORKS, SOUTH AUSTRALIA: FINANCES, 1963-64 TO 1967-68  
(\$'000)

Year	Invested capital at 30 June (a)	Revenue	Expenditure			Deficit
			Working expenses (b)	Interest	Total	
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
1967-68 . . .	117,541	4,340	5,262	4,954	10,216	5,876

(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 1968 being \$33,562,156. Particulars of the scheme, where applicable, are included in the tables of the combined waterworks, page 803. 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 1967-68 water used from the scheme amounted to 5,507 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 1909-1968* 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 114 local water supplies (*see also* the chapter Water Conservation and Irrigation). Four 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 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 1963-64 to 1967-68.

**METROPOLITAN WATER SUPPLY, WESTERN AUSTRALIA: SERVICES  
1963-64 TO 1967-68**

Year	Number of services (a)	Average daily consumption	Total consumption for year	Average daily consumption per service (b)	Length of mains	Number of meters
		mill gal	mill gal	gallons	miles	
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
1967-68 . . . . .	173,068	68.2	24,958	409	2,923	152,603

(a) Figures relate to 30 June.      (b) Calculated from averages for the year.

Water rating for 1967-68 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 1963-64 to 1967-68 are shown in the following table.

**METROPOLITAN SEWERAGE AND MAIN DRAINAGE  
WESTERN AUSTRALIA: SERVICES  
1963-64 TO 1967-68**

Year	Services	Length of sewers	Length of main drains
		miles	miles
1963-64 . . . . .	68,958	769	94
1964-65 . . . . .	69,553	777	100
1965-66 . . . . .	70,283	816	102
1966-67 . . . . .	71,188	848	109
1967-68 . . . . .	72,177	886	118

Sewerage rating for 1967-68 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, 1963-64 TO 1967-68**  
(\$'000)

<i>Service and year</i>	<i>Capital cost to 30 June</i>	<i>Revenue</i>	<i>Expenditure</i>		<i>Total</i>	<i>Surplus (+) or deficit (-)</i>
			<i>Working expenses</i>	<i>Interest and debt redemption</i>		
<b>Water supply—</b>						
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
1967-68 . . . .	66,217	5,782	2,292	3,243	5,535	+247
<b>Sewerage—</b>						
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
1967-68 . . . .	29,286	3,198	1,689	1,474	3,164	+ 34
<b>Main drainage—</b>						
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
1967-68 . . . .	7,433	721	314	349	663	+ 58

*Country water supplies.* Information concerning country water supplies is included in the chapter Water Conservation and Irrigation.

### Tasmania

*Waterworks.* At the end of 1967-68 there were 106 municipally operated waterworks in Tasmania. The capacity of the reservoirs was approximately 2,938 million gallons, the estimated population served was 328,000, and the number of properties served was approximately 106,000. 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, Seven Mile Beach, Rokeby, and Lauderdale, and it is planned to take it to the towns of Margate, Snug, and Howden in due course. The storage at Risdon Brook with a capacity of 800 million gallons was completed in February 1968. The Board has at present under construction 2 half-million gallon reservoirs to serve the towns of Kingston, Howden and Margate.

*Sewerage.* At the end of 1967-68 there were 28 municipal sewerage schemes in operation in Tasmania. They served an estimated population of 225,000 and the number of tenements served was approximately 71,000.



**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), Bendora Dam (2,360 million gallons) and Corin Dam (capacity 16,600 million gallons). Water is fed from Bendora Dam by gravity to 17 major reservoirs. The maximum daily supply is 45 million gallons. In addition, a pumping capacity of 38.5 million gallons per day is available from 9 pumps. The total population served in the Australian Capital Territory, which during 1967-68 consumed 4,797.3 million gallons of water, was 110,000 (at 30 June 1968). In addition, the Canberra water supply system supplied 367.3 million gallons of water to Queanbeyan, New South Wales. The total number of water meters at 30 June 1968 was 27,982 and the total length of water lines was 534.9 miles. The sewerage system for Canberra and suburbs has three treatment works: the Weston Creek works provides for 100,000 persons, the Fyshwick works provides for 10,000 persons and the Belconnen works provides for 5,000 persons. There were 462.4 miles of sewerage, and 6½ miles of sewer rising mains (at 30 June 1968). There were also 491.4 miles of storm-water drains.

**Harbour boards and trusts**

The number and net tonnage of vessels which entered the major ports in each State during the years 1966-67 and 1967-68 are shown in Chapter 12, Transport, Communication and Travel (*see* page 374). Particulars of overseas and interstate cargo discharged and shipped are shown on page 376 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, 1963-64 TO 1967-68**  
(\$'000)

Year	Revenue			Total	Expenditure(a)			Total	Surplus
	Wharfage and tranship- ment rates	Tonnage rates and berthing charges	Other charges		Adminis- tration and mainten- ance	Interest, debt redemp- tion, exchange, etc.			
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	
1967-68	12,664	2,024	5,645	20,333	10,830	9,451	20,280	53	

(a) Excludes capital expenditure but includes transfers to the Renewals Fund Reserve Account (\$4,778,000 in 1963-64, \$5,080,000 in 1964-65, \$3,060,000 in 1965-66, \$3,975,000 in 1966-67, and \$4,940,000 in 1967-68).

*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 38 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 1968 there were 5 dolphin berths 3,350 feet long, and 86 effective commercial cargo berths, with a total length of 43,186 feet, controlled by the Board. Accommodation for harbour craft amounts to 2,245 feet, while the length of other berths, including oil and private wharves, totals 28,815 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. Shipping at Newcastle is concerned primarily with the coal, iron and steel and other heavy industries located in the district, however 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 15,000 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 38 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 seven 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 9,000 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 2,550 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 \$27,278,000 in 1967-68. This figure includes the revenue for the ports of Sydney, Newcastle and Botany Bay (see table on page 807) and State navigation service collections, \$6,944,000 in 1967-68.

### 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. The port's first overseas container terminal, Swanson Dock, which has 1,050 ft of concrete wharf apron with 22.5 acres stacking area behind the berth, was officially opened on 7 March 1968. An additional 800 ft long 'common user' container berth on the east side of Swanson Dock was expected to be completed in August 1969. Two roll-on roll-off container unit-load berths were also completed in early 1969, 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 the other at the River Entrance Docks, with a 600 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, 1964 TO 1968  
(\$'000)

Year	Gross loan indebtedness at 31 December	Revenue		Expenditure				Surplus (+) or deficit (-)
		Wharfage and tonnage rates	Total	Operation, administration and maintenance	Interest, debt redemption, exchange, etc.	General reserve, depreciation, renewals and insurance account	Total	
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
1968 . .	36,029	8,357	13,573	6,972	2,381	4,002	13,355	+218

*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 1967 was \$3,479,463, and expenditure from revenue totalled \$2,211,170. At 31 December 1967 the value of the Trust's fixed assets was \$25,855,472 and loans outstanding amounted to \$7,735,915.

*Portland Harbor Trust.* The port of Portland provides unimpeded access for large ocean-going vessels to the entrance of a 250-acre harbour basin having a minimum depth of 36 feet of water under all tidal conditions. 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 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 provided in-transit storage for grain awaiting overseas shipment. In 1968 a new berth for handling bulk commodities was completed. This berth was designed primarily to handle imports associated with the manufacture of fertiliser at Lady Bay.

Operating revenue and expenditure for the year ended 30 June 1968 were \$352,373 and \$299,697 respectively. The fall in revenue and expenditure was due to the effect of the drought on the grain crops. The value of the Trust's fixed assets, less depreciation, was \$17,948,837 at 30 June 1968, and loans and advances outstanding amounted to \$18,498,496.

### 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 1962-63 to 1966-67 are shown below.

#### BRISBANE HARBOUR: FINANCES, 1962-63 TO 1966-67 (\$'000)

Year	Loan indebtedness at 30 June	Receipts		Payments	
		Harbour dues	Total	Working expenses (a)	Total
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
1966-67 . . .	4,636	2,044	2,987	2,228	2,561

(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 1967 are shown on page 811, together with a summary for the years ended 30 June 1963 to 1967.

**HARBOUR BOARDS, QUEENSLAND: FINANCES, 1962-63 TO 1966-67**  
(\$'000)

Harbour board	Loan indebtedness at 30 June	Revenue		Expenditure (excluding loan)		Surplus(+) or deficit(-)
		Wharfage and harbour dues	Total	Working expenses	Total including interest and redemption (a)	
Bowen . . . . .	545	17	21	21	21	..
Bundaberg . . . . .	6,282	780	1,354	288	1,188	+166
Cairns . . . . .	6,951	569	1,306	397	1,033	+273
Gladstone . . . . .	6,957	402	3,056	227	3,236	-180
Mackay . . . . .	4,149	480	1,158	354	1,033	+125
Rockhampton . . . . .	2,806	110	208	68	215	-7
Townsville . . . . .	8,694	752	1,269	521	1,475	-206
<b>Total, 1966-67 . . . . .</b>	<b>36,384</b>	<b>3,109</b>	<b>8,372</b>	<b>1,876</b>	<b>8,201</b>	<b>+171</b>
1965-66 . . . . .	35,436	2,524	8,862	1,792	9,088	-226
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

(a) Includes expenditure on capital works from accumulated revenue.

### South Australia

*Department of Marine and Harbors.* All South Australian harbours are controlled by the Department of Marine and Harbors, 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 1963-64 to 1967-68.

**DEPARTMENT OF MARINE AND HARBORS, SOUTH AUSTRALIA: FINANCES**  
**1963-64 TO 1967-68**  
(\$'000)

Year	Loan indebtedness at 30 June	Revenue	Expenditure from revenue			Surplus
			Working expenses	Interest	Total	
1963-64 . . . . .	40,030	6,114	3,591	1,581	5,172	942
1964-65 . . . . .	41,393	6,201	3,908	1,679	5,587	614
1965-66 . . . . .	43,172	6,194	3,941	1,734	5,675	519
1966-67 . . . . .	44,264	6,734	4,019	1,807	5,827	907
1967-68 . . . . .	45,478	6,418	4,196	1,869	6,065	352

### 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 665,450 square feet of covered storage space and 11,237 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, 2 berths at the nearby steelworks jetties with a low water depth of 38 feet, 1 berth at the alumina works jetty with a low water depth of 40 feet and 1 berth at the bulk cargo jetty with a low water depth of 44 feet. There is also a special berth for the handling of explosives. Gross earnings for 1967-68 amounted to \$9,638,118, working expenses to \$7,270,130, interest charges on loan capital \$817,775, sinking fund contributions \$224,581, and loan indebtedness totalled \$20,279,893.

*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 1967-68 amounted to \$520,498, working expenses \$188,216, interest and sinking fund charges \$226,772, and loan indebtedness totalled \$3,987,255.

*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 1967-68 amounted to \$785,020, working expenses \$293,675, interest on loan capital \$332,376, and loan indebtedness totalled \$6,784,108.

*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

Marine boards control all Tasmanian ports, except those controlled by the Port of Launceston Authority and the Smithton Harbour Trust. Ports controlled by the seven marine boards are: Hobart, Stanley (Circular Head), Burnie, Devonport, Strahan, Currie (King Island), and Whitemark (Flinders Island). Port Latta (specialised port for the shipment of iron ore pellets) is managed by North-West Iron and Dahlia Mining companies for the Circular Head Marine Board. Hobart, Launceston, Burnie and Devonport are the principal ports in Tasmania. In addition to their interstate and intra-state traffic, they receive considerable overseas shipping. Depths of water at wharves vary, in general, between 16 and 40 feet.

#### AUTHORITIES CONTROLLING PORTS, TASMANIA: FINANCES 1964-65 TO 1967-68 (\$'000)

Authority	Loan indebtedness at 30 June (a)	Receipts (revenue account)		Expenditure (revenue account)		Surplus (+) or deficit (-)
		Wharfage charges	Total	Loan charges	Total	
Hobart . . . . .	2,658	925	1,756	386	1,442	+314
Launceston . . . . .	3,341	681	1,756	280	1,781	-24
Devonport . . . . .	5,258	639	1,061	452	909	+152
Burnie . . . . .	10,443	716	1,204	748	1,147	+56
Circular Head . . . . .	437	17	68	33	57	+11
King Island . . . . .	91	37	44	17	39	+5
Strahan . . . . .	20	34	46	4	46	..
Flinders Island . . . . .	1	15	17	1	10	+7
Smithton . . . . .	..	..	1	..	2	-1
<b>Total, 1967-68 . . . . .</b>	<b>22,249</b>	<b>3,064</b>	<b>5,953</b>	<b>1,921</b>	<b>5,433</b>	<b>+519</b>
1966-67 . . . . .	20,361	2,910	5,628	1,646	5,333	+295
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 1967-68 was \$2,598,000, of which Hobart raised \$350,000, Launceston \$450,000, Devonport \$700,000, Burnie \$850,000, and Circular Head \$238,000.

## 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 163 fire districts had been constituted at the end of 1967. 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 1967 the actual strength of the Fire Brigade throughout the fire districts of New South Wales was 455 officers and 1,330 permanent and 2,690 volunteer firemen. Corresponding figures for the Sydney Fire District were 374, 1,178 and 297. The revenue for the year 1967 was \$9,366,000, as follows; from the Government \$1,154,000; municipalities and shires, \$1,154,000; fire insurance companies and firms, \$6,923,000; and from other sources, \$136,000. The disbursements for the year were \$9,547,000. 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 1968 Volunteer Brigades equipped by means of this fund numbered 2,500 with an active membership of about 65,000 persons. The approved expenditure from the Fund for equipment, up to 30 June 1969, amounted to \$10,340,000.

### 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 1968 the Board had under its control 45 stations, 1,153 permanent staff, 234 special service and clerical, etc. staff, and 7 part-time firemen. The total receipts for 1967-68 were \$6,904,188, comprising contributions \$6,053,012, receipts for services \$526,859, and interest and sundries \$324,317. The expenditure was \$6,460,925.

*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 1968 the Country Fire Authority Act applied to 191 insurance companies and 208 urban and 1,048 rural fire brigades. The effective registered strength of the brigades was 117,333 members. Income for the year 1967-68 amounted to \$2,952,993. Total expenditure other than loan amounted to \$2,764,160.

### Queensland

There are two controlling bodies responsible for fire fighting services throughout Queensland. The State Fire Services Council controls brigades set up under *The Fire Brigades Acts 1964 to 1966*, and the Rural Fires Board under provisions of *The Rural Fires Act, 1946 to 1968* administers Bush Fire Brigades. In addition a Local Authority may establish a fire fighting brigade of its own as do some major establishments such as the State Forestry Department and private companies whose activities involve fire hazards.

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 1967 there were 84 Fire Brigades Boards. The number of stations was 171 and full-time staff numbered 994, including 21 administrative, 239 officers and 734 firemen. Volunteers numbered 23. Part-time staff numbered 1,284 including 83 administrative, 123 officers and 1,078

firemen. The total revenue for the year 1966-67 was \$4,581,300, received mainly from the following sources: Government \$550,170, local authorities \$550,170, insurance companies \$3,301,017. Loan receipts (Government and other) were \$538,504. The total expenditure for the year was \$4,428,391, the chief items being salaries and wages \$3,029,556, and interest and redemption of loans \$504,038.

The Rural Fires Board consists of a chairman and six members all appointed by the Governor-in-Council from Government Departments and the Minister of Lands has power to add up to three additional members from the community as a whole. For administrative purposes the State is divided into Rural Fire Districts under the control of a Chief Fire Warden and in these districts Fire Wardens are appointed to assigned areas. These officers co-ordinate and control the Bush Fire Brigades on a voluntary basis. At 30 June 1967 there were 163 Rural Fire Districts with 1,316 Fire Wardens and Bush Fire Brigades numbered 881. Expenditure by the State Government during 1966-67 amounted to \$45,544.

#### 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 1968 there were altogether 37 fire brigade stations, of which 15 were metropolitan and 22 country.

The strength of the permanent staff at 30 June 1968 was 509, including 387 officers and men, 90 country auxiliary firemen and 32 other employees (including maintenance workers). The total revenue for the year 1967-68 was \$1,669,902, including contributions of \$1,447,299 made up as follows: insurance companies \$871,079, Treasury \$227,788 and municipalities \$348,432. The Treasury contribution includes a special grant of \$198,970.

#### 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 56 fire districts at 30 June 1968. 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 77 and 177 respectively. The brigades throughout the State controlled by the Western Australian Fire Brigades Board at 30 June 1968 numbered 75, with a staff of 1,748 including 349 permanent officers and firemen and 1,399 volunteer brigade officers and firemen. The revenue for nine months of the year ended 30 June 1968 was \$1,622,107 and the expenditure \$1,647,667.

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 2,204 at 30 June 1968, and the establishment of bush fire brigades, 930 at 30 June 1968. 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 22.5 per cent each from the Treasury and the municipalities and 55 per cent from the insurance companies concerned. The cost for the year 1967-68 amounted to \$808,478. There were, at 30 June 1968, 23 boards controlling 36 stations, and their aggregate staffs numbered 617 (officers and firemen), including 193 permanent firemen, 384 part-time firemen and 40 volunteers; the volunteers all operate under the Hobart Board in the forested and mountainous Fern Tree area.