

CHAPTER 21

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 exercise general control, numbering 900, 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 846-53 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 854 of that section. On pages 838-9 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 1966 the area incorporated was 272,000 square miles, or nearly nine-tenths of the total area of the State. All local government authorities in the State are subject to the general provisions of the Local Government Act. Municipalities and shires may combine to form county councils for the establishment and conduct of services of joint benefit, e.g. electricity, water, gas, abattoirs. At 31 December 1966 there were fifty-three county councils, including the Sydney County Council.

Victoria

Local government is established throughout the State, the various divisions being termed cities, towns, boroughs, or shires. The only unincorporated areas are French Island (41,600 acres) in Westernport Bay, Lady Julia Percy Island (652 acres) off Port Fairy, Bass Strait Islands (966 acres), part of Gippsland Lakes (81,920 acres), and Tower Hill (1,460 acres) adjacent to the Borough of Kororoit. Melbourne and Geelong were incorporated under special statutes prior to the establishment of a general system of local government, but are now subject to several provisions of the Local Government Act.

Queensland

The whole of the State (except certain islands along the coast, the Dawson Valley Irrigation Area and the Somerset Dam Area) is incorporated into cities, towns and shires under 'The Local Authorities Act of 1902' and its amendments.

South Australia

The settled portion of South Australia is incorporated, being mostly under municipal corporations in the larger cities and towns and district councils in the agricultural areas.

Western Australia

Local government is established throughout the State, the divisions being cities, towns and shires.

Tasmania

The whole State is divided into municipal districts, Hobart and Launceston being incorporated as cities under separate Acts.

Area, population, dwellings, and value of rateable property

The area, population, dwellings, and value of rateable property in the incorporated areas of each State are shown for the year 1964-65 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. In this table particulars of dwellings are in accordance with the definition used in the 1961 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 metropolitan areas include the whole of some shires and municipalities part only of which is regarded as metropolitan for census and other purposes. This is because the financial activity of such areas cannot be split into 'metropolitan' and 'other' sections. The areas should not be compared with census metropolitan areas.

LOCAL GOVERNMENT AUTHORITIES: AREA, POPULATION, DWELLINGS, AND VALUE OF RATEABLE PROPERTY, STATES, 1964-65

Location	Number	Area '000 acres	Population '000 (a)	Dwellings		Value of rateable property		
				Occupied	Unoccupied	Unimproved capital value	Improved capital value	Annual value
				No. (b)	No. (b)	\$'000	\$'000	\$'000
New South Wales(c)—								
Metropolitan—								
Capital city	1	7	167	48,599	2,311	573,326	1,291,067	115,011
Other	34	702	2,230	570,916	22,825	2,651,328	6,814,778	415,695
Outside metropolitan area	190	173,648	1,782	441,537	47,267	1,501,114	n.a.	n.a.
<i>Total, New South Wales</i>	<i>225</i>	<i>174,357</i>	<i>4,179</i>	<i>1,061,052</i>	<i>72,403</i>	<i>4,725,769</i>	<i>n.a.</i>	<i>n.a.</i>
Victoria(d)—								
Metropolitan—								
Capital city	1	8	76	18,971	740	n.a.	769,698	38,485
Other	45	715	2,045	505,637	16,093	n.a.	6,583,718	336,977
Outside metropolitan area(e)	163	55,387	1,078	264,769	30,469	n.a.	3,642,399	183,825
<i>Total, Victoria</i>	<i>209</i>	<i>56,110</i>	<i>3,199</i>	<i>789,377</i>	<i>47,302</i>	<i>n.a.</i>	<i>10,995,815</i>	<i>559,287</i>
Queensland(a)—								
Capital city	1	246	644	160,588	5,441	407,223	n.a.	n.a.
Other(f)	130	425,980	962	236,845	28,475	580,069	n.a.	n.a.
<i>Total, Queensland</i>	<i>131</i>	<i>426,226</i>	<i>1,606</i>	<i>397,433</i>	<i>33,916</i>	<i>987,292</i>	<i>n.a.</i>	<i>n.a.</i>
South Australia(a)—								
Metropolitan—								
Capital city	1	4	20	5,846	437	120,739	308,000	15,390
Other	20	100	602	158,054	5,157	n.a.	1,226,000	61,312
Outside metropolitan area	121	36,857	441	95,205	11,208	n.a.	1,186,000	59,328
<i>Total, South Australia</i>	<i>142</i>	<i>36,961</i>	<i>1,064</i>	<i>259,105</i>	<i>16,802</i>	<i>n.a.</i>	<i>2,720,000</i>	<i>136,030</i>
Western Australia(a)—								
Metropolitan—								
Capital city	1	16	96	26,845	1,001	5,654	n.a.	13,202
Other	16	107	369	88,003	2,688	137,530	n.a.	9,794
Outside metropolitan area	127	624,466	337	79,469	10,016	185,166	n.a.	4,585
<i>Total, Western Australia</i>	<i>144</i>	<i>624,589</i>	<i>802</i>	<i>194,317</i>	<i>13,705</i>	<i>328,350</i>	<i>n.a.</i>	<i>27,581</i>

For footnotes see next page.

**LOCAL GOVERNMENT AUTHORITIES: AREA, POPULATION, DWELLINGS, AND
VALUE OF RATEABLE PROPERTY, STATES, 1964-65—continued**

Location	Num- ber	Area	Popula- tion	Dwellings		Value of rateable property		
				Occu- pied	Unoccu- pied	Unim- proved capital value	Im- proved capital value	Annual value
		'000 acres	'000 (a)	No. (b)	No. (b)	\$'000	\$'000	\$'000
Tasmania(a)—								
Metropolitan—								
Capital city	1	20	53	15,281	507	96,687	181,105	17,210
Other	2	92	68	14,483	795	47,933	138,976	10,134
Outside metropolitan area . .	46	16,774	244	61,494	7,280	145,901	529,803	34,173
Total, Tasmania	49	16,885	365	91,258	8,582	290,520	849,883	61,518

(a) Year ended 30 June 1965. (b) Particulars of dwellings as at census 30 June 1961. (c) Year ended 31 December 1964. (d) Year ended 30 September 1965. (e) Excludes Yallourn Works Area under the jurisdiction of the State Electricity Commission. (f) Includes City of Redcliffe and that part of Pine Rivers Shire within the Metropolitan Area of Brisbane but outside the Brisbane City Area.

Local government finances

The following tables show the latest available financial statistics for local government authorities. The figures relate to the year 1964-65 except for New South Wales, where they relate to the year 1964. For further detail on local government finances see *State, Territory and Local Government Authorities' Finance and Government Securities*, Bulletin No. 4, 1965-66, 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, 1964-65**

	N.S.W. (a)	Vic. (b)	Qld (c)	S.A. (c)	W.A. (c)	Tas. (c)	Total
REVENUE (EXCLUDING LOAN RECEIPTS) (\$'000)							
Taxation—							
Rates (net)	107,760	66,231	36,589	18,625	12,216	6,677	249,428
Penalties	1,068	260	..	..	..		..
Licences	2,303	486	470	200	222		3,768
Total, taxation	111,131	66,977	37,059	18,826	12,438	6,765	253,195
Public works and services—							
Sanitary and garbage services	9,465	3,706	7,081	199	1,114	453	22,018
Council properties	9,919	(d) 12,818	1,859	1,479	5,026	980	32,080
Street construction	7,218	5,438	..	3,584	1,608	58	17,905
Other	13,161	3,177	805	327	989	552	19,011
Total, public works, etc. .	39,763	25,138	9,745	5,589	8,737	2,042	91,014
Government grants—							
Roads	31,293	718	4,759	(e) 7,204	9,109	1,320	54,402
Other	5,504	4,214	788	392	263	315	11,476
Total, government grants .	36,796	4,932	5,547	7,596	9,372	1,635	65,879
Profits from business under- takings . . . . .	..	1,123	..	29	..	..	1,152
Fees and fines . . . . .	..	874	..	..	189	..	1,063
All other . . . . .	..	1,084	(f) 16,989	320	4,375	489	23,257
Total revenue	187,689	100,129	69,339	32,360	35,112	10,930	435,559

For footnotes see next page.

LOCAL GOVERNMENT AUTHORITIES: ORDINARY SERVICES—REVENUE AND EXPENDITURE, STATES, 1964-65—continued

	N.S.W. (a)	Vic. (b)	Qld (c)	S.A. (c)	W.A. (c)	Tas. (c)	Total
EXPENDITURE (EXCLUDING LOAN EXPENDITURE) (\$'000)							
General administration . . .	12,223	12,900	5,915	2,931	2,740	1,379	38,089
Debt services (excluding business undertakings)—							
Interest	7,348	5,589	7,995	1,350	2,024	919	25,225
Redemption	12,741	6,907	8,231	2,217	3,072	1,211	34,379
Exchange	23	..	209	..	..	..	232
Other . . . . .	..	73	123	..	..	..	196
Total, debt, etc.	20,112	12,569	16,558	3,568	5,096	2,130	60,032
Public works and services—							
Roads, streets and bridges . .	81,302	33,263	17,560	19,350	10,413	4,027	165,915
Health administration	5,028	1,033	..	591	639	219	..
Sanitary and garbage services .	12,385	9,546	7,470	1,052	1,366	407	39,736
Street lighting	4,164	2,002	1,049	735	477	299	8,726
Council properties	22,706	(g)17,454	8,418	3,313	7,606	1,739	61,236
Other	10,335	3,715	275	590	2,417	32	17,365
Total, public works, etc. . . .	135,919	67,013	34,773	25,631	22,919	6,723	292,978
Grants—							
Fire brigades	932	1,461	497	250	300	125	3,565
Hospitals and ambulances . . .	..	268	..	668	21	..	..
Other charities	519	..	..	8	161	..	1,644
Other	(h) 5,796	(i) 3,292	1,886	85	..	230	11,289
Total, grants	7,247	5,020	2,384	1,010	482	355	16,498
All other	5,765	2,528	(j)11,100	7	577	690	20,667
Total expenditure	181,265	100,031	70,730	33,147	31,813	11,278	428,264

(a) Figures for New South Wales relate to the year ended 31 December 1964, 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 1965. (c) Year ended 30 June 1965. (d) Includes \$6,440,000 plant hire. (e) Includes \$3,792,000 reimbursement from Highways Department. (f) Includes the following reimbursements: \$4,280,000 from Main Roads Department, \$1,579,000 from other State Government Departments, and \$4,951,000 from other sources. (g) Includes \$1,641,000 plant and equipment. (h) To Main Roads Department. (i) Includes \$1,663,000 to Country Roads Board. (j) Includes expenditure on work done for reimbursement: for Main Roads Department \$4,345,000; for other State Government Departments \$1,671,000; other \$4,901,000.

LOCAL GOVERNMENT AUTHORITIES: ORDINARY SERVICES—REVENUE AND EXPENDITURE, STATES, 1961 TO 1965 (\$'000)

Year	N.S.W.(a)	Vic.(b)	Qld(c)	S.A.(c)	W.A.	Tas.(c)	Total
Revenue(d)—							
1961	135,248	71,673	53,397	23,779	(e)20,990	7,598	312,685
1962	150,438	78,063	56,940	26,658	(c)21,073	8,406	341,578
1963	159,998	83,941	62,668	27,589	(c)25,356	9,796	369,349
1964	169,130	89,023	64,388	31,836	(c)28,217	10,478	393,072
1965	187,689	100,129	69,339	32,360	(c)35,112	10,930	435,559
Expenditure(d)—							
1961	135,926	72,827	54,433	24,926	(e)21,162	7,673	316,946
1962	149,928	78,142	56,093	26,814	(c)20,763	8,161	339,900
1963	159,515	83,714	61,901	27,341	(c)25,071	9,434	366,975
1964	165,695	90,538	64,337	32,018	(c)28,669	10,282	391,540
1965	181,265	100,031	70,730	33,147	(c)31,813	11,278	428,264

(a) Years ended previous 31 December. (b) Years ended 30 September. (c) Years ended 30 June. (d) Excludes loan receipts or expenditure. (e) Municipalities—years ended 31 October; Road Districts—years ended 30 June.

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, 1964-65**

(\$'000)

	N.S.W. (a)	Vic. (b)	Qld (c)	S.A. (c)	W.A. (c)	Tas. (c)	Total
REVENUE (EXCLUDING LOAN RECEIPTS)							
Water supply and sewerage—							
Rates	9,033	568	5,989	..	..	3,340	28,523
Charges for services and sales of products	2,509			6	34	397	
Other (including grants)	(d) 2,698			..	..	1,032	
<i>Total, water supply, etc.</i>	14,240	582	13,849	6	34	4,770	33,480
Electricity and gas—							
Rates	1,185	..	20	..	..	..	1,204
Charges for services and sales of products	190,353	42,147	28,151	1,059	1,938	..	263,648
Other (including grants)	5,545	309	4,310	204	..	..	10,367
<i>Total, electricity, etc.</i>	197,082	42,455	32,481	1,263	1,938	..	275,219
Railways, tramways and omnibuses—							
Charges for services and sales of products . . . . .	..	..	7,541	..	..	..	7,541
Other (including grants) . . . . .	..	..	260	..	..	..	260
<i>Total, railways, etc.</i> . . . .	..	..	7,801	..	..	..	7,801
Other—	(e)	(f)	(g)	(h)	(i)	(j)	
Rates	27	..	21	..	..	..	49
Charges for services and sales of products	14,093	2,225	1,071	322	192	260	18,164
Other (including grants)	792	90	25	31	..	290	1,228
<i>Total, other</i>	14,912	2,315	1,118	353	192	550	19,440
Grand total	226,234	45,352	55,249	1,621	2,164	5,320	335,941
EXPENDITURE (EXCLUDING LOAN EXPENDITURE)							
Water supply and sewerage—							
Working expenses	5,572	375	5,840	7	20	2,147	13,961
Depreciation	(k) 258	49	..	..	..	..	209
Debt charges	5,543	144	5,475	..	36	2,209	13,407
Other (including transfers to general revenue and construction) . . . . .	..	5	1,592	..	..	148	1,744
<i>Total, water supply, etc.</i>	10,853	573	12,907	7	56	4,503	28,903
Electricity and gas—							
Working expenses	158,304	38,333	22,359	1,050	1,369	..	221,415
Depreciation	(k) 4,236	1,328	..	..	208	..	5,771
Debt charges	22,322	1,551	7,231	84	296	..	31,485
Other (including transfers to general revenue and construction) . . . . .	..	1,011	2,328	186	..	..	3,525
<i>Total, electricity, etc.</i>	184,862	42,222	31,918	1,320	1,873	..	262,195
Railways, tramways, and omnibuses—							
Working expenses . . . . .	..	..	8,128	..	..	..	8,128
Debt charges . . . . .	..	..	878	..	..	..	878
Other (including transfers to general revenue and construction) . . . . .	..	..	255	..	..	..	255
<i>Total, railways, etc.</i> . . . .	..	..	9,261	..	..	..	9,261
Other—	(e)	(f)	(g)	(h)	(i)	(j)	
Working expenses	13,497	1,782	491	337	165	338	16,610
Depreciation	99	124	..	..	..	..	223
Debt charges	736	222	91	..	..	57	1,106
Other (including transfers to general revenue and construction) . . . . .	..	193	148	18	..	..	359
<i>Total, other</i>	14,332	2,322	730	355	165	395	18,298
Grand total	210,052	45,117	54,816	1,682	2,093	4,898	318,658

(a) Year ended 31 December 1964. (b) Year ended 30 September 1965. (c) Year ended 30 June 1965.
 (d) Includes Government grant, \$1,848,000, for part of cost of new works borne by Government.
 (e) Abattoirs. (f) Abattoirs, hydraulic power undertakings, quarries, iceworks, and reinforced concrete pipe and culvert works. (g) Off-street car parking, municipal markets, hostels, hotels, and cinemas.
 (h) Quarries, hospitals and cinemas. (i) Quarries canteen and abattoirs. (j) Abattoirs. (k) Net balance after deducting charge for debt redemption. The full amount of charge for debt redemption is included under debt charges.

**LOCAL GOVERNMENT AUTHORITIES: BUSINESS UNDERTAKINGS—REVENUE
AND EXPENDITURE, STATES, 1961 TO 1965**
(S'000)

Year	N.S.W. (a)	Vic. (b)	Qld (c)	S.A. (c)	W.A.	Tas. (c)	Total
Revenue(d) —							
1961 . . .	160,553	33,769	32,364	1,255	(e) 1,729	3,269	232,939
1962 . . .	175,489	35,424	35,718	1,311	(c) 1,536	3,691	253,170
1963 . . .	194,460	38,305	42,154	1,505	(c) 1,857	3,969	282,251
1964 . . .	212,020	40,067	50,563	1,889	(c) 2,142	4,314	310,995
1965 . . .	226,234	45,352	55,249	1,621	(c) 2,164	5,320	335,941
Expenditure(d)—							
1961 . . .	155,170	33,464	34,634	1,243	(e) 1,738	3,251	229,500
1962 . . .	167,923	35,353	35,452	1,297	(c) 1,422	3,618	245,064
1963 . . .	183,801	37,982	41,631	1,539	(c) 1,789	3,823	270,565
1964 . . .	199,171	39,883	50,167	1,745	(c) 1,949	4,372	297,288
1965 . . .	210,052	45,117	54,816	1,682	(c) 2,093	4,898	318,658

(a) Years ended previous 31 December.
(d) Excludes loan receipts or expenditure.
years ended 30 June.

(b) Years ended 30 September.

(c) Years ended 30 June.
(e) Municipalities—years ended 31 October; Road Districts—

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
1964-65
(S'000)

	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	Total
Ordinary services—							
Roads, bridges, streets, footpaths, drainage, and sewerage	11 896	8 207	23,041	3,668	1,951	1,755	50,518
Council properties	(a) 9,375	(a) 6,249	6,630	1,285	(a) 2,717	(a) 631	34,591
Parks, gardens, and recrea- tional reserves	1,965	3,408		678	976	678	
Other	(b) 2,410	1,286	1,229	61	205	390	5,579
Total, ordinary services	25,645	19,151	30,900	5,692	5,849	3,453	90,689
Business undertakings—							
Water supply	5 065	208	8,976	..	..	1 095	15,344
Sewerage	3,355	..	..	..	56	1,719	5,130
Electricity and gas	25,541	2,587	5,193	22	862	..	34,205
Railways, tramways and omnibuses . . . . .	..	..	813	..	..	..	813
Abattoirs	2,735	661	..	..	..	87	3,483
Other . . . . .	..	52	60	..	..	..	113
Total, business undertakings	36,697	3,508	15,042	22	918	2,900	59,088
Grand total	62,342	22,659	45,942	5,713	6,767	6,354	149,777

(a) Includes plant. (b) Includes advances for homes. \$724,000.
For years to which particulars relate see following table.

**LOCAL GOVERNMENT AUTHORITIES: LOAN EXPENDITURE
STATES, 1961 TO 1965
(\$'000)**

Year	N.S.W. (a)	Vic. (b)	Qld (c)	S.A. (c)	W.A.	Tas. (c)	Total
Ordinary services—							
1961 . . .	15,189	10,359	22,815	3,579	(d) 4,542	2,553	59,038
1962 . . .	15,847	10,919	22,653	3,354	(c) 5,492	2,774	61,038
1963 . . .	19,856	12,478	25,974	4,977	(c) 6,836	3,862	73,982
1964 . . .	22,725	15,944	32,426	5,383	(c) 5,685	4,289	86,453
1965 . . .	25,645	19,151	30,900	5,692	(c) 5,849	3,453	90,689
Business undertakings—							
1961 . . .	30,299	2,736	15,148	82	(d) 275	2,707	51,248
1962 . . .	28,256	3,605	15,133	43	(c) 311	2,884	50,232
1963 . . .	36,988	3,665	10,927	114	(c) 596	3,350	55,640
1964 . . .	34,142	3,513	12,434	94	(c) 513	3,142	53,839
1965 . . .	36,697	3,508	15,042	22	(c) 918	2,900	59,088

(a) Years ended previous 31 December. (b) Years ended 30 September. (c) Years ended 30 June.
(d) Municipalities—years ended 31 October; Road Districts—years ended 30 June.

Local government and semi-governmental authorities' debt

Statistics of local government and semi-governmental debt for 1960–61 to 1964–65 are given in the following paragraph. The information covers all local government 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, Grain Elevators, Roads and Bridges, Marketing, and Miscellaneous. County Councils are included among these authorities.

Victoria. Water Supply and Sewerage, Irrigation and Drainage, Harbours, Tramways, Electricity and Gas Supply, Fire Brigades, Marketing (Buying and Selling), Industry Assistance, Grain Elevators, and Housing.

Queensland. Water Supply and Sewerage, Irrigation and Drainage, Harbours, Transport, Electricity Supply, Fire Brigades, University, Hospitals and Ambulances, Marketing (Buying and Selling and Agency), and Industry Assistance.

South Australia. Irrigation and Drainage, Tramways, Electricity Supply, Fire Brigades, Hospitals and Ambulances, Marketing (Agency), Industry Assistance, Banking, Housing, and Miscellaneous.

Western Australia. Water Supply and Sewerage, Harbours, Transport, Electricity Supply, Fire Brigades, Hospitals, Marketing (Agency), Housing, University of Western Australia, and Miscellaneous.

Tasmania. Harbours, Electricity Supply, Fire Brigades, Transport, Housing, and Water Supply.

A detailed list of the authorities included is shown in *State, Territory and Local Government Authorities' Finance and Government Securities*, Bulletin No. 4, 1965–66.

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 1964–65. For greater detail see *State, Territory and Local Government Authorities' Finance and Government Securities*.

LOCAL GOVERNMENT AND SEMI-GOVERNMENTAL AUTHORITIES' DEBT 843

LOCAL GOVERNMENT AND SEMI-GOVERNMENTAL AUTHORITIES: NEW MONEY LOAN RAISINGS, REDEMPTION, DEBT, AND INTEREST PAYABLE, STATES 1964-65 (\$'000)

	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	Total
LOCAL GOVERNMENT AUTHORITIES							
New money loan raisings—							
From government	166	147	2,806	726	71	9	3,925
From public	34,710	23,269	31,794	5,356	7,458	6,208	108,794
<i>Total loan raisings</i>	<i>34,876</i>	<i>23,415</i>	<i>34,600</i>	<i>6,082</i>	<i>7,529</i>	<i>6,217</i>	<i>112,719</i>
Funds provided for redemption—							
Government loans	203	137	1,806	1,157	1	67	3,371
Loans due to public	15,501	10,384	14,340	1,115	3,341	1,672	46,354
<i>Total funds, redemptions</i>	<i>15,704</i>	<i>10,521</i>	<i>16,147</i>	<i>2,271</i>	<i>3,342</i>	<i>1,740</i>	<i>49,725</i>
Accumulated sinking fund balance	8,568	8,778	17,486	..	133	778	35,743
Debt—							
Due to government	3,480	7,071	34,448	4,428	71	931	50,428
Due to banks (net overdraft)	44	880	..	29	..	..	954
Due to public creditor(a)	233,188	148,665	273,969	26,809	44,014	42,375	769,019
<i>Total debt(a)</i>	<i>236,712</i>	<i>156,616</i>	<i>308,417</i>	<i>31,237</i>	<i>44,114</i>	<i>43,305</i>	<i>820,400</i>
Maturing overseas(a)(b) . . . . .	..	..	5,043	..	..	..	5,043
Annual interest payable(a)	(c) 11,549	8,239	16,231	1,565	2,360	2,309	(c) 42,251

SEMI-GOVERNMENTAL AND OTHER PUBLIC AUTHORITIES

New money loan raisings—							
From government	32,535	48,728	4,047	26,890	10,336	20,051	142,587
From public	70,286	100,453	28,093	10,349	12,538	3,990	225,708
<i>Total loan raisings</i>	<i>102,821</i>	<i>149,180</i>	<i>32,140</i>	<i>37,239</i>	<i>22,874</i>	<i>24,041</i>	<i>368,295</i>
Funds provided for redemption—							
Government loans	6,812	5,468	1,281	3,448	1,748	2,339	21,095
Loans due to public	22,530	12,825	9,591	170	3,360	1,312	49,788
<i>Total funds, redemptions</i>	<i>29,341</i>	<i>18,293</i>	<i>10,871</i>	<i>3,618</i>	<i>5,108</i>	<i>3,652</i>	<i>70,883</i>
Accumulated sinking fund balance	101,736	38,572	17,481	2,031	6,065	2,842	168,727
Debt—							
Due to government	498,080	597,146	57,576	339,035	212,243	250,614	1,954,694
Due to banks (net overdraft)	3,292	771	..	36	317	..	4,417
Due to public creditor(a)	782,556	1,315,574	243,419	113,807	68,499	49,639	2,573,493
<i>Total debt(a)</i>	<i>1,283,927</i>	<i>1,913,491</i>	<i>300,995</i>	<i>452,878</i>	<i>281,059</i>	<i>300,253</i>	<i>4,532,604</i>
Maturing overseas(a)(b)	10,000	9,718	..	..	..	..	19,718
Annual interest payable(a)	(c) 62,487	92,783	15,618	20,882	12,255	13,631	(c) 217,656

(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 £Stg1 to \$A2.50; New York debt is payable in U.S. dollars which have been converted at the I.M.F. rate of \$U.S.1.12 to \$A1. (b) Included in debt figures above. (c) Excludes amounts of annual interest payable on net overdraft—New South Wales.

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, 1960-61 TO 1964-65**
(\$'000)

	1960-61	1961-62	1962-63	1963-64	1964-65
LOCAL GOVERNMENT AUTHORITIES					
New money loan raisings—					
From government	5,911	3,659	5,377	6,700	3,925
From public	71,488	91,148	103,932	107,047	108,794
<i>Total loan raisings</i>	<i>77,399</i>	<i>94,807</i>	<i>109,309</i>	<i>113,746</i>	<i>112,719</i>
Funds provided for redemption—					
Government loans	3,152	3,047	2,998	3,361	3,371
Loans due to public	28,324	30,725	36,565	40,371	46,354
<i>Total funds, redemptions</i>	<i>31,476</i>	<i>33,772</i>	<i>39,563</i>	<i>43,732</i>	<i>49,725</i>
Accumulated sinking fund balance	33,210	36,549	36,930	36,720	35,743
Debt—					
Due to government	40,953	43,986	46,649	50,024	50,428
Due to banks (net overdraft)	1,051	1,385	1,724	1,167	954
Due to public creditor(a)	516,514	579,659	640,935	707,863	769,019
<i>Total debt(a)</i>	<i>558,519</i>	<i>625,030</i>	<i>689,308</i>	<i>759,054</i>	<i>820,400</i>
Maturing overseas(a)(b)	11,001	10,643	8,257	7,900	5,043

SEMI-GOVERNMENTAL AND OTHER PUBLIC AUTHORITIES

New money loan raisings—					
From government	124,293	126,106	131,127	146,726	142,587
From public	144,289	180,881	218,115	221,299	225,708
<i>Total loan raisings</i>	<i>268,582</i>	<i>306,987</i>	<i>349,242</i>	<i>368,025</i>	<i>368,295</i>
Funds provided for redemption—					
Government loans	16,839	17,670	18,102	19,782	21,095
Loans due to public	34,977	37,689	44,492	42,314	49,788
<i>Total funds, redemptions</i>	<i>51,816</i>	<i>55,359</i>	<i>62,594</i>	<i>62,097</i>	<i>70,883</i>
Accumulated sinking fund balance	115,115	127,048	139,117	153,587	168,727
Debt—					
Due to government	1,463,645	1,572,482	1,702,593	1,829,801	1,954,694
Due to banks (net overdraft)	12,186	11,688	7,333	2,829	4,417
Due to public creditor(a)	1,830,308	1,992,297	2,187,816	2,381,829	2,573,493
<i>Total debt(a)</i>	<i>3,306,139</i>	<i>3,576,467</i>	<i>3,897,743</i>	<i>4,214,458</i>	<i>4,532,604</i>
Maturing overseas(a)(b)	23,286	23,266	23,244	23,222	19,718

(a) See footnote (a) page 843.

(b) Included in debt figures above.

Roads and bridges

Commonwealth Government grants

The following table shows the allocation 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 1961-62 to 1965-66. 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, 1961-62 TO 1965-66
(\$'000)**

Year	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	Total
1961-62 . .	27,622	20,160	18,186	11,504	17,528	5,000	100,000
1962-63 . .	29,880	21,754	19,592	12,400	18,974	5,400	108,000
1963-64 . .	32,442	22,824	21,070	13,338	20,526	5,800	116,000
1964-65 . .	36,346	25,576	23,670	14,902	23,006	6,500	130,000
1965-66 . .	39,191	27,508	25,538	16,024	24,739	7,000	140,000

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 463) 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 road and bridge construction is 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, and 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. 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. The Department of Main Roads generally meets half the cost of works on secondary roads and on tourist roads.

Length of roads. The total length of proclaimed roads (*see* page 463) in New South Wales at 30 June 1966 was 25,589 miles classified as: State highways, 6,530 miles; trunk roads, 4,159 miles; ordinary main roads, 11,661 miles; secondary roads, 144 miles; developmental roads, 2889 miles; and tourist roads, 206 miles. The length of main roads (highways, trunk and ordinary main roads) maintained by the Department of Main Roads at 30 June 1966 was 6.036 miles (27 per cent) while the length maintained by Councils was 16,314 miles (73 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, 75 per cent, 25 per cent; and trunk and ordinary main roads, 5 per cent, 95 per cent. Unclassified roads in the Western Division of the State, totalling 1,137 miles, were maintained by the Department, while developmental roads, totalling 2,889 miles, were maintained by Councils. In the County of Cumberland the proportions of main roads maintained by the Department and Councils respectively were: State highways, 98 per cent, 2 per cent; and ordinary main roads, 57 per cent, 43 per cent. Secondary roads totalling 144 miles were maintained by Councils. Of the 206 miles of tourist roads throughout the State, 177 miles (86 per cent) were maintained by Councils and 29 miles (14 per cent) by the Department. In 1966 the total length of all roads in New South Wales was estimated at 131,043 miles. The length of roads, according to their surface, were as follows: bitumen or concrete, 28,575 miles; gravel or stone, 44,594 miles; formed only, 26,911 miles; cleared only, 30,963 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 1965-66, 66 new bridges were constructed. In addition, 72 concrete box culverts each having a waterway width of twenty feet or more were completed. Major bridge works under construction included 17 steel and/or concrete bridges each costing over \$100,000.

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, grants under Commonwealth Aid Roads Act (see page 844 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, 1961-62 TO 1965-66

(\$'000)

	1961-62	1962-63	1963-64	1964-65	1965-66
--	---------	---------	---------	---------	---------

REVENUE(a)

Motor vehicle taxation, registration and licence fees	25,366	30,327	38,682	41,059	42,471
Commonwealth Aid Roads Act	17,873	19,080	20,617	22,934	24,648
State and Commonwealth grants	1,408	475	197	70	35
Contributions by other departments and bodies	475	342	326	97	243
Local authorities' contributions—					
Under Section 11 of Main Roads Act	4,289	4,506	5,273	5,768	6,418
Other	250	229	490	91	157
Other	322	277	343	531	673
Total	49,983	55,234	65,929	70,549	74,645

EXPENDITURE(b)

Roads and bridges—					
Construction	37,874	38,000	48,199	56,153	61,714
Maintenance	12,686	12,661	16,209	16,514	15,813
Administration	2,257	2,632	2,820	3,425	3,757
Interest, exchange, etc., on debt	505	566	986	1,237	926
Other(c)	1,064	1,242	1,376	1,125	1,378
Total	54,387	55,100	69,589	78,454	83,588

(a) Excludes repayable advances by the State Government and private loans (\$1,270,000 in 1961-62, \$1,780,000 in 1962-63, \$4,020,000 in 1963-64, \$7,500,000 in 1964-65, and \$5,005,000 in 1965-66), and transfers from Sydney Harbour Bridge Account for Expressway construction (\$3,644,000 in 1961-62, \$4,162,000 in 1962-63, \$3,078,000 in 1963-64, \$2,360,000 in 1964-65, and \$4,750,000 in 1965-66). Expenditure from these amounts is fully reflected in Expenditure. (b) Excludes debt redemption (\$106,150 in 1961-62, \$114,176 in 1962-63, \$123,992 in 1963-64, \$177,406 in 1964-65 and \$213,062 in 1965-66) and repayment of government advances (\$120,000 in 1962-63, \$120,000 in 1963-64, \$1,020,000 in 1964-65, and \$200,000 in 1965-66). (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 846 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 1966 was \$27,294,000, 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, almost \$24,000,000, is repayable from toll income. Income for 1965-66 amounted to \$4,301,000, including road tolls, \$3,859,000; railway passenger tolls, \$281,000; and omnibus passenger tolls, \$29,000. Expenditure amounted to \$2,504,000, including interest, exchange, flotation expenses, etc., \$859,000; sinking fund, \$323,000; maintenance, \$568,000. 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 1965-66 a total of \$2,011,000 was expended on tram track conversion and \$20,454,000 on the bridge expressway-type approaches. The account showed a deficiency of \$1,850,000 at 30 June 1966. During 1965-66, 37,897,966 road vehicles (excluding omnibuses and exempt vehicles), 25,712,317 rail travellers and 13,318,652 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 roads declared (see page 463) by the Country Roads Board in Victoria at 30 June 1966 was 14,502 miles, classified as follows: State highways, 4,465 miles; main roads, 9,094 miles; by-pass roads, 37 miles; tourist roads, 445 miles; forest roads, 461 miles. The length of the surface sealed (bitumen or concrete) included in the foregoing mileage was 12,569 miles or 87 per cent of the total. In addition to the 14,502 miles of classified roads, there were approximately 85,000 miles of unclassified roads at 30 June 1966. The total length of roads and streets in Victoria at 30 June 1966 is estimated as: bitumen or concrete, 27,007 miles; gravel or stone, 29,621 miles; formed only, 20,921 miles; cleared only, 21,934 miles; total, 99,483 miles.

Country Roads Board—operations. During 1965-66, 1,896 miles of declared roads under the Board's control were treated with bitumen. In addition, 1,031 miles of undeclared roads, for which the Board contributed funds, were similarly treated. The total length of bitumen treatment carried out in 1965-66 was 3,067 miles (including 140 miles for other authorities). Of the work on the roads under the Board's control in 1965-66, 754 miles related to State highways and by-pass roads. During 1965-66, 175 bridge projects of an estimated total value of \$5,060,000 were initiated. Of these, 112, estimated to cost \$1,974,000, 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, road 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 1965-66 loan receipts and payments each amounted to \$1,020,000. The total loan expenditure to 30 June 1966 was \$33,983,016. 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 1965-66 \$2,272,642 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
1961-62 TO 1965-66
(\$'000)

	1961-62	1962-63	1963-64	1964-65	1965-66
RECEIPTS					
Motor vehicle registration fees(a)	19,059	20,579	22,669	22,588	23,787
Drivers' licence fees(a)	520	637	595	603	715
Drivers' licence testing fees	154	149	162	187	188
Municipalities' payments	1,555	1,764	1,579	1,690	1,691
Commonwealth Aid Roads Acts(b)	19,755	21,351	22,431	25,182	27,175
Roads (Special Projects) Fund	..	..	..	..	2,273
Loans from State Government	1,366	602	666	762	1,020
Road charges Commercial Goods Vehicles Act	4,525	4,919	5,638	5,926	6,379
Public Works Loan Application Act	..	..	..	700	768
Other	(c) 1,151	168	223	889	971
Total	48,086	50,169	53,964	58,527	64,966
PAYMENTS					
Construction and maintenance of roads and bridges—					
State highways	13,673	13,210	19,151	17,081	17,704
Main roads	14,853	13,496	14,889	15,189	16,569
By-pass roads	1,365	863	2,641	4,854	3,745
Tourist roads	1,146	939	1,425	1,422	1,510
Forest roads	590	553	742	714	699
Unclassified roads	10,386	9,668	10,107	11,131	12,709
Other	139	139	87	167	140
Plant purchase	349	1,832	1,193	697	1,149
Interest, debt redemption, etc.	1,855	1,931	1,950	1,988	2,056
Office building, Kew—capital cost	39	542	378	71	12
Statutory payment to—					
Tourists' Resorts Fund	383	395	427	469	468
Transport Regulation Board	..	..	..	..	178
Administration and other	3,303	3,813	3,769	4,744	6,339
Total	48,082	47,378	56,758	58,525	63,278

(a) After deducting costs of collection. Prior to 1 January 1965 one half of the drivers' licence fees was credited to the funds of the Country Roads Board while the remaining half was credited to the Municipalities Assistance Fund. Since that date of the total amount collected, one quarter is paid to the Country Roads Board, one quarter is paid to the Municipalities Assistance Fund, and one half is paid to Consolidated Revenue. (b) Excludes portion of Commonwealth Aid Roads Acts advances drawn by the Public Works Department for expenditure on wharfs, jetties, etc. (c) Includes \$1,000,000 Special Grant from Commonwealth Government.

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 1966 was \$8,912,970.

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 1965-66 was \$752,249, consisting entirely of receipts from owners' certificates. Expenditure from the Fund amounted to \$464,922, of which \$338,932 was incurred by the Railways Department and \$125,990 by the Country Roads Board, leaving a balance carried forward of \$1,021,299.

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 463) in Queensland at 30 June 1966 was 24,438 miles; comprising State highways, 6,331 miles; main roads, 5,176 miles; developmental roads, 4,377 miles; and secondary roads, 8,554 miles. By the amendments to the Main Roads Act published in the Government Gazette of 6 April 1959, mining access, farmers' and tourists 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 1966 was: bitumen or concrete, 15,555 miles; gravel or stone, 19,854 miles; formed only, 42,803 miles; cleared only, 43,340 miles; total, 121,552 miles.

Department of Main Roads—operations. During 1964–65 the Department completed 1,806 miles of roads, including new construction and stage construction. Bridges of all types to a length of 7,806 linear feet were constructed, bringing the total constructed by the Department at 30 June 1965 to 247,168 feet. In addition, at 30 June 1965, 10,532 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 1960–61 to 1964–65 are shown below.

DEPARTMENT OF MAIN ROADS, QUEENSLAND: RECEIPTS AND PAYMENTS
1960–61 TO 1964–65
(\$'000)

	1960–61	1961–62	1962–63	1963–64	1964–65
RECEIPTS					
Motor vehicle registration, Transport Acts collections, fees, etc.	11,138	11,627	12,339	13,664	15,531
Loans from State Government . . . . .	..	1,820	1,668	1,046	1,039
Grants from State Government . . . . .	..	..	104	260	..
Roads (Contribution to Maintenance) Act	1,667	1,818	2,201	2,558	3,027
Commonwealth Aid Roads and Works Acts	16,537	19,203	20,854	24,877	27,919
Maintenance repayments—local authorities	1,446	1,494	1,555	1,586	1,125
Hire, rent, sales of plant, etc.	2,439	2,571	2,966	3,322	3,704
Other	1,047	1,217	1,275	2,126	2,043
Total	34,275	39,750	42,962	49,439	54,388
PAYMENTS					
Permanent road works and surveys(a)	22,604	26,371	28,847	34,345	39,993
Maintenance of roads	4,913	5,758	5,939	6,507	6,466
Plant, machinery, buildings, etc. (including plant maintenance)	2,790	3,039	2,573	3,351	3,735
Loans—Interest	215	168	120	132	203
Redemption	637	644	650	666	697
Administration and other	3,043	3,575	4,063	4,828	5,618
Total	34,201	39,554	42,192	49,829	56,712

(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 463) under the provisions of the Highways Act and all other roads, commonly designated district roads. At 30 June 1966 there were 8,193 miles of *proclaimed main roads* and approximately 66,788 miles of district roads, including roads and tracks outside local government areas, totalling 74,981 miles. *Total lengths of roads*, classified by surface, were estimated to be: bitumen or concrete, 7,940 miles; gravel or stone, 15,950 miles; formed only, 10,538 miles; unformed, 40,553 miles.

State Highways and Local Government Department receipts and payments. The following table shows particulars of receipts and payments, during the years 1961-62 to 1965-66, of funds controlled by the Highways and Local Government Department.

HIGHWAYS AND LOCAL GOVERNMENT DEPARTMENT, SOUTH AUSTRALIA
RECEIPTS AND PAYMENTS, 1961-62 TO 1965-66
 (\$'000)

	1961-62	1962-63	1963-64	1964-65	1965-66
RECEIPTS					
Motor vehicles registration, licences, fees	8,586	9,074	9,978	12,075	11,206
Commonwealth Aid Roads Acts	11,505	12,400	13,337	14,903	16,024
Loans from State Government	400	580	950	..	..
Other(a)	1,068	1,166	1,210	1,359	3,340
Total	21,558	23,220	25,476	28,337	30,570
PAYMENTS					
Construction and reconstruction of roads and bridges(b)	14,616	15,358	19,517	18,339	20,623
Maintenance(a)(b)	4,674	4,976	5,583	5,277	5,375
Recoups to Consolidated Revenue Fund—interest, debt redemption and exchange	454	486	512	1,164	1,167
Advances to local and semi-governmental authorities	840	1,162	1,650	1,126	1,376
Stores, plant, machinery, suspense accounts, etc.(c)	814	—144	538	909	1,503
Total	21,398	21,837	27,801	26,815	30,044

(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, 1930-1966*, 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 463). 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 1966 was: main roads, 3,465 miles, including seven miles of controlled-access roads; important secondary roads, 7,958 miles; and developmental roads, 43,330 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 1966 was made up as follows: bitumen or concrete, 12,977 miles; gravel or stone, 22,917 miles; formed only, 44,860 miles; cleared only, 27,843 miles; total, 108,597 miles.

Main Roads Department—operations. During the year 1965–66 the activities of the Department included clearing, 2,808 miles; forming, 3,964 miles; gravelling, 2,311 miles; reconditioning, 8,862 miles; and stabilising, 87 miles. In addition, 1,797 miles were primed and sealed (including widening). New and replacement bridges constructed totalled fifty, while seven bridges were widened.

Main Roads Department—receipts and payments. The funds of the Main Roads Department are derived principally from allocations made under the *Commonwealth Aid Roads Act* 1964. In addition, financial assistance was given by the Commonwealth Government to the extent of \$1,500,000 in 1965–66 for the improvement of roads used for the transport of beef cattle in the Kimberley District. For the five-year period ended 30 June 1966 additional grants totalling \$6,900,000 were received from Commonwealth funds and were matched by a corresponding State contribution. In 1966–67 a further \$1,500,000 will be received from the Commonwealth. 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. Receipts for the year ended 30 June 1966 amounted to \$391,902, and there were no disbursements to that date. (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 1961–62 to 1965–66 are shown in the following table.

MAIN ROADS DEPARTMENT, WESTERN AUSTRALIA
RECEIPTS AND PAYMENTS, 1961–62 TO 1965–66
(\$'000)

	1961–62	1962–63	1963–64	1964–65	1965–66
RECEIPTS					
Motor vehicle registration, licences, fees, etc.	1,561	2,014	2,335	3,370	4,054
Commonwealth Aid Roads Acts	15,506	16,256	16,987	21,945	22,618
Commonwealth Aid Roads Acts— matching grants	1,482	2,000	2,460	..	463
Western Australia Grant (Beef Cattle Roads) Act	1,000	1,400	1,500	1,500	1,500
Commonwealth-State Grant for res- toration of flood-damaged roads	640	..	..	..	..
Recoups from other authorities	494	740	1,124	1,455	917
Other	11	14	71	52	(a) 2,024
Total	20,694	(b) 22,424	(c) 24,477	28,322	31,576

For footnotes *see* next page.

**MAIN ROADS DEPARTMENT, WESTERN AUSTRALIA: RECEIPTS AND
PAYMENTS, 1961-62 TO 1965-66—continued**
(\$'000)

	1961-62	1962-63	1963-64	1964-65	1965-66
PAYMENTS					
Construction and reconstruction of roads and bridges(d)	12,940	14,534	13,872	18,110	21,012
Maintenance of roads and bridges(d)	2,172	2,015	2,561	2,196	1,856
Grants to local authorities, etc.	2,873	2,546	2,940	2,939	3,501
Transfer to State Consolidated Revenue	140	140	140	..	..
Plant, machinery, etc.	480	971	1,146	1,587	1,709
Other(d)	775	876	1,405	1,530	1,861
Total	19,380	21,082	(e) 22,064	(f) 26,362	29,939

(a) Includes \$1,896,000 transferred from an Overhaul Account previously administered by the Public Works Department. (b) Excludes \$1,400,000 advance from State Treasury. (c) Excludes \$1,000,000 advance from State Treasury. (d) Includes administration and expenditure on hire and maintenance of road construction plant, etc., and on purchase of materials. (e) Excludes \$1,400,000 refund of advance to 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 1965-66 on the construction and maintenance of roads, tracks and bridges amounted to \$15,326,140, of which \$9,948,084 was charged to road funds, \$15,623 to revenue, \$4,423,476 to loan, and \$938,957 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 463) at 30 June 1966 was 2,246 miles, comprising State highways, 1,205 miles; main roads, 662 miles; secondary roads, 196 miles; tourist roads, 47 miles; and other roads, 136 miles. The mileages of sealed (bitumen or concrete) roads and their proportions to the respective totals were: State highways, 955 miles (79 per cent); main roads, 441 miles (67 per cent); secondary, tourist and other roads, 96 miles (25 per cent). The total length of classified sealed roads was 1,492 miles (66 per cent). The total length of local authorities roads at 30 June 1966 was 8,727 miles, comprising bitumen or concrete, 1,354 miles (16 per cent); gravel or stone, 6,109 miles (70 per cent); formed only or cleared only, 1,264 miles (14 per cent). Roads of other authorities (Hydro-Electric Commission, Forestry Commission and Closer Settlement Board) totalled 1,854 miles.

The *total length of all roads* in Tasmania at 30 June 1966 was 12,827 miles, comprising bitumen or concrete, 2,893 miles (23 per cent); gravel or stone, 8,664 miles (68 per cent); formed only or cleared only, 1,270 miles (10 per cent).

Combined road funds—receipts and payments. The table following shows particulars of the receipts and payments of the combined Road Funds for the years 1961-62 to 1965-66.

ROAD FUNDS, TASMANIA: RECEIPTS AND PAYMENTS, 1961-62 TO 1965-66
(\\$'000)

	1961-62	1962-63	1963-64	1964-65	1965-66
RECEIPTS					
Motor vehicle taxation and registration, licences, fees, fines, etc.	2,509	2,833	3,019	3,153	3,425
Commonwealth Aid Roads and Works Acts	5,000	5,400	5,800	6,500	7,000
Recoups from local authorities, etc.	17	19	14	16	18
State Loan Fund	4,125	3,854	4,761	3,468	4,446
Hire of plant and workshop charges	2,905	2,949	3,165	3,329	3,732
Other	(a) 992	(a) 682	(a) 465	(a) 1,295	220
Total	15,547	15,737	17,224	17,761	18,842

PAYMENTS					
Construction and reconstruction of roads and bridges	9,182	9,801	11,239	11,420	11,591
Maintenance of roads and bridges	2,518	2,567	2,586	2,552	3,141
Other works connected with transport	38	46	72	76	62
Grants to local authorities	(b) 235	(b) 50	33	15	35
Purchase, maintenance and operation of plant	2,919	3,070	3,231	3,402	3,751
Other	172	147	220	383	300
Total	15,064	15,682	17,382	17,848	18,881

(a) Includes Commonwealth Employment Stimulation Grant (\$733,912 in 1961-62, \$507,554 in 1962-63, \$15,302 in 1963-64, and \$14,946 in 1964-65). (b) Includes grants under Commonwealth Employment Stimulation Grant (\$206,912 in 1961-62 and \$22,260 in 1962-63).

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 13, 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 1962 to 1966. 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, 1961-62 TO 1965-66**

(\$ million)

Year	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T. and A.C.T.	Aust.
1961-62 . . .	104	78	49	29	23	16	8	307
1962-63 . . .	108	77	55	30	26	17	10	324
1963-64 . . .	127	89	65	35	27	18	9	370
1964-65 . . .	142	94	71	35	34	17	10	404
1965-66 . . .	156	103	68	38	37	19	15	437

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 Cobarr 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 1966). The storage reservoirs of the metropolitan system with a combined available capacity of 574,730 million gallons, drain catchment areas of 3,860 square miles (Warragamba, 3,480 square miles, Upper Nepean, 347 square miles, and Woronora, 33 square miles). The development of a water supply system on the Warragamba River was completed with the official opening of the Warragamba Dam in October 1960. This dam, constructed in concrete, has a storage capacity of 452,505 million gallons. Its safe net draught is estimated to be 274 million gallons a day. A hydro-electric power station at the dam generated 341 million kWh in 1963-64, but, because of dry conditions, only 1 million kWh in 1965-66. At 30 June 1966 there were 169 service reservoirs in use with a combined capacity of 663 million gallons. Rating for water for 1965-66 was 3.75 cents in the \$ of assessed annual value. For water in excess of the allowance provided for in the rate (calculated at 30 cents per 1,000 gallons) the charge was 28 cents per 1,000 gallons.

The water supply of the *Hunter District system* is drawn principally from three sources: the Chichester Reservoir, with a storage capacity of about 5,000 million gallons and draining a catchment of 76 square miles, the Tomago Sandbeds, which extend northerly along the coast towards Port Stephens, and the Grahamstown Water Supply Scheme which is still being developed. Another source of supply is provided by the Nelson Bay-Anna Bay Scheme. Service reservoirs and tanks distributed throughout the water supply district have a total storage capacity of 125 million gallons. Water rating for 1965-66 was 6.9792 cents in the \$ of assessed annual value. The price of water to domestic and industrial consumers is 27.5 cents per 1,000 gallons.

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, 1961-62 TO 1965-66**

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. gals.	mill. gals.	gallons	gallons	miles	
1961-62 . . .	634,139	2,481	221	80,556	348	89	6,945	430,588
1962-63 . . .	653,674	2,544	234	85,282	357	92	7,173	438,585
1963-64 . . .	669,948	2,600	255	93,211	381	98	7,397	457,215
1964-65 . . .	693,185	2,660	290	105,892	418	109	7,649	479,321
1965-66 . . .	712,059	2,723	230	83,802	323	84	7,972	495,850

(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
1961-62 TO 1965-66**

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. gals.	mill. gals.	gallons	gallons	miles
1961-62 . . .	87,792	296,502	31.7	11,555	361	107	1,512
1962-63 . . .	89,283	301,380	36.6	13,352	410	121	1,551
1963-64 . . .	91,616	309,609	36.4	13,336	398	118	1,590
1964-65 . . .	93,646	316,625	41.5	15,139	443	131	1,623
1965-66 . . .	94,779	320,451	32.7	11,970	346	102	1,673

(a) Newcastle, Maitland and Cessnock areas.

Metropolitan and Hunter District sewerage and drainage system (to 30 June 1966). The metropolitan system serving Sydney and suburbs comprises 3 major sewerage systems and 7 minor systems, consisting of 6 outfalls discharging directly into the Pacific Ocean and 4 treatment works. In addition, 7 centres outside the metropolitan area (Camden, Campbelltown, St Mary's, Port Kembla, Richmond, Warragamba township, and Wollongong) are served by local treatment works. Stormwater drainage channels under the control of the Metropolitan Water, Sewerage and Drainage Board at 30 June 1966 were 181 miles long. Sewerage rating for 1965-66 was 3.95 cents in the \$ of assessed annual value, and drainage rating 0.5208 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 1965-66 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, 1962 TO 1966

30 June—	Improved properties for which sewerage available	Estimated population served	Lengths of sewers	Length of stormwater channels
		'000	miles	miles
1962 . .	426,333	1,710	4,489	178
1963 . .	451,997	1,780	4,763	179
1964 . .	475,735	1,870	5,074	180
1965 . .	501,389	1,930	5,328	179
1966 . .	524,225	2,000	5,585	181

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

At 30 June 1966, 70,534 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 1,023 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 1965-66, and for the three services combined for the years 1961-62 to 1965-66.

**METROPOLITAN AND HUNTER DISTRICT WATER SUPPLY, SEWERAGE
AND DRAINAGE, NEW SOUTH WALES: FINANCES, 1961-62 TO 1965-66**
(\$'000)

Year	Capital debt at 30 June	Revenue	Expenditure				Surplus (+) or deficit (-)
			Working expenses (a)	Interest and exchange	Debt redemption	Total	

METROPOLITAN(b)

1965-66—							
Water . . .	285,850	33,650	15,080	13,370	5,193	33,643	+ 7
Sewerage . .	184,498	23,155	11,086	8,578	3,485	23,149	+ 6
Drainage . .	4,852	1,287	1,003	218	65	1,286	+ 1
Total, 1965-66 .	475,200	58,092	27,169	22,166	8,743	58,078	+14
1964-65 . . .	440,941	54,890	26,846	20,166	7,861	54,873	+17
1963-64 . . .	407,205	50,860	25,133	18,549	7,145	50,827	+33
1962-63 . . .	375,776	41,191	20,970	16,838	6,355	41,162	+29
1961-62 . . .	340,372	39,651	18,700	14,892	6,027	39,619	+32

HUNTER DISTRICT(c)

1965-66—							
Water . . .	55,406	5,295	2,084	2,610	586	5,280	+15
Sewerage . .	18,086	2,365	1,292	797	268	2,357	+ 8
Drainage . .	782	144	93	35	7	135	+ 9
Total, 1965-66 .	74,274	7,804	3,469	3,442	861	7,772	+32
1964-65 . . .	69,778	6,508	3,099	2,808	701	6,607	-99
1963-64 . . .	65,254	6,205	2,890	2,653	648	6,191	+14
1962-63 . . .	59,931	5,813	2,640	2,431	722	5,794	+19
1961-62 . . .	55,408	5,466	2,791	2,101	529	5,421	+45

(a) Includes provision for renewals, long service leave, etc. (b) County of Cumberland, City of Greater Wollongong, Shellharbour and Kiama Municipalities, and parts of Colo and Wollondilly Shires. (c) Newcastle-Maitland-Cessnock areas.

Local government country water supply and sewerage systems. At 31 December 1964 country water supply services were conducted or under construction by 49 municipalities, 87 shires and 5 county councils, and country sewerage services by 51 municipalities and 40 shires. The capital indebtedness of these schemes was \$80,961,000 at 31 December 1964, namely \$56,447,000 for water and \$24,513,000 for sewerage. Debt of the municipalities amounted to \$39,255,000, shires to \$30,787,000, and county councils to \$10,918,000. Government advances amounting to \$851,570 are included in these figures. Aggregate income and expenditure amounted to \$14,188,000 and \$10,827,000, respectively, in 1964.

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 1965 was \$6,124,000. In 1965 income (excluding subsidies, State Government \$165,000 and mining companies \$443,000) amounted to \$678,000 and expenditure (excluding debt redemption \$189,000) amounted to \$1,086,000. The Cobar Water Board was constituted in February 1964. At 31 December 1965 its capital indebtedness was \$2,501,000. 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 Railways Department and other large consumers. Only a small quantity is sold direct to private consumers. The capital indebtedness of these systems was \$15,064,822 at 31 December 1965. 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-one Commissioners elected to represent the municipalities which lie wholly or partly within the metropolitan area. The principal functions of the Board are: to control and manage the metropolitan water supply system; to provide the metropolitan area with an efficient main and general sewerage system; to deal with main drains and main drainage works; to control and manage the rivers, creeks and watercourses within the metropolitan area; and to carry out the functions of a permanent planning authority.

Metropolitan water supply. There are 6 storage reservoirs serving the metropolitan area—Yan Yean, 7,233 million gallons (available for consumption, 6,649 million gallons); Toorourrong, 60 million gallons; Maroondah, 6,289 million gallons (4,870 million gallons); O'Shannassy, 930 million gallons; Silvan, 8,853 million gallons (8,823 million gallons); and Upper Yarra, 45,400 million gallons (44,120 million gallons); total 68,765 million gallons (65,452 million gallons). Service reservoirs number 45, with a total capacity of 366 million gallons. The water rate levied by the Board in 1965–66 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 1961–62 to 1965–66.

MELBOURNE WATER SUPPLY: SERVICES, 1961–62 TO 1965–66

Year	Number of houses supplied	Estimated population supplied	Average daily consumption	Total consumption for the year	Average daily consumption		Length of aqueducts, etc., mains and reticulation	Number of meters
					Per house	Per head of estimated population		
		'000	mill. gals.	mill. gals.	gallons	gallons	miles	
1961–62	519,216	1,869	157.6	57,521	304	84.3	5,477	422,318
1962–63	547,123	1,981	151.3	55,225	277	76.4	5,622	460,866
1963–64	572,431	2,072	162.9	59,621	285	78.6	5,882	485,856
1964–65	595,727	2,157	168.2	61,409	282	78.0	6,098	511,077
1965–66	612,844	2,218	178.7	65,218	292	80.5	6,280	536,093

Metropolitan sewerage and drainage. Particulars of sewerage and drainage services for 1961–62 to 1965–66 are shown on the next page. The rate levied in 1965–66 for sewerage was 4.375 cents in the \$ on the net annual value of the property served. The drainage rate was 0.625 cents in the \$.

MELBOURNE SEWERAGE AND DRAINAGE: SERVICES
1961-62 TO 1965-66

Year	Number of houses for which sewers are provided	Estimated population for which sewers are provided	Average daily pumping	Total sewerage pumped for the year	Average daily pumping		Length of sewers, etc.	Length of main drains
					Per house	Per head of estimated population		
		'000	mill. gals.	mill. gals.	gallons	gallons	miles	miles
1961-62	399,890	1,361	83.0	30,308	207.6	61.0	3,665	198
1962-63	422,899	1,402	84.9	30,997	200.8	60.6	3,769	205
1963-64	443,291	1,446	89.7	32,833	202.4	62.0	3,932	211
1964-65	453,078	1,491	93.6	34,152	206.5	62.8	4,113	218
1965-66	467,705	1,599	94.6	34,545	202.4	59.2	4,311	229

The metropolitan sewerage system consists of the main system (serving an area of 100,572 acres) and 6 subsidiary systems—the Sunshine system (serving an area of 2,980 acres), the Laverton system (serving an area of 290 acres), the Kew system (serving an area of 112 acres), the South-eastern system (serving an area of 4,138 acres in Cheltenham, Parkdale, Mentone, and Mordialloc), Watsonia system (serving an area of 188 acres), and the Maribyrnong system (serving an area of 182 acres). The Metropolitan Sewerage Farm, 26,809 acres in extent and situated about twenty-four miles south-west of Melbourne beyond the township of Werribee, serves to purify and dispose of approximately ninety-eight per cent of the sewerage flow of the metropolis before its discharge into Port Philip Bay. The total capital cost (less depreciation) of the farm to 30 June 1966 was \$9,895,593. Revenue during 1965-66 amounted to \$578,681, cost of sewerage disposal to \$623,213, trading expenses to \$300,500, interest to \$543,739, and net cost of sewerage purification to \$888,771. These financial particulars are included in the sewerage items of the summary below.

Melbourne and Metropolitan Board of Works finances. The following table provides for the year 1965-66 a summary of the financial operations of the water supply, sewerage and drainage services conducted by the Melbourne and Metropolitan Board of Works, and of the combined services for the years 1961-62 to 1965-66.

MELBOURNE AND METROPOLITAN BOARD OF WORKS: FINANCES
1961-62 TO 1965-66
(\$'000)

Service, etc.	Capital cost of works and buildings at 30 June(a)	Revenue	Expenditure				Surplus (+) or deficit (-)
			Working expenses	Interest and exchange	Debt redemption	Total	
Water	146,540	13,701	4,472	7,680	..	12,152	+ 1,549
Sewerage	158,915	14,337	4,167	7,804	..	11,971	+ 2,366
Drainage	27,964	2,127	537	1,042	..	1,579	+ 548
General(b)	11,791	..	2,186	..	2,274	4,460	- 4,460
Total, 1965-66	345,210	30,165	11,362	16,526	2,274	30,162	+ 3
1964-65	314,972	25,307	9,308	14,856	1,960	26,124	- 817
1963-64	286,566	24,373	9,315	13,342	1,693	24,350	+ 23
1962-63	258,428	23,429	10,068	11,840	1,494	23,403	+ 26
1961-62	235,014	21,400	9,644	10,553	1,189	21,386	+ 14

(a) Total loan indebtedness—1965-66, \$322,748,311. (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 1966 the Commission provided a reticulated water supply from its own works to 140 cities and towns having a combined population of 206,000 persons. The principal systems operated by the Commission serve part of the Mornington Peninsula—Dandenong area (about 91,000 people supplied); Bendigo, Castlemaine, etc. (57,000); and about 8,400 people in the Western District. In addition, 12,000 persons in a number of towns in the Bellarine Peninsula receive supply through a Commission-operated distributory system from headworks controlled by the Geelong Waterworks and Sewerage Trust. The Bendigo-Castlemaine supply also provides for the irrigation of 11,000 acres as well as urban requirements in the area. Outside these areas the Commission supplies mainly small towns in the north of the State in areas where it also supplies farms with water for irrigation or domestic and stock purposes. Capital expenditure by the Commission on urban water supply at 30 June 1966 was divided between the several systems as follows: Mornington Peninsula, \$22,800,000; Bendigo-Castlemaine, \$9,700,000 (includes the costs of supplying a comparatively large rural system with water for irrigation, stock and domestic purposes); Bellarine Peninsula, \$2,100,000; Otway System (Western District), \$2,500,000; other, \$2,500,000; total, \$39,600,000. This expenditure is net of redemption payments. In addition to the towns supplied by the Commission there are 639,000 people in 230 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—serving in all about 52,000 people—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 370 urban centres containing more than 845,000 people. Very few towns of any importance are now without reticulated water supply. The following table presents the financial position in respect of town water supply at 30 June 1966.

TOWN WATER SUPPLY, VICTORIA: CAPITAL LIABILITY
30 JUNE 1966
(\$'000)

	Water supply provided by—		
	Local authorities	State Rivers and Water Supply Commission	Total
Government advances . . .	57,700	40,800	98,500
Less redemption . . .	4,300	500	4,800
Government advances outstanding . . .	53,400	40,300	93,700
Borne by State . . .	12,400	14,600	27,000
Borne locally . . .	41,000	25,700	66,700

In addition, nearly \$19,000,000 has been borrowed locally, mainly by the Geelong Waterworks and Sewerage Trust.

The proportion of loan capital borne by the State is much higher in the case of Commission undertakings than for towns supplied by local authorities. This is because most Commission undertakings have been developmental in nature. Besides meeting interest on capital borne by it, the State pays the difference between three per cent and the actual rate paid on practically all the capital carried locally. The total annual subsidy on country town water supply is currently about \$2,700,000.

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 1966 there were 59 cities and towns with sewerage systems in operation. These contained about 523,000 persons, nearly half the total number of residents outside the metropolitan area.

Expenditure on sewerage in Victorian country towns at 30 June 1966 was approximately \$65,000,000, of which some \$51,000,000 had been advanced by private lenders. The annual State subsidy on country sewerage in Victoria is currently about \$1,350,000, provided mainly in the form of subsidies on interest rates paid along the same lines as for town water supply. Comparatively little capital is borne directly by the State.

Geelong Waterworks and Sewerage Trust. The Geelong Waterworks and Sewerage Trust was constituted in 1908 and reconstituted under the *Geelong Waterworks and Sewerage Act* 1909. It was further reconstituted in September 1950 to include a government nominee (chairman), and provision was made for a commissioner to be elected by the ratepayers of the Shire of Corio, making a total of seven commissioners. The amount of loan money which may be raised is limited to \$24,000,000 for water supply undertakings and \$10,000,000 for sewerage undertakings. The population supplied is estimated by the Trust at 109,482 persons. This and other general information relates to 30 June 1966.

The *Geelong water supply scheme* comprises two systems for gathering and storing water, the water in both systems being brought over fifty miles to Geelong. There are 7 storage reservoirs and 11 service basins whose total storage capacity is 13,292 million gallons. The length of water mains and reticulation is 558.9 miles. The total expenditure on water supply to 30 June 1966 was \$16,131,881. General fund expenditure for 1965-66 comprised \$447,720 for working expenses and \$1,029,734 for interest, redemption and reserves, while revenue amounted to \$1,478,014. The sinking fund appropriations at June 1966 amounted to \$947,438. The replacement and contingencies reserve amounted to \$1,036,057. There is a water rate of 5.83 cents in the \$ (with minima of \$1 for vacant land and \$2 for tenements) on the net annual value of rateable properties.

The *Geelong sewerage scheme* consists of a main outfall sewer to the ocean and 314.6 miles of main and reticulation sewers. The sewerage area is 11,851 acres, and the number of buildings connected within the sewered areas is 26,843. The total expenditure on sewerage works to 30 June 1966 was \$7,443,704. The revenue in 1965-66 amounted to \$743,628, and the general fund expenditure comprised \$246,160 on working expenses and \$497,049 on interest, redemption and reserves. Sinking fund appropriations at 30 June 1966 were \$538,019. Replacement and contingencies reserve amounted to \$1,082,511. A general rate of 4.58 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 improvements of the surrounding area is financed by the levying of an improvement rate of 0.21 cents in the \$ on the net annual value of all lands within the drainage area. The revenue for 1965-66 amounted to \$38,533.

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 1966.

The *Ballarat water supply district* comprises an area of about 62 square miles, containing a population of about 62,000. The total storage capacity of the 7 reservoirs is 5,435 million gallons and the catchment area is 24,182 acres. The capital cost of construction of the waterworks was \$5,988,651 to 31 December 1966. The liabilities amounted to \$3,773,199 at 31 December 1966, including loans due to the Government totalling \$3,519,244. The revenue for the year 1966 was \$430,723. Working expenses during 1966 amounted to \$245,004 and interest and other charges to \$185,415. A water rate of 3.2 cents in the \$ on the net annual valuation is levied, with a minimum charge of \$4 per annum on any rateable property; water by measure, 14 cents per 1,000 gallons.

The *Ballarat sewerage district* comprises the City of Ballarat and parts of the Shires of Ballarat, Bungaree and Grenville and the Borough of Sebastopol. There are more than 192 miles of sewers. The capital cost of sewerage construction works to 31 December 1966 was \$4,397,354. Two hundred and sixty-seven sewered areas had been declared as at 31 December 1966. Assessments in the sewerage district numbered 19,740, while those in sewered areas numbered 16,851. There were 15,403 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 1966 amounted to \$3,813,935; redemption payments at that date totalled \$849,392. House connections financed by the Authority numbered 4,330. Revenue during 1966 amounted to \$452,048, and expenditure, which included \$264,284 for interest and redemption, was \$440,256. A sewerage rate of 4.2 cents in the \$ on the net annual valuation is levied, with a minimum charge of \$8 on any rateable property. The charge for trade wastes is 10 cents per 1,000 gallons.

Latrobe Valley Water and Sewerage Board. The Latrobe Valley Water and Sewerage Board was constituted on 1 July 1954. The Board consists of seven members, namely: two Government nominees (one of whom is Manager and also Board Chairman), three members elected by water supply, sewerage and river improvement authorities within the Latrobe Valley, and one representative each of the State Electricity Commission of Victoria and the Gas and Fuel Corporation of Victoria.

The Board is empowered to construct *water supply works within the Latrobe Valley*, but at present its main construction activities are confined to the central industrialised areas and the new township of Churchill. The total capital cost of construction of the waterworks was \$10,888,179 to 30 June 1966. Liabilities amounted to \$11,615,930, including loans due to the Government totalling \$11,180,928. Revenue for the year was \$748,390. Expenditure during 1965-66 amounted to \$658,344, including interest amounting to \$337,120. 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 1966 was 10,400 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 1966 was \$6,000,592. Liabilities amounted to \$6,745,824, including loans due to the Government totalling \$5,821,955. Revenue in 1965-66 was \$277,352 and expenditure totalled \$309,200, including \$116,065 interest payments. No sewerage rate is levied, but a charge is made by measure for wastes both from industries and public authorities.

Other sewerage authorities. At 30 June 1966, 79 other sewerage authorities had been constituted under the provisions of the Sewerage Districts Acts, and systems were in operation in 55 districts.

Queensland

Brisbane City Council (to 30 June 1966). 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 (67,000 million gallons); Lake Manchester, 5,800 million gallons (5,700 million gallons); Brisbane River, Mt Crosby Weir, 540 million gallons (480 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 18 service reservoirs with a capacity of approximately 43 million gallons. The Somerset reservoir is a dual purpose project with a designed total holding capacity of 200,000 million gallons, 67,000 million gallons to be for water storage and 133,000 million gallons for flood mitigation. Water rating for the year ended 30 June 1966, was 1.25 cents in the \$ on the unimproved valuation of all rateable land, with a minimum charge of \$24 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 1961-62 to 1965-66.

BRISBANE WATER SUPPLY(a): SERVICES, 1961-62 TO 1965-66

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. gals.	mill. gals.	gallons	gallons	miles
1961-62	178,279	649,970	45.3	16,538	254	69.7	2,284
1962-63	182,804	665,479	48.3	17,644	264	72.6	2,378
1963-64	188,032	685,223	51.2	18,696	272	74.8	2,410
1964-65	193,471	703,258	61.4	22,409	317	87.3	2,564
1965-66	197,707	722,970	67.6	24,668	342	93.5	2,666

(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 1966 was 1.1 cents in the \$ on the unimproved valuation of each portion of land, with a minimum charge of \$24 for the year. The following table is a summary of operations of the Brisbane sewerage scheme for the years 1961-62 to 1965-66.

BRISBANE SEWERAGE: SERVICES, 1961-62 TO 1965-66

Year	Premises connected	Estimated population served	Total sewage pumped for the year	Length of main, branch, reticulation, etc. sewers
			mill. gals.	miles
1961-62 .	67,407	249,406	5,933	906
1962-63 .	71,754	265,490	6,851	944
1963-64 .	75,964	281,067	7,211	1,042
1964-65 .	84,390	312,243	7,190	1,222
1965-66 .	90,940	336,478	8,821	1,341

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 1961-62 to 1965-66.

BRISBANE WATER SUPPLY AND SEWERAGE: FINANCES, 1961-62 TO 1965-66 (\$'000)

Service and year	Gross capital cost to 30 June	Revenue	Expenditure			Surplus (+) or deficit(—)
			Working expenses	Interest, redemption, etc. charges	Total (a)	
Water supply—						
1961-62 . .	39,990	4,963	2,260	1,950	4,763	+ 201
1962-63 . .	43,059	5,650	2,334	2,168	5,218	+ 432
1963-64 . .	46,175	5,989	2,492	2,330	5,318	+ 670
1964-65 . .	49,768	7,030	2,827	2,436	5,889	+ 1,141
1965-66 . .	54,635	8,365	3,069	2,503	8,471	— 106
Sewerage—						
1961-62 . .	35,907	2,072	592	1,130	2,091	— 19
1962-63 . .	39,854	2,525	592	1,304	2,336	+ 189
1963-64 . .	45,439	2,763	651	1,550	2,571	+ 192
1964-65 . .	50,184	3,664	803	1,705	3,434	+ 230
1965-66 . .	55,858	4,829	882	1,829	4,172	+ 657

(a) Total, including other expenditure.

Country towns. In addition to the City of Brisbane, there were at 30 June 1965, 203 cities and towns in Queensland provided with water supply systems controlled by municipal and shire councils. At 30 June 1965 there were 45 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 \$6,819,052 in 1964-65. Expenditure amounted to \$7,017,580, including \$2,984,999 for debt charges. In addition, expenditure from loans and loan subsidy amounted to \$5,719,906. Finances of sewerage undertakings are incorporated in council general funds and are not available separately.

South Australia

The water supply and sewerage systems in this State were constructed mainly, and are maintained, by the Engineering and Water Supply Department, under the control of the Minister of Works. Works controlled by the Department are the Adelaide, Barossa, Beetaloo, Bundaleer, Moorook, Tod River, Warren, Yorke Peninsula, and other country water districts systems, the Morgan-Whyalla water supply system, the metropolitan and country sewerage systems, the

Metropolitan Flood Waters Scheme, and works on the River Murray constructed under the River Murray Waters Agreement. Several water supply schemes on the Murray River are operated by the Department of Lands in conjunction with its irrigation works, and supplies to Woomera and Leigh Creek coalfield are controlled by the operating authorities. The following tables show particulars of metropolitan and country waterworks combined.

WATERWORKS, SOUTH AUSTRALIA: SERVICES, 1961-62 TO 1965-66

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. gals.	miles	
1961-62 . . .	338,636	85,404	13,154	45,106	9,634	247,972
1962-63 . . .	357,342	92,737	13,287	45,062	9,996	262,571
1963-64 . . .	365,579	104,159	13,373	45,173	10,469	278,183
1964-65 . . .	376,425	109,651	13,524	45,179	10,748	292,212
1965-66 . . .	390,045	127,599	13,849	45,189	11,091	303,288

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

WATERWORKS, SOUTH AUSTRALIA: FINANCES, 1961-62 TO 1965-66
(£'000)

Year	Invested capital at 30 June (a)	Revenue	Expenditure			Deficit
			Working expenses (b)	Interest	Total	
1961-62 . . .	146,231	9,065	8,390	5,388	13,778	4,713
1962-63 . . .	161,817	9,903	7,975	6,395	14,370	4,467
1963-64 . . .	172,583	11,103	7,752	6,960	14,711	3,608
1964-65 . . .	189,205	11,955	8,475	7,694	16,169	4,214
1965-66 . . .	201,828	13,393	9,845	8,376	18,221	4,828

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

Adelaide waterworks. At 30 June 1966 the Adelaide waterworks supplied a district of 216,926 acres. The capacity of reservoirs and storage tanks was 24,230 million gallons and there were 3,108 miles of mains. Water is also drawn from the 11,300 million gallon reservoir at South Para in the Barossa Water District. The Mannum-Adelaide pipeline conveys water from the River Murray to Adelaide at a rate of up to 66 million gallons a day. Water is delivered to a terminal storage near Adelaide and hence to the metropolitan distribution system or alternatively it can be delivered into metropolitan reservoirs on the River Torrens or to reservoirs on the River Onkaparinga by further pumping. The pipeline supplements the Warren system and other country areas.

ADELAIDE WATERWORKS: FINANCES, 1961-62 TO 1965-66
(£'000)

Year	Invested capital at 30 June (a)	Revenue	Expenditure			Surplus (+) or deficit (-)
			Working expenses (b)	Interest	Total	
1961-62 . . .	77,254	6,302	4,754	2,738	7,492	— 1,190
1962-63 . . .	83,461	6,874	4,143	3,380	7,522	— 649
1963-64 . . .	86,692	7,796	3,861	3,610	7,471	+ 326
1964-65 . . .	92,872	8,417	4,222	3,907	8,129	+ 289
1965-66 . . .	98,056	9,521	5,292	4,248	9,540	— 19

(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 179 square miles in all, includes treatment works at Glenelg, Port Adelaide, Bolivar, and Christies Beach. Financial and other particulars for 1961-62 to 1965-66 are shown hereunder.

ADELAIDE METROPOLITAN SEWERAGE: SUMMARY
1961-62 TO 1965-66

Year	Length of sewers	Number of connections	Invested capital at 30 June (a)	Revenue	Expenditure			Surplus
					Working expenses (b)	Interest	Total	
	miles		\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
1961-62 . . .	1,659	179,918	29,090	4,422	1,827	1,049	2,876	1,546
1962-63 . . .	1,714	186,143	33,510	4,689	2,002	1,151	3,153	1,536
1963-64 . . .	1,774	194,889	38,996	5,239	2,201	1,265	3,466	1,774
1964-65 . . .	1,854	204,128	47,127	5,513	2,363	1,380	3,743	1,769
1965-66 . . .	1,952	213,375	56,235	6,386	2,614	1,561	4,175	2,211

(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 152 miles of sewers and 5,046 connections in the country systems. A sewerage scheme for Whyalla is under construction.

Country water supply. Water districts systems at 30 June 1966 comprised an area of 13,632,249 acres. Supply came from reservoirs having a total capacity of 20,959 million gallons, from the River Murray, and from underground sources. Apart from local supplies, water from the River Murray comes from branches of the Mannum-Adelaide main and from the Morgan-Whyalla main. The principal areas of underground supplies are in the south-east of the State, where water from the Murray Basin can be had at moderate depths or from lakes, and from sand beds on Eyre Peninsula. In the year 1965-66 supplies made to Mount Gambier, Naracoorte and other towns amounted to 1,145 million gallons, and the Uley-Wanilla, Lincoln and Poldas Basins contributed 658 million gallons to the Tod River Water District.

COUNTRY WATERWORKS, SOUTH AUSTRALIA: FINANCES
1961-62 TO 1965-66
(\$'000)

Year	Invested capital at 30 June (a)	Revenue	Expenditure			Deficit
			Working expenses (b)	Interest	Total	
1961-62 . . .	68,976	2,763	3,636	2,651	6,286	3,523
1962-63 . . .	78,356	3,030	3,833	3,015	6,848	3,818
1963-64 . . .	85,892	3,307	3,891	3,350	7,241	3,934
1964-65 . . .	96,333	3,538	4,253	3,787	8,040	4,502
1965-66 . . .	103,772	3,872	4,553	4,128	8,681	4,809

(a) After deduction of depreciation.

(b) Includes debt redemption.

Morgan-Whyalla water supply scheme. This scheme, which has 223 miles of main, was officially opened on 31 March 1944, the capital invested to 30 June 1966 being \$28,594,600. Particulars of the scheme, where applicable, are included in the tables of the combined waterworks, page 863.

Apart from supplying Whyalla, the main has 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, duplication of the main is under way. During 1965-66 water used from the scheme amounted to 4,486 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, 1909-1966* and consists of seven members appointed by the Governor. The area which constitutes the territory administered by the Board encompasses approximately 1,270 square miles and extends from Perth southward to Rockingham and Serpentine, northward to Sorrento, and eastward to Greenmount and Kalamunda. The Department of Public Works and Water Supply controls the Goldfields and Agricultural Water Supply and the Great Southern Towns Water Supply as well as ninety-one local water supplies (*see also* the chapter Water Conservation and Irrigation). Five independent town schemes are controlled by local Water Boards in country areas, and individual water supplies serve railways, timber mill towns, isolated mines, pastoral properties, stock routes, and agricultural areas, mainly from dams, tanks, wells, and bores.

Metropolitan water supply, sewerage and drainage. The sources of the metropolitan water supply are Serpentine Reservoir and Serpentine Pipehead Reservoir, Canning Reservoir, Wungong Brook Diversion Weir, Churchman Brook Reservoir, and Victoria Reservoir. The largest of these sources are the Serpentine Reservoir and the Canning Reservoir. Serpentine Reservoir is constructed of rolled earth fill, and the embankment rises 171 feet above the stream bed, the length at the crest being 1,390 feet. Its capacity is 39,000 million gallons, and the area of the catchment is 245 square miles. Canning Reservoir, with an estimated catchment area of 302 square miles, has a storage capacity of 20,550 million gallons retained by a concrete wall 218 feet high and 1,534 feet long at the crest. Water from storages on the Darling Range is conveyed to service reservoirs to serve the City of Perth and the metropolitan area. A limited quantity of water is drawn from Mundaring Weir to serve the Kalamunda area and sections of Greenmount, and to meet the peak demands of summer consumption supplies are supplemented from artesian bores, which can provide a daily maximum of 15 million gallons. The amount of bore water used is rarely more than 10 per cent of the metropolitan consumption and is usually considerably less.

The following table shows particulars of the *metropolitan water supply services* for 1961-62 to 1965-66.

**METROPOLITAN WATER SUPPLY, WESTERN AUSTRALIA
SERVICES, 1961-62 TO 1965-66**

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. gals	mill. gals	gallons	miles	
1961-62 . . .	137,960	50.6	18,492	373	2,179	116,610
1962-63 . . .	142,246	47.1	17,214	336	2,278	123,364
1963-64 . . .	149,033	53.2	19,454	362	2,411	130,480
1964-65 . . .	154,051	55.7	20,339	367	2,526	135,471
1965-66 . . .	158,675	59.5	21,707	375	2,654	139,435

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

Water rating for 1965-66 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 1961-62 to 1965-66 are shown in the following table.

**METROPOLITAN SEWERAGE AND MAIN DRAINAGE
WESTERN AUSTRALIA: SERVICES
1961-62 TO 1965-66**

Year	Services	Length of sewers	Length of main drains
		miles	miles
1961-62 . . .	67,378	736	77
1962-63 . . .	68,223	751	81
1963-64 . . .	68,958	769	94
1964-65 . . .	69,553	777	100
1965-66 . . .	70,283	816	102

Sewerage rating for 1965-66 was 8.75 cents in the \$ on annual valuation, while metropolitan main drainage rating was 1.66 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, 1961-62 TO 1965-66
(\$'000)**

Service and year	Capital cost to 30 June	Revenue	Expenditure			Surplus (+) or deficit (-)
			Working expenses	Interest and debt redemption	Total	
Water supply—						
1961-62 . . .	44,312	3,607	1,545	1,976	3,521	+ 85
1962-63 . . .	48,489	3,705	1,505	2,175	3,680	+ 25
1963-64 . . .	51,482	4,175	1,583	2,502	4,084	+ 91
1964-65 . . .	54,334	4,370	1,653	2,641	4,294	+ 76
1965-66 . . .	58,336	4,861	1,815	3,018	4,833	+ 28
Sewerage—						
1961-62 . . .	16,603	1,877	1,050	893	1,944	- 67
1962-63 . . .	18,119	2,261	1,102	1,019	2,120	+ 141
1963-64 . . .	19,851	2,323	1,214	1,015	2,229	+ 93
1964-65 . . .	22,050	2,426	1,272	1,053	2,325	+ 101
1965-66 . . .	24,243	2,823	1,336	1,176	2,512	+ 310
Main drainage—						
1961-62 . . .	3,950	240	126	181	307	- 66
1962-63 . . .	4,383	296	151	200	351	- 54
1963-64 . . .	4,998	310	153	217	370	- 60
1964-65 . . .	5,641	342	191	238	429	- 87
1965-66 . . .	6,344	418	245	275	520	- 102

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

Tasmania

Waterworks. At the end of 1965-66 there were 96 municipally operated waterworks in Tasmania. The capacity of the reservoirs was approximately 2,500 million gallons, the estimated population served was 306,000, and the number of properties served was approximately 98,000.

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 overall control of water supply in the greater Hobart area, comprising the municipalities of Hobart, Clarence, Glenorchy, and Kingborough, is vested in the Metropolitan Water Board, but the municipalities retain primary responsibility for reticulation. The Board has constructed a large bulk supply at Bryn Estyn, near New Norfolk, which supplies bulk water from the Derwent River to the metropolitan area and has a pipeline capacity of 20 million gallons a day. In addition, the Board also controls the Southern Regional Water Supply Scheme, which supplies water to Hobart's eastern shore. In addition to supplying the metropolitan area, the Board extended its service to supply the towns of Cambridge, Midway Point, Sorell, and Seven Mile Beach, and it is planned to take it to the towns of Rokeby, Lauderdale, Margate, Snug, and Howden in due course. The Board has at present under construction a storage at Risdon Brook with a capacity of 800 million gallons and estimated to cost \$2½ million. This work is expected to be completed during 1967-68.

Sewerage. At the end of 1965-66 there were 22 municipal sewerage schemes in operation in Tasmania. They served an estimated population of 204,000 and the number of tenements served was approximately 55,300.

Northern Territory

Information relating to water supply in the Northern Territory may be found in the chapter *Water Conservation and Irrigation*.

Australian Capital Territory

The water supply, sewerage and drainage systems in the Australian Capital Territory are under the control of the Commonwealth Department of Works. The sources of the water supply are: Cotter Dam (capacity 967 million gallons) and Bendora Dam (2,360 million gallons). Eight pumps are capable of pumping approximately 31.6 million gallons daily to 12 major reservoirs. The total population served in the Australian Capital Territory, which during 1965-66 consumed 4,804 million gallons of water, was 95,290 (at 30 June 1966). In addition, the Canberra water supply system supplied 356 million gallons of water to Queanbeyan, New South Wales. The total number of water meters at 30 June 1966 was 23,043 and the total length of water lines was 425 miles. The sewerage system for Canberra and suburbs consists of a treatment works, 345 miles of sewerage reticulation, and 6½ miles of rising mains (at 30 June 1966). There were also 361 miles of stormwater sewers.

Harbour boards and trusts

The number and net tonnage of vessels which entered the major ports in each State during the years 1964-65 and 1965-66 are shown in Chapter 13, *Transport, Communication, etc.* (see page 432). Particulars of overseas and interstate cargo discharged and shipped are shown on page 433 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, 1961-62 TO 1965-66**
(\$'000)

Year	Revenue				Expenditure(a)			Surplus
	Wharfage and transhipment rates	Tonnage rates and berthing charges	Other charges	Total	Administration and maintenance	Interest, debt redemption, exchange, etc.	Total	
1961-62 .	9,308	1,399	2,585	13,293	7,513	5,714	13,228	65
1962-63 .	9,693	1,581	2,438	13,712	7,543	6,056	13,599	113
1963-64 .	10,838	1,755	2,933	15,526	7,864	7,567	15,431	95
1964-65 .	11,594	1,858	3,565	17,017	9,109	7,835	16,945	72
1965-66 .	10,711	1,832	3,980	16,523	9,512	6,916	16,428	95

(a) Excludes capital expenditure but includes transfers to the Renewals Fund Reserve Account (\$2,750,000 in 1961-62, \$3,091,000 in 1962-63, \$4,778,000 in 1963-64, \$5,080,000 in 1964-65, and \$3,060,000 in 1965-66).

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 42 feet deep (low water ordinary spring tide) and the Eastern Channel 42 feet deep. The foreshores, which have been reduced by reclamations, are 152 miles in length, and the total area of the port is 13,600 acres, or 21 square miles, of which about one-half has a depth of 30 feet or more at low water ordinary spring tide. The mean range of tides is 3 feet 6 inches.

The wharves are situated close to the business centre of the city, about four or five miles from the Heads. At 30 June 1966 there were 5 dolphin berths 3,350 feet long, and 88 effective commercial cargo berths with a total length of 45,565 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 23,961 feet. Depth of water at wharves is up to 36 feet. Special facilities for the storage and handling of products such as wheat, wool, coal, etc. are provided, and modern plant has been installed for replenishing ships' bunkers with oil or coal. Docking facilities are available for large vessels and the Captain Cook Graving Dock ranks among the largest graving docks in the world, being 1,139 feet by 147 feet 7½ inches with a depth of 45 feet 2 inches over the sill at high water. There are also several smaller dry docks and floating docks in the port.

Port of Newcastle. As from 1 May 1961 the Maritime Services Board of New South Wales became the single authority for the port of Newcastle. An Advisory Committee consisting of eight members, appointed by the Governor, assists the Board in matters associated with the operation of the port. It is primarily a coal-loading port, and the proximity to the coal fields has led to the establishment of important industries, including iron and steel works, in the district. Facilities are available for the shipment of wool, wheat and frozen meat, and a wharf is available for timber.

The area used by shipping is about 570 acres, excluding the entrance to the harbour and the inner basin, which together cover an area of 162 acres. The width of the harbour at the entrance is 1,200 feet, and the navigable channel, with a depth of 30 feet at low water, is 500 feet wide. Work is now in hand to increase the depth to 36 feet. Wharfage accommodation amounts to approximately 16,000 feet, including about 3,000 feet of privately owned wharfage. There are also two dolphin berths available for tie-up purposes. A floating dock of 15,000 tons capacity is available at the port.

Botany Bay. The Maritime Services Board of New South Wales is the administrative and controlling authority. The port is primarily a discharging centre for the oil refinery at Kurnell, near Sydney, and two berths are available as well as tanker mooring buoys. The entrance to the Bay is approximately one and a quarter miles wide, with a minimum depth of about 37 feet in the dredged swinging basin.

Port Kembla. As from 3 May 1948 the Maritime Services Board assumed the administration and navigational control of Port Kembla, which had previously been administered by the New South Wales Department of Public Works. This Department, however, continues to be the constructing authority in respect of works, dredging and maintenance. An Advisory Committee consisting of nine members, appointed by the Governor, has been formed to assist the Board in the operation of the port. It has an area of approximately 340 acres, with depths ranging from 20 to 50 feet (low water ordinary spring tide), and wharfage accommodation totalling

8,000 feet has been provided for large ocean-going vessels. No cargo sheds are available, as the nature of trade at the port does not call for the provision of sheltered storage accommodation at the berths. It is the port of the southern coalfields and for the expanding industrial area in and about Wollongong. The developmental programme for Port Kembla includes the construction of an inner harbour to provide wharfage for the steelworks in addition to modern general cargo berths; a coal loading plant capable of loading at the rate of 2,000 tons an hour is now available. Present accommodation is 1,900 feet of wharfage, with 36 feet (an 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 \$22,592,000 in 1965-66. This figure includes the revenue for the ports of Sydney, Newcastle and Botany Bay (see table on page 868) and State navigation service collections, \$6,069,000 in 1965-66.

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 now 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 the general cargo trade and have both rail and crane facilities and modern amenities for port workers. 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.

During 1965 major reconstruction and modernisation of several cargo berths in the Port including 1-4 Victoria Dock and 19 South Wharf was concluded. Construction of a new shipping control centre seventy-four feet above ground level, with radar and visual observation of the entire port area, was continued. The specifications and design for the construction of a 250-ton dual purpose floating crane were finalised and tenders called for the building of the crane. A modernisation programme costing \$720,000 was undertaken on the main overseas passenger terminal at Station Pier. 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, 1962 TO 1966

(\$'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	
1962 . .	29,750	4,883	7,958	5,170	1,793	969	7,932	+ 26
1963 . .	29,835	5,459	8,969	5,391	1,918	1,546	8,855	+114
1964 . .	29,773	7,145	11,312	6,687	2,632	1,812	11,131	+181
1965 . .	30,473	7,058	11,434	6,451	2,393	2,382	11,226	+208
1966 . .	32,229	6,393	10,695	6,235	1,712	2,583	10,530	+165

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 1966 there were 18 effective berths in the port, plus 2 berths at the Commonwealth Explosives Pier, Point Wilson, owned and operated by the Commonwealth. Point Henry Pier, a 4,000 feet alumina discharging structure, was officially opened on 13 April 1966, and Corio Quay South No. 1, a new general cargo and meat loading berth, came into operation in February 1967. The construction of a modern dry bulk berth with an initial discharge rate of 1,000 tons an hour will commence 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. Eight berths have a depth of 36 feet at low water, while 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 1965 was \$3,224,548 and expenditure from revenue totalled \$1,978,528. At 31 December 1965 the value of the Trust's fixed assets was \$22,936,336 and loans outstanding amounted to \$7,683,070.

Portland Harbor Trust. Construction of an all-weather deep-sea port of three berths with a low water depth of 36 feet was completed to operational standards in 1960. A new oil tanker berth was brought into commission during 1963, from which petroleum products are pumped to bulk terminals at North Portland, and the completion of a bulk grain terminal now provides in-transit storage for one and a quarter million bushels of grain awaiting overseas shipment. Cargo vessels loading or discharging cargo during 1965-66 financial year showed an increase of 10 vessels over the previous year's figure. The current construction programme of a new bulk shipping berth will comprise the first stage of development of No. 2 Quay. Timed for completion in mid-1968, No. 6 Berth has been designed primarily for the discharge of phosphate rock and other chemicals. Operating revenue for the year ended 30 June 1966 was \$322,776 and revenue expenditure was \$267,116. The value of the Trust's fixed assets, less depreciation, was \$16,697,089 at 30 June 1966, and loans and advances outstanding amounted to \$17,109,875.

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 1960-61 to 1964-65 are shown below.

BRISBANE HARBOUR: FINANCES, 1960-61 TO 1964-65
(*\$'000*)

Year	Loan indebtedness at 30 June	Receipts		Payments	
		Harbour dues	Total	Working expenses(a)	Total
1960-61	5,627	1,525	2,327	1,357	1,801
1961-62	5,431	1,485	2,168	1,256	1,698
1962-63	5,296	1,640	2,514	1,774	2,146
1963-64	5,032	1,859	2,500	3,346	3,837
1964-65	4,912	2,125	2,796	2,305	2,646

(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 1965 are shown below, together with a summary for the years ended 30 June 1961 to 1965.

HARBOUR BOARDS, QUEENSLAND: FINANCES, 1960-61 TO 1964-65
(\$'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	532	20	25	21	29	- 4
Bundaberg	6,328	475	1,789	197	1,798	- 9
Cairns	7,062	498	1,087	316	1,024	+ 63
Gladstone	4,470	216	706	67	625	+ 82
Mackay	4,162	453	1,404	317	1,288	+116
Rockhampton	2,599	81	105	51	126	- 21
Townsville	8,671	670	1,221	429	1,281	- 60
Total, 1964-65 . .	33,824	2,412	6,337	1,398	6,169	+168
1963-64	28,369	2,329	5,419	1,362	5,402	+ 17
1962-63	22,619	2,179	4,119	1,203	3,731	+388
1961-62	19,682	1,883	3,571	997	3,248	+322
1960-61	18,791	1,724	3,366	1,095	3,251	+116

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

South Australia

The South Australian Harbors Board. All South Australian harbours are controlled by the South Australian Harbors Board, which consists of three commissioners appointed by the Governor for a period of five years and eligible for re-appointment. The Board 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. At a few ports the wharves or jetties are privately controlled, the principal of these being at Whyalla, Ardrossan and Rapid Bay, all of which are controlled by the Broken Hill Pty. Co. Ltd. Port Augusta is controlled by the Commonwealth Railways on behalf of the Commonwealth Government. 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 (Outer Harbor). The following table shows the finances of the Board for 1961-62 to 1965-66.

THE SOUTH AUSTRALIAN HARBORS BOARD: FINANCES
1961-62 TO 1965-66
(\$'000)

Year	Capital at 30 June (a)	Revenue	Expenditure from revenue			Surplus
			Working expenses	Interest	Total	
1961-62	37,112	5,153	3,353	1,402	4,755	399
1962-63	38,968	5,098	3,344	1,531	4,876	222
1963-64	40,996	6,114	3,591	1,581	5,172	942
1964-65	42,474	6,201	3,908	1,679	5,587	614
1965-66	44,316	6,194	3,941	1,734	5,675	519

(a) State Treasurer's funds and reserve employed.

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 703,850 square feet of covered storage space and 11,148 feet of wharf

berth accommodation. All inner harbour berths are dredged to a low water depth of 36 feet. The outer harbour includes 3 main anchorages, Gage Roads, Owen Anchorage and Cockburn Sound. Deep-water jetties, including the oil refinery jetty in Cockburn Sound, are available in the outer harbour. Ocean-going deep draft ships enter the Sound by means of a channel dredged through Success and Parmelia Banks to a low water depth of 38 feet and a bottom width of 500 feet. In the outer harbour there are 3 tanker berths each with a low water depth of 44 feet at the Kwinana oil refinery, 1 berth at the nearby steelworks jetty with a low water depth of 30 feet, and 1 berth at the alumina works jetty with a low water depth of 40 feet. There is also a special berth for the handling of explosives. Gross earnings for 1965-66 amounted to \$7,870,126, working expenses to \$6,040,556, interest charges on loan capital \$742,502, sinking fund contributions \$200,964, and capital and other funds employed totalled \$18,649,104.

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 1965-66 amounted to \$402,635, working expenses \$145,555, interest and sinking fund charges \$209,381, and capital account totalled \$3,738,945.

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 1965-66 amounted to \$624,465, working expenses \$233,528, interest on loan capital \$294,857, and capital account totalled \$6,725,951.

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 Yampie and Dampier, both operated by iron ore mining companies, and Exmouth, the port serving the communications installation at North West Cape. Lighter facilities at Barrow Island are operated by a private organisation currently developing a petroleum oil field.

Tasmania

There are 8 marine boards and 1 harbour trust in Tasmania. The marine boards control the ports of Hobart, Launceston, Stanley (Circular Head), Burnie and Wynyard (Table Cape), Devonport and Ulverstone, Strahan, Currie (King Island), and Whitemark (Flinders Island), and the harbour trust controls the port of Smithton. Hobart, Launceston, Burnie, and Devonport are the principal ports of Tasmania. In addition to their interstate and intra-state traffic, there is also considerable overseas shipping. Depths of water at wharves vary, in general, between 16 and 40 feet.

MARINE BOARDS AND HARBOUR TRUST, TASMANIA: FINANCES, 1964-65 AND 1965-66 (\$'000)

Authority	Loan indebtedness at 30 June (a)	Receipts (revenue account)		Expenditure (revenue account)		Surplus (+) or deficit (-)
		Wharfage charges	Total	Loan charges	Total	
Hobart . . .	2,645	806	1,560	326	1,168	+392
Launceston . . .	2,892	630	1,781	242	1,632	+149
Devonport . . .	4,142	526	823	354	932	-109
Burnie . . .	8,767	626	1,241	550	1,284	-43
Circular Head . . .	168	11	28	19	32	-4
King Island . . .	95	35	54	7	43	+11
Strahan . . .	27	25	36	4	46	-10
Flinders Island . . .	3	15	17	2	8	+9
Smithton . . .	..	..	1	..	2	-1
Total, 1965-66 . . .	18,739	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 1965-66 was \$2,055,000, of which Launceston raised \$200,000, Devonport \$400,000, Burnie \$1,400,000, King Island \$18,000, and Circular Head \$37,000.

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, 1909-1958, and 158 fire districts had been constituted at the end of 1965. 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 1965 the actual strength of the Fire Brigade throughout the fire districts of New South Wales was 422 officers and 1,290 permanent and 2,656 volunteer firemen. Corresponding figures for the Sydney Fire District were 344, 1,145 and 322. The revenue for the year 1965 was \$8,456,000, made up as follows: from the Government, \$1,044,000; municipal and shires, \$1,044,000; fire insurance companies and firms, \$6,263,000; and from other sources, \$104,000. The disbursements for the year were \$8,196,000. 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, 1949-1963 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 1966 Volunteer Brigades equipped by means of this fund numbered 2,500 with an active membership of about 150,000 persons. The approved expenditure from the Fund for equipment, up to 30 June 1967, amounted to \$7,982,000.

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 1966 the Board had under its control 44 stations, 1,088 permanent staff, 229 special service and clerical, etc. staff, and 14 part-time firemen. The total receipts for 1965-66 were \$5,519,192, comprising contributions \$4,707,900, receipts for services \$510,126, and interest and sundries \$301,166. The expenditure was \$5,733,753.

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 1966 the Country Fire Authority Act applied to 192 insurance companies and 206 urban and 1,048 rural fire brigades. The effective registered strength of the brigades was 112,984 members. Income for the year 1965-66 amounted to \$2,140,287. Total expenditure other than loan amounted to \$1,957,905.

Queensland

Fire districts are constituted under the Act of 1964. 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-seventh, insurance companies five-sevenths, and local authorities one-seventh. The insurance companies' contribution is paid to the State Government and thence to fire brigades.

At 30 June 1965 there were 84 Fire Brigade Boards. The number of stations was 162 and full-time staff numbered 968, including 25 administrative, 223 officers and 720 firemen. Volunteers numbered 72. Part-time staff numbered 1,259, including 85 administrative, 131 officers and 1,043 firemen. The total revenue for the year 1964-65 was \$3,681,990, received mainly from the following sources: Government \$496,496, local authorities \$496,496, insurance companies \$2,482,542. Loan receipts (Government and other) were \$707,732. The total expenditure for the year was \$3,728,936, the chief items being salaries and wages \$2,571,958, and interest and redemption of loans \$431,448.

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 \$26,000, the excess is borne five-sevenths by insurance companies and two-sevenths by the municipalities. At 30 June 1966 there were altogether 37 fire brigade stations, of which 13 were metropolitan and 24 country.

The strength of the permanent staff at 30 June 1966 was 460, including 337 officers and men, 89 country auxiliary firemen and 34 other employees (including maintenance workers). The total revenue for the year 1965-66 was \$1,430,746, including contributions of \$1,208,574 made up as follows: insurance companies \$727,159, Treasury \$190,552 and municipalities \$290,863. The Treasury contribution includes a special grant of \$164,292.

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 52 fire districts at 30 September 1966. The contribution to the Board is made in the proportion of 16 per cent from the Government, 20 per cent from local government authorities, and 64 per cent from insurance companies. The number of local government authorities and insurance companies who contributed numbered 74 and 164 respectively. The brigades throughout the State controlled by the Western Australian Fire Brigades Board at 30 September 1966 numbered 71, with a staff of 1,628, including 315 permanent officers and firemen and 1,313 volunteer brigade officers and firemen. The revenue for the year ended 30 September 1966 was \$1,732,357 and the expenditure \$1,680,266.

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 2,065 at 30 June 1966, and the establishment of bush fire brigades, 871 at 30 June 1966. Many individual brigades are large organisations with numerous self-contained sections.

Tasmania

The *Fire Brigades Act 1945* provided for the creation of the Fire Brigades Commission of Tasmania to co-ordinate the activities of existing fire brigade boards, while leaving the responsibility for individual control and management with the boards. The Commission consists of two persons nominated by the Minister, one person elected by the City or Municipal Councils' representatives and three persons elected by the insurance representatives of the Fire Brigades Boards. Contributions towards the cost of operations are on the basis of one-quarter each from the treasury and the municipalities and one-half from the insurance companies concerned. The cost for the year 1965-66 amounted to \$540,269. There were, at 30 June 1966, 23 boards controlling 35 stations, and their aggregate staffs numbered 570 (officers and firemen), including 134 permanent firemen, 366 part-time firemen and 70 volunteers; the volunteers all operate under the Hobart Board in the forested and mountainous Fern Tree area.