

## CHAPTER XIX

### LOCAL GOVERNMENT

**NOTE.**—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.

#### § 1. Introduction

**1. 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, practically the whole of Australia comes within local government jurisdiction.

The financial statistics in § 2 following 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.

**2. 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 §§ 3 to 7, 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.

3. **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 in § 4 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 in paragraph 10 of that section. In § 2, some information is given of the revenue and expenditure of local government authorities in respect of roads.

4. **Water Supply and Sewerage.**—In the cities of Sydney and Melbourne, the control of water supply and sewerage is in the hands of special boards, while in Adelaide and Perth these services are under the direct supervision of government departments. 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.

5. **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.

6. **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.

## § 2. Local Government Authorities

1. **New South Wales.**—For purposes of local government, the whole of the Eastern and Central land divisions and a small portion 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 1961, 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, sewerage. At 31st December, 1961, there were 58 county councils, including the Sydney County Council.

2. **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*.

3. **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* 1902 and its amendments.

4. **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.

5. **Western Australia.**—Local government is established throughout the State, the divisions being cities, towns and shires.

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

7. *Area, Population, Dwellings and Value of Ratable Property*.—The area, population, dwellings and value of ratable property in the incorporated areas of each State are shown for the year 1960-61 in the following table. The valuations relate to ratable property only and exclude government and other non-ratable property, whose value in the aggregate is considerable. 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.

**LOCAL GOVERNMENT AUTHORITIES: AREA, POPULATION, DWELLINGS AND VALUE OF RATABLE PROPERTY, 1960-61**

Location	Num- ber	Area  '000 acres	Popula- tion  '000 (a)	Dwellings		Value of ratable property		
				Occu- pied	Unoccu- pied	Unim- proved capital value	Im- proved capital value	Annual value
				No. (a)	No. (a)	£'000	£'000	£'000
NEW SOUTH WALES(b)								
Metropolitan— Capital City .. ..	1	7	172	48,599	2,311	167,672	484,768	26,006
Other .. ..	34	702	2,051	570,916	22,825	746,902	2,449,538	144,632
Outside Metropolitan Area	190	173,648	1,691	441,537	47,267	568,654	(c)	(c)
Total .. ..	225	174,357	3,914	1,061,052	72,403	1,483,228	(c)	(c)
VICTORIA(d)								
Metropolitan— Capital City .. ..	1	8	77	18,971	740	(c)	278,773	13,938
Other .. ..	43	715	1,837	505,637	16,093	(c)	1,588,089	80,825
Outside Metropolitan Area(e)	164	55,387	1,006	264,769	30,469	(c)	1,171,124	58,611
Total .. ..	208	56,110	2,920	789,377	47,302	(c)	3,037,986	153,374
QUEENSLAND(f)								
Capital City .. ..	1	246	594	160,588	5,441	70,838	(c)	(c)
Other(g) .. ..	130	425,980	918	236,845	28,544	249,526	(c)	(c)
Total .. ..	131	426,226	1,512	397,433	33,985	320,364	(c)	(c)
SOUTH AUSTRALIA(f)								
Metropolitan— Capital City .. ..	1	4	23	5,846	437	60,639	120,000	5,988
Other .. ..	20	100	567	158,054	5,157	(c)	456,000	22,796
Outside Metropolitan Area	121	36,867	365	95,205	11,208	(c)	415,000	20,773
Total .. ..	142	36,971	955	259,105	16,802	(c)	991,000	49,557
WESTERN AUSTRALIA(h)								
Metropolitan— Capital City .. ..	1	15	95	26,845	1,001	2,052	(c)	6,011
Other .. ..	18	107	325	88,003	2,686	44,447	(c)	3,142
Outside Metropolitan Area	126	624,466	314	79,469	9,939	62,974	(c)	1,776
Total .. ..	145	624,588	734	194,317	13,626	109,473	(c)	10,929

NOTE.—See next page for footnotes.

**LOCAL GOVERNMENT AUTHORITIES: AREA, POPULATION, DWELLINGS  
AND VALUE OF RATABLE PROPERTY, 1960-61—continued**

Location	Num- ber	Area	Popula- tion	Dwellings		Value of ratable property		
				Occu- pied	Unoccu- pied	Unim- proved capital value	Im- proved capital value	Annual value
				'000 acres	'000 (a)	No. (a)	No. (a)	£'000
TASMANIA(f)								
Metropolitan— Capital City .. ..	1	18	54	15,281	507	22,223	65,084	4,369
Other .. ..	2	99	59	14,483	795	10,398	42,908	2,361
Outside Metropolitan Area	46	16,661	237	61,494	7,280	60,344	203,148	13,293
Total .. ..	49	16,778	350	91,258	8,582	92,965	311,140	20,023

(a) Particulars of population and dwellings as at Census 30th June, 1961. (b) Year ended 31st December, 1960. (c) Not available. (d) Year ended 30th September, 1961. (e) Excludes Yallourn Works Area under the jurisdiction of the State Electricity Commission. (f) Year ended 30th June, 1961. (g) Includes City of Redcliffe and that part of Pine Rivers Shire within the Metropolitan Area of Brisbane but outside the Brisbane City area. (h) Municipalities—year ended 31st October, 1961; Road Districts—year ended 30th June, 1961.

8. **Finances.**—(i) *General.* The following tables show the latest available financial statistics for local government authorities. The figures relate to the year 1960-61 except for New South Wales, where they relate to the year 1960. For further detail on local government finances, see *Finance, Part I.—Public and Private Finance*, Bulletin No. 52, 1960-61, issued by this Bureau.

(ii) *Ordinary Services.* In the returns of revenue and expenditure for 1960-61 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, 1960-61**

Particulars	N.S.W. (a)	Vic. (b)	Q'land (c)	S. Aust. (c)	W. Aust. (d)	Tas. (e)	Total
Number of local government authorities ..	225	208	131	142	145	49	900

**REVENUE (EXCLUDING LOAN RECEIPTS) (£'000)**

Taxation—							
Rates (net) ..	38,609	24,156	15,182	6,538	4,168	2,399	91,052
Penalties ..	323	100	..	..	..	..	423
Licences ..	828	193	149	86	154	30	1,440
Total ..	39,760	24,449	15,331	6,624	4,322	2,429	92,915
Public Works and Services—							
Sanitary and Garbage Services	3,741	1,681	2,458	45	512	221	8,658
Council Properties	3,403	(e) 4,667	678	528	1,148	288	10,712
Street Construction ..	2,198	1,819	..	1,260	360	24	5,661
Other ..	4,073	806	318	158	62	184	5,601
Total ..	13,415	8,973	3,454	1,991	2,082	717	30,632
Government Grants—							
Roads ..	12,974	244	2,413	(f) 3,112	1,541	410	20,694
Other ..	1,475	1,221	685	86	1,969	44	5,480
Total ..	14,449	1,465	3,098	3,198	3,510	454	26,174
Profits from Business Undertakings ..	..	356	..	..	49	..	405
Fees and Fines ..	..	222	..	77	56	..	6,075
All Others ..	..	371	(g) 4,815	..	335	199	..
Total Revenue ..	67,624	35,836	26,698	11,890	10,354	3,799	156,201

See next page for footnotes.

**LOCAL GOVERNMENT AUTHORITIES: ORDINARY SERVICES—REVENUE AND EXPENDITURE, 1960-61—continued**

Particulars	N.S.W. (a)	Vic. (b)	Q'land (c)	S. Aust. (c)	W. Aust. (d)	Tas. (c)	Total
<b>EXPENDITURE (EXCLUDING LOAN EXPENDITURE) (£'000)</b>							
General Administration ..	4,391	5,079	2,602	1,101	1,228	440	14,841
Debt Services (excluding Business Undertakings)—							
Interest ..	2,239	1,647	2,222	301	582	193	7,184
Redemption ..	4,246	2,119	3,108	570	1,022	330	11,395
Exchange ..	20	..	116	..	..	..	136
Other ..	..	26	41	..	..	..	67
<b>Total ..</b>	<b>6,505</b>	<b>3,792</b>	<b>5,487</b>	<b>871</b>	<b>1,604</b>	<b>523</b>	<b>18,782</b>
Public Works and Services—							
Roads, Streets and Bridges ..	32,186	12,102	8,183	7,781	2,854	1,675	64,781
Health Administration ..	1,787	419	2,922	238	294	88	15,559
Sanitary and Garbage Services ..	5,143	3,567		388	585	128	
Street Lighting ..	1,437	717	402	263	160	111	3,090
Council Properties ..	8,906	(h) 7,125	3,410	1,065	3,207	515	24,228
Other ..	3,123	885	185	153	69	50	4,465
<b>Total ..</b>	<b>52,582</b>	<b>24,815</b>	<b>15,102</b>	<b>9,888</b>	<b>7,169</b>	<b>2,567</b>	<b>112,123</b>
Grants—							
Fire Brigades ..	352	560	185	122	125	45	1,389
Hospitals and Ambulances ..	231	118	..	236	7	..	592
Other Charities ..							
Other ..	(f) 1,651	(j) 1,498	624	34	32	33	3,872
<b>Total ..</b>	<b>2,234</b>	<b>2,176</b>	<b>809</b>	<b>392</b>	<b>164</b>	<b>78</b>	<b>5,853</b>
All Other ..	2,250	551	(k) 3,217	..	265	228	6,511
<b>Total Expenditure</b>	<b>67,962</b>	<b>36,413</b>	<b>27,217</b>	<b>12,252</b>	<b>10,430</b>	<b>3,836</b>	<b>158,110</b>

(a) Figures for New South Wales relate to the year ended 31st December, 1960, and are on an income and expenditure basis as distinct from those of other States which are on a cash basis. (b) Year ended 30th September, 1961. (c) Year ended 30th June, 1961. (d) Municipalities—year ended 31st October, 1961; Road Districts—year ended 30th June, 1961. (e) Includes £2,187,000 plant hire. (f) Includes £1,436,000 reimbursement from Highways Department. (g) Includes the following reimbursements: £1,565,000 from Main Roads Department, £460,000 from other State Government Departments and £1,127,000 from other sources. (h) Includes £1,374,000 plant and equipment. (i) To Main Roads Department. (j) Includes £775,000 to Country Roads Board. (k) Includes expenditure on work done for re-imbursement: for Main Roads Department £1,564,000; for other State Government Departments £479,000; other £1,066,000.

**LOCAL GOVERNMENT AUTHORITIES: ORDINARY SERVICES—REVENUE AND EXPENDITURE (£'000)**

Year.	N.S.W.(a)	Vic.(b)	Q'land(c)	S. Aust.(c)	W. Aust.(d)	Tas.(c)	Total
<b>REVENUE (EXCLUDING LOAN RECEIPTS)</b>							
1957 ..	45,570	24,840	19,623	8,694	7,404	2,721	108,852
1958 ..	52,440	26,742	21,654	9,313	7,966	2,848	120,963
1959 ..	55,946	29,456	23,618	9,977	8,544	3,147	130,688
1960 ..	61,024	32,864	25,593	10,667	9,437	3,404	142,989
1961 ..	67,624	35,836	26,698	11,890	10,354	3,799	156,201
<b>EXPENDITURE (EXCLUDING LOAN EXPENDITURE)</b>							
1957 ..	46,403	25,299	19,503	8,921	7,232	2,697	110,055
1958 ..	50,510	27,210	20,870	9,115	7,751	2,828	118,284
1959 ..	54,024	29,332	23,184	10,024	8,343	3,149	128,056
1960 ..	58,511	32,295	25,631	10,898	9,364	3,410	140,109
1961 ..	67,962	36,413	27,217	12,252	10,430	3,836	158,110

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

(iii) *Business Undertakings.* The tables hereunder show, for 1960-61, particulars of the revenue and expenditure, other than loan, of business undertakings under the control of the local government authorities. These particulars are not included in the foregoing tables.

**LOCAL GOVERNMENT AUTHORITIES: BUSINESS UNDERTAKINGS—REVENUE  
AND EXPENDITURE, 1960-61  
(£'000)**

Particulars	N.S.W. (a)	Vic. (b)	Q'land (c)	S. Aust. (c)	W. Aust. (d)	Tas. (c)	Total
<b>REVENUE (EXCLUDING LOAN RECEIPTS)</b>							
Water Supply and Sewerage—							
Rates .. .. .	3,159	365	2,177	..	6	1,048	6,755
Charges for Services and							
Sales of Products ..	948	..	2,136	2	28	188	3,302
Other (including Grants) ..	(e) 892	12	444	..	3	219	1,570
Total .. .. .	4,999	377	4,757	2	37	1,455	11,627
Electricity and Gas—							
Rates .. .. .	450	..	5	..	..	..	455
Charges for Services and							
Sales of Products ..	69,068	15,341	7,076	508	764	..	92,757
Other (including Grants) ..	1,918	235	165	29	3	..	2,350
Total .. .. .	71,436	15,576	7,246	537	767	..	95,562
Railways, Tramways and							
Omnibuses—							
Charges for Services and							
Sales of Products ..	..	..	3,701	..	..	..	3,701
Other (including Grants) ..	..	..	146	..	..	..	146
Total .. .. .	..	..	3,847	..	..	..	3,847
Other—							
Rates .. .. .	(f) 13	(g) ..	(h) 11	(i) ..	(j) 61	(k) ..	85
Charges for Services and							
Sales of Products ..	3,730	906	313	81	61	179	5,270
Other (including Grants) ..	98	25	8	8	14	1	154
Total .. .. .	3,841	931	332	89	136	180	5,509
Grand Total .. ..	80,276	16,884	16,182	628	940	1,635	116,545
<b>EXPENDITURE (EXCLUDING LOAN EXPENDITURE)</b>							
Water Supply and Sewerage—							
Working Expenses .. ..	2,156	297	2,185	3	17	680	5,338
Depreciation .. .. .	(l) -180	18	..	..	..	..	-162
Debt Charges .. .. .	1,861	47	2,029	..	17	682	4,636
Other (including Transfers							
to General Revenue and							
Construction) .. .. .	..	11	679	..	..	111	801
Total .. .. .	3,837	373	4,893	3	34	1,473	10,613
Electricity and Gas—							
Working Expenses .. ..	61,071	13,893	4,491	467	595	..	80,517
Depreciation .. .. .	(l) 1,130	437	..	..	66	..	1,633
Debt Charges .. .. .	7,817	486	2,175	42	74	..	10,594
Other (including Transfers							
to General Revenue and							
Construction) .. .. .	..	603	632	43	49	..	1,327
Total .. .. .	70,018	15,419	7,298	552	784	..	94,071
Railways, Tramways and							
Omnibuses—							
Working Expenses .. ..	..	..	3,910	..	..	..	3,910
Debt Charges .. .. .	..	..	347	..	..	..	347
Other (including Transfers							
to General Revenue and							
Construction) .. .. .	..	..	212	..	..	..	212
Total .. .. .	..	..	4,469	..	..	..	4,469
Other—							
Working Expenses .. ..	(f) 3,558	(g) 760	(h) 142	(i) 66	(j) 30	(k) 110	4,686
Depreciation .. .. .	41	47	..	..	..	..	88
Debt Charges .. .. .	131	75	14	..	1	21	242
Other (including Transfers							
to General Revenue and							
Construction) .. .. .	..	58	501	..	78	22	659
Total .. .. .	3,730	940	657	66	129	153	5,675
Grand Total .. ..	77,585	16,732	17,317	621	947	1,626	114,828

(a) Year ended 31st December, 1960. (b) Year ended 30th September, 1961. (c) Year ended 30th June, 1961. (d) Municipalities—year ended 31st October, 1961; Road Districts—year ended 30th June, 1961. (e) Includes Government grant, £531,000, for part of cost of new works borne by Government. (f) Abattoirs and production of building materials. (g) Abattoirs, hydraulic power undertakings, quarries and iceworks. (h) Off-street car parking, municipal markets, amusement parks, hotels, and cinemas. (i) Quarries and hospitals. (j) Quarries, abattoirs and vermin control. (k) Abattoirs. (l) Net balance after deducting charge for debt redemption. The full amount of charge for debt redemption is included under debt charges.

NOTE.—Minus sign (—) indicates an excess of credits.

The next table shows the revenue and expenditure, other than loan, of local government business undertakings for the years 1956-57 to 1960-61.

### LOCAL GOVERNMENT AUTHORITIES: BUSINESS UNDERTAKINGS—REVENUE AND EXPENDITURE

(£'000)

Year	N.S.W.(a)	Victoria(b)	Q'land(c)	S. Aust.(c)	W. Aust.(d)	Tas.(c)	Total
REVENUE (EXCLUDING LOAN RECEIPTS)							
1957 ..	55,392	11,462	12,651	527	644	988	81,664
1958 ..	61,526	13,021	13,175	548	702	1,151	90,123
1959 ..	66,378	15,242	14,113	563	771	1,272	98,339
1960 ..	72,790	16,505	15,329	601	896	1,487	107,608
1961 ..	80,276	16,884	16,182	628	940	1,635	116,545
EXPENDITURE (EXCLUDING LOAN EXPENDITURE)							
1957 ..	53,470	11,105	13,118	510	637	934	79,774
1958 ..	58,007	12,541	13,533	561	704	1,123	86,469
1959 ..	63,777	14,815	14,296	556	747	1,269	95,460
1960 ..	69,628	16,202	15,481	625	885	1,471	104,292
1961 ..	77,585	16,732	17,317	621	947	1,626	114,828

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

(iv) *Loan Expenditure.* The tables below show particulars for 1960-61 of loan expenditure on works connected with the ordinary services and the business undertakings of local government authorities.

### LOCAL GOVERNMENT AUTHORITIES: LOAN EXPENDITURE, 1960-61

(£'000)

Particulars	N.S.W.	Vic.	Q'land	S. Aust.	W. Aust.	Tas.	Total
ORDINARY SERVICES							
Roads, bridges, streets, footpaths, drainage and sewerage .. ..	3,706	2,698	8,542	1,363	845	706	17,860
Council properties .. ..	(a) 2,639	(a) 1,392	(a) 2,279	129	(a) 994	(a) 397	9,853
Parks, gardens and recreational reserves .. ..	712	571		238	329	173	
Other .. ..	(b) 538	518	586	60	69	..	1,771
<b>Total .. ..</b>	<b>7,595</b>	<b>5,179</b>	<b>11,407</b>	<b>1,790</b>	<b>2,237</b>	<b>1,276</b>	<b>29,484</b>
BUSINESS UNDERTAKINGS							
Water supply .. ..	2,029	104	4,611	..	2	1,354	9,069
Sewerage .. ..	969	..	..	..	..		
Electricity and gas .. ..	11,883	1,189	2,713	42	135	..	15,962
Railways, tramways and omnibuses .. ..	..	..	238	..	..	..	238
Abattoirs .. ..	268	75	..	..	..	..	343
Other .. ..	..	..	12	..	..	..	12
<b>Total .. ..</b>	<b>15,149</b>	<b>1,368</b>	<b>7,574</b>	<b>42</b>	<b>137</b>	<b>1,354</b>	<b>25,624</b>
<b>Grand Total .. ..</b>	<b>22,744</b>	<b>6,547</b>	<b>18,981</b>	<b>1,832</b>	<b>2,374</b>	<b>2,630</b>	<b>55,108</b>

(a) Includes plant. (b) Includes advances for homes, £155,000.

NOTE.—For years to which particulars relate, see following table.

The following table shows the loan expenditure on works connected with local government ordinary services and business undertakings during the years 1956-57 to 1960-61.

**LOCAL GOVERNMENT AUTHORITIES: LOAN EXPENDITURE**  
(£'000)

Year	N.S.W.(a)	Victoria(b)	Q'land(c)	S. Aust.(c)	W. Aust.(d)	Tas.(c)	Total
<b>ORDINARY SERVICES</b>							
1957 ..	5,857	3,711	4,596	924	1,334	580	17,024
1958 ..	5,644	4,215	5,673	1,077	1,580	455	18,644
1959 ..	5,941	4,313	6,225	1,313	2,093	812	20,697
1960 ..	7,001	4,733	8,480	1,157	1,819	1,109	24,299
1961 ..	7,595	5,179	11,407	1,790	2,237	1,276	29,484
<b>BUSINESS UNDERTAKINGS</b>							
1957 ..	9,656	1,300	5,348	58	36	761	17,159
1958 ..	11,024	1,796	5,022	99	159	1,163	19,263
1959 ..	11,645	1,505	6,464	54	144	958	20,770
1960 ..	12,776	1,319	6,304	58	78	1,226	21,761
1961 ..	15,149	1,368	7,574	42	137	1,354	25,624

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

### § 3. Local and Semi-Governmental Authorities' Debt

1. **General.**—Statistics of local and semi-governmental debt for the years 1956-57 to 1960-61 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 Supply, Fire Brigades, and Banking. 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, Housing, and Miscellaneous.

*Queensland.* Water Supply and Sewerage, Irrigation and Drainage, Harbours, 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, Irrigation and Drainage, Harbours, Tramways, Electricity Supply, Fire Brigades, Hospitals and Ambulances, Marketing (Agency), Housing, and University of Western Australia.

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

A detailed list of the authorities included is shown in *Finance, Part I—Public and Private Finance, Bulletin No. 52, 1960-61.*

2. **Local and Semi-Governmental Authorities' Debt.**—The following table provides a summary of new money loan raisings, provisions for debt redemption, debt outstanding and interest payable by local and semi-governmental authorities for the year ended 30th June, 1961. For greater detail, see *Finance, Part I—Public and Private Finance.*



**LOCAL AND SEMI-GOVERNMENTAL AUTHORITIES: NEW MONEY LOAN  
RAISINGS, REDEMPTION, DEBT AND INTEREST PAYABLE, 1960-61  
(£'000)**

Particulars	N.S.W.	Vic.	Q'land	S. Aust.	W. Aust.	Tas.	Total
<b>LOCAL GOVERNMENT AUTHORITIES</b>							
New Money Loan Raisings—							
From Government ..	270	272	1,550	720	34	236	3,082
From Public ..	10,424	6,773	11,746	1,235	3,037	2,402	35,617
Total ..	10,694	7,045	13,296	1,955	3,071	2,638	38,699
Funds Provided for Redemption—							
Government Loans ..	168	66	970	343	23	29	1,599
Loans due to Public ..	5,279	2,805	4,141	286	1,053	575	14,139
Total ..	5,447	2,871	5,111	629	1,076	604	15,738
Accumulated Sinking Fund Balance ..	4,974	3,183	8,131	..	80	237	16,605
Debt—							
Due to Government ..	2,113	1,825	14,570	1,699	261	846	21,314
Due to Banks (Net Overdraft) ..	23	486	..	..	16	..	525
Due to Public Creditor(a) ..	78,904	44,852	99,291	6,319	13,258	14,796	257,420
Total(a) ..	81,040	47,163	113,861	8,018	13,535	15,642	279,259
Maturing Overseas(a)(b) ..	2,265	..	3,236	..	..	..	5,501
Annual Interest Payable(a) ..	n.a.	2,365	5,518	360	705	798	n.a.

**SEMI-GOVERNMENTAL AND OTHER PUBLIC AUTHORITIES**

New Money Loan Raisings—							
From Government ..	16,512	19,130	4,669	8,129	3,450	7,202	59,092
From Public ..	22,580	36,479	8,879	4,205	2,413	1,082	75,638
Total ..	39,092	55,609	13,548	12,334	5,863	8,284	134,730
Funds Provided for Redemption—							
Government Loans ..	2,249	2,580	511	1,178	746	771	8,035
Loans due to Public ..	7,510	9,511	4,901	29	602	384	22,937
Total ..	9,759	12,091	5,412	1,207	1,348	1,155	30,972
Accumulated Sinking Fund Balance ..	32,120	13,330	8,586	1,289	1,499	733	57,557
Debt—							
Due to Government ..	188,101	220,515	20,760	125,629	45,692	91,885	692,582
Due to Banks (Net Overdraft) ..	5,121	789	127	54	2	..	6,093
Due to Public Creditor(a) ..	287,493	459,177	82,659	36,538	20,511	16,111	902,489
Total(a) ..	480,715	680,481	103,546	162,221	66,205	107,996	1,601,164
Maturing Overseas(a)(b) ..	6,250	5,393	..	..	..	..	11,643
Annual Interest Payable(a) ..	n.a.	31,297	5,129	7,011	2,983	4,809	n.a.

(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 £Stg.100 to £A.125; New York debt is payable in U.S. dollars which have been converted at the I.M.F. rate of \$2.24 to £A.1. (b) Included in debt figures above.

In the following tables, debt includes all liabilities for which arrangements have been made for repayment over a period of one year or more, and net overdrafts. Interest capitalized 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 capitalized), 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 capitalized. 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.

In the following table, a summary is given of new money loan raisings, provisions for the redemption of debt and debt outstanding of local and semi-governmental authorities for the years 1956-57 to 1960-61.

**LOCAL AND SEMI-GOVERNMENTAL AUTHORITIES, AUSTRALIA: NEW  
MONEY LOAN RAISINGS, REDEMPTION AND DEBT**  
(£'000)

Particulars	1956-57	1957-58	1958-59	1959-60	1960-61
<b>LOCAL GOVERNMENT AUTHORITIES</b>					
New Money Loan Raisings—					
From Government .. ..	1,624	1,775	1,993	2,610	3,082
From Public .. ..	25,046	27,445	29,662	34,080	35,617
Total .. ..	26,670	29,220	31,655	36,690	38,699
Funds provided for Redemption—					
Government Loans .. ..	1,569	1,578	1,491	1,534	1,599
Loans due to Public .. ..	9,222	9,120	11,403	13,192	14,139
Total .. ..	10,791	10,698	12,894	14,726	15,738
Accumulated Sinking Fund Balance	12,865	13,710	14,106	15,316	16,605
Debt—					
Due to Government .. ..	17,753	17,922	18,805	19,819	21,314
Due to Banks (Net Overdraft) .. ..	637	448	686	465	525
Due to Public Creditor(a) .. ..	184,984	197,243	213,496	235,387	257,420
Total(a) .. ..	203,374	215,613	232,987	255,671	279,259
Maturing Overseas(a)(b) .. ..	6,499	6,320	6,140	5,962	5,501
<b>SEMI-GOVERNMENTAL AND OTHER PUBLIC AUTHORITIES</b>					
New Money Loan Raisings—					
From Government .. ..	51,644	56,948	54,242	54,525	59,092
From Public .. ..	62,777	73,924	73,689	86,290	75,638
Total .. ..	114,421	130,872	127,931	140,815	134,730
Funds provided for Redemption—					
Government Loans .. ..	3,978	6,829	8,484	7,281	8,035
Loans due to Public .. ..	10,496	15,041	12,934	17,539	22,937
Total .. ..	14,474	21,870	21,418	24,820	30,972
Accumulated Sinking Fund Balance	29,702	35,500	41,882	49,447	57,557
Debt—					
Due to Government .. ..	492,929	542,817	592,436	639,983	692,582
Due to Banks (Net Overdraft) .. ..	6,402	5,900	6,410	4,415	6,093
Due to Public Creditor(a) .. ..	626,172	697,910	764,944	840,497	902,489
Total(a) .. ..	1,126,103	1,246,627	1,363,790	1,484,895	1,601,164
Maturing Overseas(a)(b) .. ..	15,140	11,673	11,663	11,555	11,643

(a) See footnote (a) page 799.

(b) Included in debt figures above.

### § 4. Roads and Bridges

1. **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 1957–58 to 1961–62, and to the Commonwealth for expenditure on the construction and maintenance of strategic roads and for the promotion of road safety practices for each of the years 1957–58 and 1958–59. After 1st 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 Chapter XXI. Public Finance, and *Finance* bulletins.

#### ROAD CONSTRUCTION, MAINTENANCE, ETC.: GRANTS UNDER THE COMMONWEALTH AID ROADS ACTS

(£'000)

Year ended 30th June—	N.S.W.	Vic.	Q'land	S. Aust.	W. Aust.	Tas.	C'wealth (a)	Total
1958 ..	9,495	6,264	6,585	3,879	6,658	1,733	1,000	35,614
1959 ..	9,930	6,543	6,890	4,056	6,967	1,813	1,000	37,199
1960 ..	12,172	8,660	8,021	4,922	7,964	2,184	..	43,923
1961 ..	12,870	9,184	8,428	5,128	8,090	2,300	..	46,000
1962 ..	13,811	10,080	9,093	5,752	8,764	2,500	..	50,000

(a) In the years prior to 1959–60, allocations under the *Commonwealth Aid Roads Act* 1954–1956 for expenditure on the construction and maintenance of strategic roads and the promotion of road safety practices.

2. **New South Wales.**—(i) *General.* A central road authority, known as the Main Roads Board, was created by legislation in 1925 for the purpose of providing improved and uniform standards of construction, reconstruction and maintenance of the principal roads of the State and to administer government subsidies for works on those roads. In 1932, the Main Roads administration was reorganized as a separate department under the control of a Commissioner. The activities of the Department of Main Roads include works on main, developmental 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 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, except those within the City of Sydney, may be proclaimed as main roads on the recommendation of the Commissioner for Main Roads, who takes into consideration the representations made by the councils concerned, availability of funds for construction and maintenance purposes, and the value of the roads as connecting links between centres of population or business. The classes of main roads are (i) the State highways, which form the principal avenues of road communication throughout the State and connect with similar avenues in other States; (ii) trunk roads, which, with the State highways, form the framework of a general system of intercommunication throughout the State; (iii) ordinary main roads, which provide a network of roads connecting towns and important centres of population with the State highways and trunk roads and with each other. In addition to the main roads, there are also (i) secondary roads (in the County of Cumberland), which carry a substantial volume of through traffic and thereby relieve neighbouring main roads of traffic, (ii) developmental roads, which help to develop country districts and (iii) tourist roads, which serve to make accessible areas or districts used by tourists.

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 paid from the funds of the Department of Main Roads. The Councils contribute towards the cost at the rate of  $\frac{1}{4}$ d. in the £ on the unimproved value of ratable property. The rate payable in respect of lands used principally for primary production is one-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 works and three-quarters of the cost

of road works on trunk roads, and three-quarters of the cost of bridge works and two-thirds of the cost of road 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 meets half the cost of works on secondary roads and on tourist roads.

(ii) *Length of Roads.* (a) *Proclaimed Roads.* The total length of proclaimed roads in New South Wales at 30th June, 1962, was 25,540 miles classified as:—State highways, 6,493 miles; trunk roads, 4,163 miles; ordinary main roads, 11,647 miles; secondary roads, 100 miles; developmental roads, 3,083 miles; and tourist roads, 54 miles.

The length of main roads maintained by the Department of Main Roads at 30th June, 1962, was 5,268 miles (23.5 per cent.), while the length maintained by Councils was 17,035 miles (76.5 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, 64 per cent., 36 per cent.; and trunk and ordinary main roads, 5 per cent., 95 per cent. Unclassified roads in the Western Division of the State, totalling 1,031 miles, were maintained by the Department, while developmental roads, totalling 3,083 miles, were maintained by Councils. In the County of Cumberland, the proportions of main roads maintained by the Department and Councils respectively were:—State highways, 99 per cent., 1 per cent.; and ordinary main roads, 53 per cent., 47 per cent. Secondary roads totalling 100 miles were maintained by Councils. The 54 miles of tourist roads throughout the State were maintained by Councils.

(b) *Surface of Roads.* In 1960, the total length of all roads in New South Wales was estimated at 129,752 miles. The lengths of roads, according to their surface, were as follows:—bitumen or concrete, 18,476 miles; gravel or stone, 46,775 miles; formed only, 26,966 miles; cleared only, 37,535 miles.

(iii) *Main Roads Department.* (a) *General.* 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.

During 1961–62, 76 new bridges were constructed. In addition, 71 concrete box culverts each having a waterway width of 20 feet or more were completed. Major bridge works under construction included steel and/or concrete bridges over the Richmond River at Wardell on the Pacific Highway (length 736 feet); over the Richmond River at Ballina Street, Lismore, on the Bruxner Highway (length, 688 feet); over the Clyde River at Nelligen (length, 827 feet); over the Hunter River at Maitland (Belmore Bridge, length, 643 feet); over the Parramatta River at Gladesville (length, 1,900 feet); over the Lane Cove River at Fig Tree (length, 749 feet); over the Macquarie River at Gin Gin (length, 330 feet); over the Parramatta River at Silverwater (length, 657 feet); over the Darling River at Tilpa (length, 407 feet); and over the George's River at Taren Point (length, 1,662 feet).

(b) *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 Acts* (see para. 1 above and Chapter XXI. 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 1924–1960*. The State Government also makes repayable advances for Main Roads Department works.

Revenue and expenditure for the five years 1957–58 to 1961–62 are shown below.

**DEPARTMENT OF MAIN ROADS, NEW SOUTH WALES:  
REVENUE AND EXPENDITURE  
(£)**

Particulars	1957-58	1958-59	1959-60	1960-61	1961-62
<b>REVENUE(a)</b>					
Motor vehicle taxation, registration and licence fees .. ..	8,444,589	10,727,126	11,850,477	12,432,316	12,683,234
Commonwealth Aid Roads Act ..	6,468,726	6,926,549	7,719,608	8,239,061	8,936,462
State and Commonwealth grants ..	453,750	357,500	638,750	375,000	704,000
Contributions by other departments and bodies .. ..	305,153	240,412	360,978	382,689	237,572
Councils' contributions .. ..	1,119,731	1,384,927	1,649,122	1,858,878	2,269,553
Other .. ..	45,296	46,204	83,179	154,816	160,759
<b>Total .. ..</b>	<b>16,837,245</b>	<b>19,682,718</b>	<b>22,302,114</b>	<b>23,442,760</b>	<b>24,991,580</b>
<b>EXPENDITURE(b)</b>					
Roads and bridges—					
Construction .. ..	9,464,733	10,508,109	13,883,723	17,731,562	18,936,979
Maintenance .. ..	6,096,227	5,908,649	6,352,014	6,137,466	6,343,148
Administration .. ..	614,098	705,745	824,203	912,675	1,128,740
Interest, exchange, etc., on debt ..	184,067	190,789	202,439	227,238	252,649
Other(c) .. ..	202,179	212,895	351,394	542,127	531,783
<b>Total .. ..</b>	<b>16,561,304</b>	<b>17,526,187</b>	<b>21,613,773</b>	<b>25,551,068</b>	<b>27,193,299</b>

(a) Excludes repayable advances by the State Government (£150,000 in 1957-58, £800,000 in 1959-60, £575,000 in 1960-61 and £635,000 in 1961-62) and transfers from Sydney Harbour Bridge Account for Expressway construction (£100,000 in 1958-59, £362,000 in 1959-60, £768,000 in 1960-61 and £1,822,000 in 1961-62. Expenditure from these amounts is fully reflected in Expenditure. (b) Excludes debt redemption (£39,966 in 1957-58, £42,717 in 1958-59, £45,981 in 1959-60, £48,816 in 1960-61 and £53,075 in 1961-62) and repayment of government advances (£298,073 in 1958-59 and £400,000 in 1960-61). (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.

The figures shown above 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.

(c) *Sydney Harbour Bridge.* The Sydney Harbour Bridge was opened for traffic on 19th March, 1932. The main span is 1,650 feet and clearance for shipping 176 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 30th June, 1962, was £11,786,864, 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, over £10,100,000, is repayable from toll income. Income for 1961-62 amounted to £1,775,000, including road tolls, £1,575,180; railway passenger tolls, £143,285; and omnibus passenger tolls, £15,804. Expenditure amounted to £1,109,000; including interest, exchange, floatation expenses, etc., £426,840; sinking fund, £133,850; maintenance, £288,133; and major improvements, £22,869. The accumulated surpluses of the Bridge Account have been used to finance conversion of tram tracks to roadway and construction of city expressways. From 1957-58 to 1961-62 a total of £988,665 was expended on tram track conversion and £3,052,000 on city expressways. The account showed a deficiency of £867,106 at 30th June, 1962. During 1961-62, 30,871,000 road vehicles (excluding omnibuses and exempt vehicles), 25,371,000 rail travellers and 14,414,000 omnibus travellers crossed the bridge, contributing respectively 91 per cent., 8 per cent., and 1 per cent. of the total toll revenue.

3. *Victoria.*—(i) *General.* 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.

(ii) *Length of Roads.* (a) *Declared Roads.* The total length of roads in Victoria declared by the Country Roads Board at 30th June, 1962, was 14,506 miles, classified as follows:—State highways, 4,498 miles; main roads, 9,112 miles; by-pass roads, 9 miles; tourist roads, 426 miles; forest roads, 461 miles. The length of the surface treated (black) or higher type of pavements included in the foregoing mileage was 11,480 miles or 79 per cent. of the total.

(b) *Surface of Roads.* It is estimated that, in addition to the 14,506 miles of classified roads, there were approximately 87,000 miles of unclassified roads at 30th June, 1962. The latest detailed estimate of the length of roads and streets in Victoria (as at 30th September, 1961) provides the following information:—bitumen or concrete, 21,633 miles; gravel or stone, 32,118 miles; formed only, 22,576 miles; cleared only, 25,500 miles; total, 101,827 miles.

(iii) *Country Roads Board.* (a) *General.* During 1961–62, 1,764 miles of declared roads under the Board's control were treated with bitumen. In addition, 931 miles of undeclared roads, for which the Board contributed funds, were similarly treated. The total length of bitumen treatment carried out in 1961–62 was 2,817 miles (including 122 miles for other authorities). Of the work on the roads under the Board's control in 1961–62, 534 miles related to State highways and by-pass roads.

During 1961–62, 199 bridge projects of an estimated total value of £2,119,000 were initiated. Of these, 128, estimated to cost £800,000, were under municipal supervision.

(b) *Receipts and Payments.* The funds of the Country Roads Board are derived principally from motor registration fees, two-thirds of all money received by way of owners' certificates, one half 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. In addition, loans have been authorized 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 the year ended 30th June, 1962, loan receipts and payments each amounted to £683,000. The total loan expenditure to 30th June, 1962, was £15,353,183. 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 30th June, 1937, the total expenditure at that date being £6,425,758.

**COUNTRY ROADS BOARD, VICTORIA: RECEIPTS AND PAYMENTS**  
(£)

Particulars	1957–58	1958–59	1959–60	1960–61	1961–62
<b>RECEIPTS</b>					
Motor vehicle registration fees(a) ..	8,013,268	8,340,079	8,941,256	9,282,073	9,529,594
Drivers' licence fees(a) ..	219,342	(b)284,994	(b)452,324	(b)256,673	(b)259,890
Drivers' licence testing fees ..	..	..	..	38,969	76,901
Municipalities' payments ..	560,092	685,773	723,803	788,663	777,667
Commonwealth Aid Roads Acts(c) ..	6,158,907	6,870,975	8,460,574	8,983,776	9,877,696
Loans from State Government ..	402,822	75,834	160,000	283,000	683,000
Commonwealth-State contribution for restoration of flood damage ..	460,452	53,171	5,124	966	..
Road charges Commercial Goods Vehicles Act .. ..	1,529,236	1,873,424	2,117,494	2,254,421	2,262,417
Other .. ..	37,114	30,263	43,994	50,223	(d)575,704
<b>Total .. ..</b>	<b>17,381,233</b>	<b>18,214,513</b>	<b>20,904,569</b>	<b>21,938,764</b>	<b>24,042,869</b>

NOTE.—See next page for footnotes.

COUNTRY ROADS BOARD, VICTORIA: RECEIPTS AND PAYMENTS—*continued*  
(£)

Particulars.	1957-58	1958-59	1959-60	1960-61	1961-62
PAYMENTS					
Construction and maintenance of roads and bridges—					
State highways .. .. .	4,988,708	5,357,732	5,852,042	6,880,998	6,836,437
Main roads .. .. .	5,428,679	5,536,431	6,259,203	5,919,265	7,426,610
By-pass roads .. .. .	..	28,579	266,880	1,096,742	682,635
Tourist roads .. .. .	457,735	453,877	551,088	600,132	572,755
Forest roads .. .. .	127,775	190,652	192,060	275,365	295,101
Unclassified roads .. ..	3,615,378	3,371,433	3,974,049	4,228,144	5,193,213
Other .. .. .	107,469	82,899	124,589	88,612	69,295
Plant, stores and materials ..	1,053,254	712,974	1,028,042	708,141	174,694
Interest, debt redemption, etc. ..	831,077	862,583	875,034	888,244	927,527
Office building, Kew—capital cost ..	..	..	452,275	528,123	19,554
Statutory payment to Tourists' Resorts Fund .. .. .	108,780	144,770	151,737	187,872	191,554
Administration and other .. ..	860,760	1,004,542	1,221,756	1,177,903	1,651,472
<b>Total .. .. .</b>	<b>17,579,615</b>	<b>17,746,472</b>	<b>20,948,755</b>	<b>22,579,541</b>	<b>24,040,847</b>

(a) After costs of collection. Since 1950, one half of the drivers' licence fees has been credited to the funds of the Country Roads Board while the remaining half has been credited to the Municipalities Assistance Fund. (b) Owing to the gradual change-over in currency of drivers' licences from one year to two and three years, revenue from drivers' licences increased slightly in 1958-59, reached a peak in 1959-60, and thereafter declined to normal levels. (c) Excludes portion of *Commonwealth Aid Roads Acts* advances drawn by the Public Works Department for expenditure on wharfs, jetties, etc. (d) Includes £500,000 Special Grant from Commonwealth Government.

(iv) *Melbourne and Metropolitan Board of Works.* Since assuming responsibility for carrying-out planning scheme proposals relating to metropolitan highways and bridges, a tentative £20,000,000 construction programme of urgent highway works throughout the metropolitan area of Melbourne has been adopted and is being progressively implemented by the Board of Works. Expenditure on these projects up to 30th June, 1962, was £2,617,046.

(v) *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 (owner's certificates) and money provided under any other Act. The amount available for expenditure in 1961-62 was £478,845, comprising receipts from owners' certificates, £291,463, recoups, £167,646 and the balance brought forward from 1960-61, £19,736. Expenditure from the Fund amounted to £478,845, of which £343,070 was incurred by the Railways Department and the balance by the Country Roads Board.

4. *Queensland.*—(i) *General.* Under the *Main Roads Act 1920*, a Main Roads Board was constituted, consisting of three members appointed by the Governor-in-Council. In 1925, the Board was abolished and its powers conferred upon a single Commissioner. The Main Roads Commission was constituted a Department under the name of the Department of Main Roads 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, secondary, mining access, farmers' and tourist roads, and tourist tracks; 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.

(ii) *Length of Roads.* (a) *Declared Roads.* The total length of declared roads in Queensland at 30th June, 1961, was 20,650 miles; comprising State highways, 8,247 miles; main roads, 10,273 miles; developmental roads, 230 miles; and secondary roads, 1,900 miles. By the amendments to the *Main Roads Acts* published in the Government Gazette of 6th April, 1959, mining access, farmers' and tourists roads became secondary roads, and the provisions relating to the declaration of tourist tracks were repealed.

(b) *Surface of Roads.* The total length of roads and streets in Queensland at 30th June, 1962, was:—bitumen or concrete, 11,016 miles; gravel or stone, 19,850 miles; formed only, 41,265 miles; cleared only, 48,985 miles; total, 121,116 miles.

(iii) *Department of Main Roads.* (a) *General.* During 1960–61, the Department completed 1,368 miles of roads, including new construction and stage construction. Bridges of all types to a length of 7,188 linear feet were constructed, bringing the total constructed by the Department at 30th June, 1961, to 216,737 feet. In addition, at 30th June, 1961, 6,553 feet were under construction.

(b) *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, including amounts for defence works, during each of the years 1956–57 to 1960–61 are shown below.

#### DEPARTMENT OF MAIN ROADS, QUEENSLAND: RECEIPTS AND PAYMENTS

(£)

Particulars.	1956–57	1957–58	1958–59	1959–60	1960–61
<b>RECEIPTS</b>					
Motor vehicle registration, Transport Acts collections, fees, etc. ..	4,608,807	4,797,882	5,036,414	5,404,547	5,568,994
Loans from State Government ..	..	125,000	621,865	..	..
Grants, advances, refunds, etc. from State Government ..	..	47,414	241,861	325,755	357,942
Commonwealth Aid Roads and Works Acts ..	6,012,899	7,020,231	7,353,215	7,912,040	8,268,742
Maintenance repayments—local authorities ..	590,885	611,124	648,882	707,813	723,187
Hire, rent, sales of plant, etc. ..	882,316	945,525	1,126,739	1,250,205	1,219,599
Other ..	405,555	479,362	548,287	601,415	523,413
<b>Total ..</b>	<b>12,500,462</b>	<b>14,026,544</b>	<b>15,577,263</b>	<b>16,201,775</b>	<b>16,661,877</b>
<b>PAYMENTS</b>					
Permanent road works and surveys	7,953,553	8,027,715	8,680,460	11,380,919	10,826,353
Maintenance of roads ..	2,372,221	2,556,029	2,790,004	2,890,698	2,456,530
Plant, machinery, buildings, etc. (including plant maintenance) ..	1,287,443	1,239,085	1,000,793	1,345,167	1,394,807
Loans—Interest ..	242,592	208,498	198,098	156,542	107,490
Redemption ..	256,048	256,287	330,561	329,722	318,288
Administration and other ..	1,022,760	1,061,891	1,157,569	1,270,686	1,521,589
<b>Total ..</b>	<b>13,134,617</b>	<b>13,349,505</b>	<b>14,157,485</b>	<b>17,373,734</b>	<b>16,625,057</b>



5. South Australia.—(i) *General.* 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.

(ii) *Source of Funds.* 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*.

(iii) *Length of Roads.* In South Australia, there are only two classifications of roads. These are main roads proclaimed under the provisions of the *Highways Act* and all other roads, commonly designated district roads. At 30th June, 1962, there were 8,188 miles of proclaimed main roads and 54,405 miles of district roads, totalling 62,593 miles. Lengths of road classified by surface were as follows:—Bitumen or concrete, 5,614 miles; gravel or stone, 13,360 miles; formed only, 15,326 miles; cleared only, 28,293 miles.

(iv) *State Highways and Local Government Department, Receipts and Payments.* The following table shows particulars of receipts and payments, during the years 1957–58 to 1961–62, of funds controlled by the Highways and Local Government Department.

#### HIGHWAYS AND LOCAL GOVERNMENT DEPARTMENT, SOUTH AUSTRALIA: RECEIPTS AND PAYMENTS

(£)

Particulars	1957–58	1958–59	1959–60	1960–61	1961–62
RECEIPTS					
Motor vehicles registration, licences, fees ..	3,470,933	3,748,763	3,942,087	4,111,494	4,293,105
Commonwealth Aid Roads Acts ..	3,907,129	4,361,892	4,923,122	5,128,065	5,752,281
Loans from State Government ..	15,000	85,000	85,000	90,000	200,000
Other .. .. .	470,150	443,577	445,484	449,333	533,812
<b>Total .. .. .</b>	<b>7,863,212</b>	<b>8,554,232</b>	<b>9,395,693</b>	<b>9,778,892</b>	<b>10,779,198</b>

#### PAYMENTS

Construction and reconstruction of roads and bridges .. .. .	3,738,544	5,096,450	6,113,227	6,465,892	7,307,955
Maintenance .. .. .	2,123,008	2,174,320	2,183,012	2,095,253	2,337,218
Recoups to Consolidated Revenue Fund—interest, debt redemption and exchange .. .. .	202,646	205,361	213,631	215,539	227,041
Advances to local and semi-governmental authorities .. .. .	293,349	464,723	301,929	702,718	420,157
Administration .. .. .	524,374	(a)	(a)	(a)	(a)
Stores, plant, machinery, suspense accounts, etc. ..	778,875	514,886	439,732	495,036	406,868
<b>Total .. .. .</b>	<b>7,660,796</b>	<b>8,455,740</b>	<b>9,251,531</b>	<b>9,974,438</b>	<b>10,699,239</b>

(a) Administrative expenses, amounting to £735,738 in 1959–60, £844,780 in 1960–61 and £1,006,179 in 1961–62, have been charged to construction and reconstruction of roads and bridges and to maintenance.

The total expenditure, both revenue and loan, by State and local governments on roads, streets and bridges in South Australia during the years 1957–58 to 1960–61 was, respectively, £9,889,000, £10,556,000, £12,277,000, and £13,517,646.

6. **Western Australia.**—(i) *General.* 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.

Under the provisions of the *Main Roads Act*, the Main Roads Department was established in 1930 to replace the Main Roads Board originally constituted as a central road authority in 1926. The Department operates under the *Main Roads Act* 1930–1961, 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. An additional category, that of important secondary roads, is used by the Department in determining its works programme.

Main roads are those which provide communication between a large producing area, either actual or potential, and its market or nearest port or railway station, between two or more such areas, between large centres of population, or between the capital city and a large producing area or a large centre of population. Controlled-access roads do not permit direct access from abutting property and may be entered and departed from only at certain selected road connexions located at points which are considered to serve best the traffic for which the controlled-access roads were designed. Developmental roads are those which serve to initiate or increase the development of an area. Important secondary roads are those which, though originally classified as developmental, have come to be used consistently by through traffic and therefore warrant a special allocation of funds by the Main Roads Department. The Act provides that, on the recommendation of the Commissioner, any road may be proclaimed a main road and any main road may cease to be a main road.

The construction and maintenance of main roads and controlled-access roads are the responsibility of the Main Roads Department. The Department also makes substantial financial provision for the construction and maintenance of important secondary roads and for the construction of developmental roads.

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.

(ii) *Length and Surface of Roads.* (a) *General.* The total length of roads and streets in Western Australia at 30th June, 1962, was made up as follows:—bitumen or concrete, 9,850 miles; gravel or stone, 20,097 miles; formed only, 41,283 miles; cleared only, 23,017 miles; natural state, 71 miles; total, 94,318 miles.

(b) *Roads under Main Roads Act.* The total length of roads for which financial provision was made by the Main Roads Department at the 30th June, 1962, was:—declared main roads, 3,542 miles, including 76 miles of controlled-access of which 5 miles have been constructed; important secondary roads, 7,538 miles; and developmental roads, 23,197 miles.

(iii) *Main Roads Department.* (a) *General.* During the year 1961–62, the activities of the Department included clearing, 1,884 miles; forming, 2,920 miles; gravelling, 1,790 miles; reconditioning, 5,900 miles; and stabilizing, 244 miles. In addition, 1,716 miles were primed and sealed (including widening) and 19 bridges constructed.

(b) *Receipts and Payments.* The funds of the Main Roads Department are derived principally from allocations made under the *Commonwealth Aid Roads Act* 1959. In addition, financial assistance was given by the Commonwealth Government in 1961–62 to the extent of £500,000 for the improvement of roads used for the transport of beef cattle in the Kimberley District. Further legislation during 1962 provided for an extension of this special assistance for a total of five years, involving in all £3,450,000, subject to the expenditure by the State of the same amount on such projects during this period. During 1961–62 also, the sum of £160,000 was granted by the Commonwealth Government and matched by a similar State contribution for the restoration of roads damaged during the severe floods in the north-west in early 1961. Other sources of income include one-half of the net amount of traffic fees collected in the Metropolitan Traffic Area and an allocation of Transport Board funds. (Outside the Metropolitan Traffic Area, motor vehicle licence fees are collected and retained by the local authorities.) Receipts and payments for the years 1957–58 to 1961–62 are shown in the following table.

**MAIN ROADS DEPARTMENT, WESTERN AUSTRALIA:  
RECEIPTS AND PAYMENTS**

(£ )

Particulars	1957-58	1958-59	1959-60	1960-61	1961-62
<b>RECEIPTS</b>					
Motor vehicle registration, licences, fees, etc. ..	489,443	488,386	539,459	486,948	486,948
Central Trust Fund .. .. .			(a)351,604	(a)707,569	a1,060,511
Commonwealth Aid Roads Acts .. .. .	6,741,558	7,555,565	7,687,130	7,428,808	7,752,996
Commonwealth Aid Roads Acts—matching grants .. .. .			(a)351,591	(a)703,533	a1,051,647
Western Australia Grant (Beef Cattle Roads) Act 1961 .. .. .					500,000
Commonwealth-State Grant to restoration of flood-damaged roads .. .. .					320,000
Recoups from other authorities .. .. .	165,987	152,754	183,106	217,196	246,920
Other .. .. .	14,355	5,254	4,777	3,179	5,331
<b>Total .. .. .</b>	<b>7,411,343</b>	<b>8,201,959</b>	<b>9,117,667</b>	<b>9,547,233</b>	<b>11,424,253</b>

**PAYMENTS**

Construction and reconstruction of roads and bridges(b) .. .. .	5,341,743	5,763,882	6,434,690	5,447,028	6,469,990
Maintenance of roads and bridges(b) .. .. .	528,300	570,054	910,846	974,053	1,086,042
Grants to local authorities, etc. .. .. .	936,622	1,078,395	1,182,255	1,263,722	1,436,651
Payments to local authorities from Central Road Trust Fund and Commonwealth matching grants .. .. .				403,799	724,873
Transfer to State Consolidated Revenue .. .. .	70,000	70,000	70,000	70,000	70,000
Plant, machinery, etc. .. .. .	456,041	222,864	160,749	368,760	240,141
Other(b) .. .. .	242,489	288,608	221,817	243,896	387,522
<b>Total .. .. .</b>	<b>7,575,195</b>	<b>7,993,803</b>	<b>8,980,357</b>	<b>8,771,258</b>	<b>10,415,219</b>

(a) Includes amounts to be distributed to metropolitan and country local authorities early in the following year. (b) Includes administration and expenditure on hire and maintenance of road construction plant, etc., and on purchase of materials.

7. Tasmania.—(i) *General.* Under the *Road Construction (Transfer of Functions) Act* 1951, which came into operation on 1st 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 authorized 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 authorized by the Transport Commission to be carried out and constructed by the Department. The expenditure by the Public Works Department during 1960-61 on the construction of roads, tracks and bridges amounted to £6,273,000, of which £3,571,000 was charged to road funds, £28,000 to revenue, £2,624,000 to loan and £50,000 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.

(ii) *Length of Roads.* (a) *Classified Roads.* The mileages of classified roads in Tasmania at 30th June, 1962, were as follows:—State highways, 1,156 miles; main roads, 666 miles; secondary roads, 196 miles; tourist roads, 46 miles; developmental roads, 16 miles; other roads, 135 miles; total, 2,215 miles; total roads, excluding State roads, 9,678 miles. The mileages of sealed roads, and their proportions to the respective totals were:—State highways, 752 miles (65 per cent.); main roads, 368 miles (55 per cent.); secondary and other roads, 57 miles (17 per cent.); total, 1,177 miles (53 per cent. of all classified roads, and 10 per cent. of all roads in Tasmania).

(b) *Surface of Roads.* The length of all roads in Tasmania, including those with surfaces of lower grade, at 30th June, 1962, was as follows:—bitumen or concrete, 2,052 miles, gravel or stone, 8,340 miles; formed only and cleared only, 1,501 miles; total, 11,893 miles.

(iii) *Receipts and Payments—Combined Road Funds.* The table below shows particulars of the receipts and payments of the combined Road Funds for the years 1957–58 to 1961–62.

### ROAD FUNDS, TASMANIA: RECEIPTS AND PAYMENTS

(£)

Particulars	1957–58	1958–59	1959–60	1960–61	1961–62
<b>RECEIPTS</b>					
Motor vehicle taxation and registration, licences, fees, fines, etc. . .	1,023,055	1,049,463	1,112,674	1,162,869	1,254,327
Commonwealth Aid Roads and Works Acts . . . . .	1,745,888	1,948,491	2,183,461	2,299,992	2,500,008
Recoups from local authorities, etc. . .	9,192	9,641	9,384	8,555	8,515
State Loan Fund . . . . .	600,083	705,630	1,168,558	2,461,289	2,062,319
Hire of plant . . . . .	1,076,810	1,181,032	1,273,535	1,393,102	1,452,402
Other . . . . .	52,310	89,219	107,803	376,795	(a)496,033
<b>Total . . . . .</b>	<b>4,507,338</b>	<b>4,983,476</b>	<b>5,855,415</b>	<b>7,702,602</b>	<b>7,773,604</b>
<b>PAYMENTS</b>					
Construction and reconstruction of roads and bridges . . . .	1,763,457	2,571,412	3,052,787	4,565,047	4,591,019
Maintenance . . . . .	1,204,243	1,190,902	1,325,329	1,306,922	1,258,856
Other works connected with transport . . . . .	2,935	14,659	18,028	36,162	19,001
Grants to local authorities, etc. . .	12,755	9,657	9,195	14,265	(b)117,461
Purchase, hire and maintenance of plant . . . . .	1,080,554	1,232,912	1,388,877	1,528,885	1,459,697
Other . . . . .	92,885	61,427	313,189	365,194	85,881
<b>Total . . . . .</b>	<b>4,156,829</b>	<b>5,080,969</b>	<b>6,107,405</b>	<b>7,816,475</b>	<b>7,531,915</b>

(a) Includes Commonwealth Employment Stimulation Grant of £366,956.  
of £103,456 under Commonwealth Employment Stimulation Grant.

(b) Include grants

8. *Northern Territory.*—Information relating to the length of roads in the Northern Territory may be found in Chapter V. Territories, of this Year Book (see p. 118).

9. *Summary of Roads used for General Traffic.*—(i) *Proclaimed or Declared Roads.* The table hereunder is a summary of the roads proclaimed or declared under the Acts of the several States relative to the operations of the central road authorities, and shows the lengths of various classes proclaimed or declared as at 30th June, 1962. The central road authority in each State assumes responsibility under the Act for the whole, or a proportion, of the cost of construction and/or maintenance of these roads, the extent varying from State to State and with the class and locality of the roads. Before proclamation of a main road, consideration is given, in general, to the following points:—availability of funds; whether the road is, or will be, within one of several classes of main trunk routes; whether the district is, or will be, sufficiently served by railways. Provision is also made in some States for the declaration of roads other than main roads. The absence of a particular class in any State does not necessarily imply that there are no roads within that State that might be so classified; the classes are restricted only to roads proclaimed or declared under the Acts. A further point to make is that, through various causes, e.g. insufficiency of funds, man-power or materials, etc., construction or maintenance may not keep pace with gazettals of mileages, and, therefore, the condition of a road may not match its status.

**PROCLAIMED OR DECLARED ROADS: LENGTHS, 30th JUNE, 1962**  
(Miles)

Class of road	N.S.W.	Vic.	Q'land (a)	S. Aust.	W. Aust.	Tas.	Total
State highways .. ..	6,493	4,498	8,247	} 8,188	3,542 {	1,156 666	} 67,985
Trunk roads .. ..	4,163	} 9,112	10,273				
Ordinary main roads ..	11,647		..				
<b>Total Main Roads ..</b>	<b>22,303</b>	<b>13,610</b>	<b>18,520</b>	<b>8,188</b>	<b>3,542</b>	<b>1,822</b>	<b>67,985</b>
Secondary roads .. ..	(b) 100	..	(c) 1,900	..	(d) 7,538	196	9,734
Developmental roads ..	3,083	..	230	..	23,197	16	26,526
Tourist roads .. ..	54	426	..	..	..	46	526
Other roads .. ..	..	(e) 470	..	..	..	(f) 135	605
<b>Total Other Roads ..</b>	<b>3,237</b>	<b>896</b>	<b>2,130</b>	<b>..</b>	<b>30,735</b>	<b>393</b>	<b>37,391</b>
<b>Grand Total .. ..</b>	<b>25,540</b>	<b>14,506</b>	<b>20,650</b>	<b>8,188</b>	<b>34,277</b>	<b>2,215</b>	<b>105,376</b>

(a) As at 30th June, 1961. (b) Metropolitan only. (c) Includes mining access roads, farmers' roads and tourist tracks. (d) Though financed by the Main Roads Department, these roads are under the control of local authorities. (e) Forest roads and by-pass roads. (f) Subsidized roads.

(ii) *Surface of Roads.* The following table represents an attempt to classify all the roads used for general traffic in Australia, at the latest dates available, according to States and Territories and to certain broad surface groups. The figures in the table for the States are obtained from the Deputy Commonwealth Statistician in each State, and are derived mainly from local government sources.

**ALL ROADS USED FOR GENERAL TRAFFIC: LENGTHS**  
(Miles)

Surface of roads	N.S.W. 30th June, 1960	Vic. 30th Sept., 1961	Q'land 30th June, 1962	S. Aust. 30th June, 1962	W. Aust. 30th June, 1962	Tas. 30th June, 1962	N. Terr. 30th June, 1962	A.C.T. 30th June, 1962	Total
Bitumen or concrete ..	18,476	21,633	11,016	5,614	9,850	2,052	1,386	335	70,362
Gravel, crushed stone or other improved surface ..	46,775	32,118	19,850	13,360	20,097	8,340	343	177	141,060
Formed only ..	26,966	22,576	41,265	15,326	41,283	} 1,501 {	1,543	86	} 323,601
Cleared only ..	37,535	25,500	48,985	28,293	23,088		9,654	..	
<b>Total ..</b>	<b>129,752</b>	<b>101,827</b>	<b>121,116</b>	<b>62,593</b>	<b>94,318</b>	<b>11,893</b>	<b>12,926</b>	<b>598</b>	<b>535,023</b>

10. *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 all public authorities on roads and bridges in Australia during each of the years ended 30th June, 1958 to 1962. The figures cover expenditure from revenue and loan funds 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**  
(£ million)

Year	N.S.W.	Victoria	Q'land	S. Aust.	W. Aust.	Tasmania	Northern Territory and A.C.T.	Aust.
1957-58 ..	35	28	17	10	9	4	2	105
1958-59 ..	38	29	18	11	9	5	2	112
1959-60 ..	42	34	23	12	11	6	2	130
1960-61 ..	50	37	24	13	10	8	2	144
1961-62 ..	53	40	25	15	11	8	3	155

### § 5. Water Supply, Sewerage and Drainage

**NOTE.**—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 Chapter VIII. Water Conservation and Irrigation.

1. New South Wales.—(i) *General.* 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 and Shellharbour, and (b) the Hunter District Water Board serving the Newcastle-Maitland-Cessnock areas. At Broken Hill, a similar board includes a representative 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.

(ii) *Water Supply*—to 30th June, 1962. (a) *Metropolitan.* The storage reservoirs of the metropolitan system, with a combined available capacity of 577,122 million gallons, drain catchment areas of 3,788 square miles (Warragamba, 3,412 square miles, Upper Nepean, 347 square miles, and Woronora, 29 square miles). The development of a water supply system on the Warragamba River was completed with the official opening of the Warragamba Dam in October, 1960. This dam, constructed in concrete, has a storage capacity of 452,505 million gallons. Its safe net draught is estimated to be 285 million gallons a day. A hydro-electric power station at the dam generates 50,000 kWh a day. At 30th June, 1962, there were 135 service reservoirs in use with a combined capacity of 616 million gallons. Rating for water for 1961-62 was 10d. in the £1 of assessed annual value and the charge for water measured by meters 2s. 9d. per 1,000 gallons.

(b) *Hunter District.* The water supply is drawn from two sources:—the Chichester Reservoir, with a storage capacity of about 5,000 million gallons and draining a catchment of 76 square miles, and the Tomago Sandbeds, which extend northerly along the coast towards Port Stephens. Service reservoirs and tanks distributed throughout the Water Supply District have a total storage capacity of 115 million gallons. Water rating for 1961–62 was 1s. 5½d. in the £1 on assessed annual value for occupied properties and 1s. 2½d. in the £1 for unoccupied properties. The price of water to domestic and industrial consumers is 2s. 9d. per 1,000 gallons.

(c) *Water Supplied, etc.* The following tables show, for the Metropolitan and Hunter District systems, the number of properties, the estimated population supplied, and other details.

## WATER SUPPLY, METROPOLITAN(a): SERVICES

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	
1957–58 ..	561,934	2,148	183.6	67,016	331	86.1	6,055	340,364
1958–59 ..	579,900	2,212	198.9	72,624	348	91.3	6,246	362,130
1959–60 ..	598,893	2,264	200.9	73,529	335	88.7	6,450	382,180
1960–61 ..	620,944	2,341	219.1	79,988	353	93.6	6,664	411,731
1961–62 ..	634,139	2,481	220.7	80,556	348	89.0	6,945	430,588

(a) County of Cumberland, City of Greater Wollongong and Shellharbour Municipality.

## WATER SUPPLY, HUNTER DISTRICT(a): SERVICES

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
1957–58 ..	78,954	r 266,628	29.5	10,753	373	r 110.5	1,410
1958–59 ..	81,398	r 274,881	28.2	10,281	346	r 102.5	1,439
1959–60 ..	84,497	r 285,346	28.6	10,474	339	r 100.3	1,460
1960–61 ..	86,032	r 290,530	29.7	10,854	346	r 102.4	1,483
1961–62 ..	87,792	296,502	31.7	11,555	361	106.8	1,512

(a) Newcastle, Maitland and Cessnock areas.

(iii) *Sewerage and Drainage—to 30th June, 1962.* (a) *Metropolitan.* Sydney and suburbs are served by three major sewerage systems and seven minor systems, consisting of six outfalls discharging directly into the Pacific Ocean, and four treatment works. In addition, five centres outside the metropolitan area (Camden, Campbelltown, St. Mary's, Port Kembla and Wollongong) are served by local treatment works.

Stormwater drainage channels under the control of the Metropolitan Water, Sewerage and Drainage Board at 30th June, 1962, were 178 miles long. Sewerage rating for 1961–62 was 9½d. in the £1 of assessed annual value, and drainage rating 1½d. in the £1.

(b) *Hunter District.* The main sewerage system serves the City of Newcastle and discharges into the Pacific Ocean at Merewether Gulf. There are also local treatment works at Maitland, Cessnock and some of the outlying districts.

Sewerage rates for 1961–62 were 1s. 0½d. in the £1 of assessed annual value of occupied lands and 9½d. in the £1 for unoccupied lands, and drainage rates (on certain areas served) 1½d. in the £1.

(c) *Particulars of Services.* The following table gives, for the Metropolitan system, details of sewerage services and stormwater drains.

### SEWERAGE AND DRAINAGE, METROPOLITAN(a): SERVICES

At 30th June—				Improved properties for which sewerage available	Estimated population served	Lengths of sewers	Length of stormwater channels
					'000	Miles	Miles
1958..	..	..	..	364,712	1,483	3,628	180
1959..	..	..	..	379,069	1,520	3,791	180
1960..	..	..	..	395,869	1,560	4,021	180
1961..	..	..	..	412,034	1,620	4,231	180
1962..	..	..	..	426,333	1,710	4,489	178

(a) County of Cumberland, City of Greater Wollongong and Shellharbour Municipality.

At 30th June, 1962, 61,362 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 852 miles, and the length of drains was 50 miles.

(iv) *Finances, Metropolitan and Hunter District Systems.* 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 1961-62, and for the three services combined for the years 1957-58 to 1960-61.

### WATER SUPPLY, SEWERAGE AND DRAINAGE, METROPOLITAN AND HUNTER DISTRICT: FINANCES

(£)

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

#### METROPOLITAN(b)

1961-62—							
Water ..	116,031,669	12,392,935	5,159,425	5,137,464	2,092,930	12,389,819	3,116
Sewerage ..	52,693,840	7,034,672	3,887,790	2,241,180	898,601	7,027,571	7,101
Drainage ..	1,460,310	398,009	302,828	67,228	21,964	392,020	5,989
Total, 1961-62	170,185,819	19,825,616	9,350,043	7,445,872	3,013,495	19,809,410	16,206
1960-61	155,122,228	17,247,400	8,094,170	6,572,955	2,568,320	17,235,445	11,955
1959-60	140,992,864	15,662,131	7,739,582	5,721,738	2,194,286	15,655,606	6,525
1958-59	127,090,931	14,243,408	7,219,250	5,107,248	1,904,612	14,231,110	12,298
1957-58	116,624,719	13,071,578	6,841,455	4,534,653	1,680,320	13,056,428	15,150

#### HUNTER DISTRICT(c)

1961-62—							
Water ..	21,067,108	1,869,622	884,445	780,951	200,093	1,865,489	4,133
Sewerage ..	6,370,513	804,969	478,895	258,247	62,146	799,288	5,681
Drainage ..	266,136	58,557	32,089	11,428	2,265	45,782	12,775
Total, 1961-62	27,703,757	2,733,148	1,395,429	1,050,626	264,504	2,710,559	22,589
1960-61	25,336,784	2,378,860	1,265,923	866,746	236,432	2,369,101	9,759
1959-60	22,638,498	2,287,793	1,197,373	738,436	343,128	2,278,937	8,856
1958-59	20,053,737	2,133,500	1,179,652	671,151	246,480	2,097,283	36,217
1957-58	16,999,335	1,961,696	1,138,593	599,457	217,907	1,955,957	5,739

(a) Includes provision for renewals, long service leave, loss on exchange, etc. (b) County of Cumberland, City of Greater Wollongong, Shellharbour Municipality. (c) Newcastle-Maitland-Cessnock areas.



(v) *Country Water Supply and Sewerage Systems.* (a) *Local Government.* At 31st December, 1960, country water supply services were conducted or under construction by 52 municipalities, 80 shires and 5 county councils, and country sewerage services by 51 municipalities and 32 shires. The capital indebtedness of these schemes was £29,771,775 at 31st December, 1960, namely, £20,364,170 for water and £9,407,605 for sewerage. Debt of the municipalities amounted to £16,314,406, shires to £9,173,661 and county councils to £4,283,708. Government advances amounting to £481,700 are included in these figures. Aggregate income and expenditure amounted to £4,999,442 and £3,837,230, respectively, in 1960.

(b) *Other.* The water supply and sewerage services for Broken Hill are operated by a statutory board, the Broken Hill Water Board. Its capital indebtedness at 31st December, 1961, was £3,318,816. In 1961, income (excluding subsidies, State Government, £109,342 and mining companies, £323,942) amounted to £275,336 and expenditure (excluding debt redemption, £228,186) amounted to £480,865.

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 £6,248,139 at 31st December, 1961.

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.

2. *Victoria.*—(i) *Melbourne and Metropolitan Board of Works.* (a) *General.* The Board consists of a Chairman and 51 Commissioners elected to represent the municipalities which lie wholly or partly within the metropolitan area. The Chairman is elected by the Commissioners for a four-year term. 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.

(b) *Water Supply.* There are six storage reservoirs serving the metropolitan area—Yan Yean, 7,233 million gallons (available for consumption, 6,649 million gallons); Toorourong, 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 37, with a total capacity of 366 million gallons.

The water rate levied by the Board in 1961–62 was 8d. in the £1 on the net annual value of the properties served. The charge for water consumed in excess of the quantity which, at 2s. 0d. per 1,000 gallons, would equal the assessed water rates on each property, was 2s. 0d. per 1,000 gallons. The following table shows particulars of Melbourne metropolitan water supply services for the years 1957–58 to 1961–62.

WATER SUPPLY, MELBOURNE: SERVICES

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	
1957–58 ..	454,853	1,637	128.8	47,006	283	78.7	4,721	317,670
1958–59 ..	483,410	1,740	134.0	48,917	277	77.0	4,942	344,702
1959–60 ..	496,841	1,789	145.3	53,169	292	81.2	5,109	366,905
1960–61 ..	510,078	1,836	152.9	55,822	300	83.3	5,245	392,396
1961–62 ..	519,216	1,869	157.6	57,521	304	84.3	5,477	422,318

(c) *Sewerage and Drainage.* Particulars of sewerage and drainage services for 1957-58 to 1961-62 are shown below. The rate levied in 1961-62 in respect of sewerage was 1s. 2d. in the £1 on the net annual value of the property served. The drainage rate was 2d. in the £1.

#### SEWERAGE AND DRAINAGE, MELBOURNE: SERVICES

Year	Number of houses for which sewers are provided	Estimated population for which sewers are provided	Average daily pumping	Total sewage pumped for the year	Average daily pumping		Length of sewers, etc.	Length of main drains
					Per house	Per head of estimated population		
		'000	Mill. gals.	Mill. gals.	Gallons	Gallons	Miles	Miles
1957-58 ..	373,019	1,343	75.0	27,379	201.1	55.8	3,256	169
1958-59 ..	378,738	1,363	78.7	28,716	207.8	57.7	3,350	176
1959-60 ..	384,844	1,385	83.2	30,459	216.2	60.1	3,458	181
1960-61 ..	395,109	1,422	88.1	32,159	223.0	62.0	3,550	193
1961-62 ..	399,890	1,440	83.0	30,308	207.6	57.7	3,665	198

The metropolitan sewerage system consists of the main system (serving an area of 84,842 acres) and five subsidiary systems—the Sunshine system (serving an area of 2,118 acres), the Laverton system (serving an area of 108 acres), the Kew system (serving an area of 112 acres), the South-eastern system (serving an area of 3,318 acres in Cheltenham, Parkdale, Mentone and Mordialloc), and the Maribymong system (serving an area of 125 acres). The Metropolitan Sewage Farm, 26,811 acres in extent and situated about 24 miles south-west of Melbourne beyond the township of Werribee, serves to purify and dispose of approximately 98 per cent. of the sewage flow of the metropolis before its discharge into Port Philip Bay. The total capital cost (less depreciation) of the farm to 30th June, 1962, was £4,180,671. Revenue during 1961-62 amounted to £183,339, cost of sewage disposal to £250,355, trading expenses to £126,562, interest to £211,891, and net cost of sewerage purification to £405,469. These financial particulars are included in the sewerage items of the summary below.

(d) *Finances.* The following table provides for the year 1961-62 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 1957-58 to 1960-61.

#### MELBOURNE AND METROPOLITAN BOARD OF WORKS: FINANCES

(£)

Service, etc.	Capital cost of works and buildings at 30th June(a)	Revenue	Expenditure				Surplus (+) or deficit (-)
			Working expenses	Interest and exchange	Debt redemption	Total	
Water ..	55,658,044	5,179,234	1,684,964	2,734,531	..	4,419,495	+ 759,739
Sewerage ..	47,738,145	4,769,880	1,533,886	2,194,618	..	3,728,504	+ 1,041,376
Drainage ..	9,437,944	750,738	506,014	347,123	..	853,137	- 102,399
General(b) ..	4,672,854	..	1,097,309	..	594,622	1,691,931	- 1,691,931
Total, 1961-62	117,506,987	10,699,852	4,822,173	5,276,272	594,622	10,693,067	+ 6,785
1960-61	106,667,945	9,157,740	4,021,508	4,724,808	530,679	9,276,995	- 119,255
1959-60	98,098,322	8,463,843	3,845,137	4,221,253	526,802	8,593,192	- 129,349
1958-59	88,466,516	7,564,879	3,471,915	3,681,159	402,969	7,556,043	+ 8,836
1957-58	79,439,722	6,962,750	3,485,745	3,287,070	170,507	6,943,322	+ 19,428

(a) Total loan indebtedness—1961-62, £107,919,380.

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

(ii) *State Rivers and Water Supply Commission.* (a) *General.* Water supply and conservation throughout Victoria (except for the area controlled by the Melbourne and Metropolitan Board of Works) is the responsibility 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 improvement, have already been described in Chapter VIII.; this section is therefore confined to the Commission's functions in connexion with urban water supply and sewerage.

(b) *Water Supply.* At 30th June, 1962, the Commission provided a reticulated water supply from its own works to 136 cities and towns having a combined population of 203,000 persons.

The principal systems operated by the Commission serve part of the Mornington Peninsula—Dandenong area (about 93,000 people supplied); Bendigo, Castlemaine, etc. (56,000); and about 8,000 people in the Western District. In addition, 10,000 persons in a number of towns in the Bellarine Peninsula receive supply through a Commission-operated distributary system from headworks controlled by the Geelong Waterworks and Sewerage Trust.

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 at 30th June, 1962, net of redemption payments, was divided up as follows between the several systems:—Mornington Peninsula, £8,350,000; Bendigo, Castlemaine, £4,075,000; Bellarine Peninsula, £800,000; Otway System (Western District), £725,000; other, £1,550,000; total, £15,500,000.

In addition to the towns supplied by the Commission, there are approximately 553,000 people in 191 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 subsidizes their capital expenditure. Most new works are financed from government loan funds, but in recent years some local authorities have been able to borrow money privately. In most cases, the local authority controls both headworks and distribution system, but a few large towns—serving about 50,000 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 329 urban centres containing more than 750,000 people. Very few towns of any importance are now without a reticulated water supply.

The following table presents the financial position in respect of town water supply at 30th June, 1962.

**TOWN WATER SUPPLY, VICTORIA: CAPITAL LIABILITY, 30TH JUNE, 1962**  
(£'000)

Particulars	Water supply provided by—		
	Local authorities	State Rivers and Water Supply Commission	Total
Government advances .. .. .	20,650	16,225	36,875
Private loans .. .. .	1,550	..	1,550
Total Expenditure .. .. .	22,200	16,225	38,425
Redemption and repayments .. .. .	1,500	725	2,225
Loan Expenditure Outstanding .. .. .	20,700	15,500	36,200
Borne by State .. .. .	4,300	8,200	12,500
Borne locally .. .. .	16,400	7,300	23,700

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 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 £850,000.

(c) *Sewerage.* 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 30th June, 1962, there were 44 cities and towns with sewerage systems in operation. These contained about 410,000 persons, approximately a third of the total number of residents outside the metropolitan area.

Expenditure on sewerage in Victorian country towns at 30th June, 1962, was approximately £18,750,000, of which some £15,000,000 had been advanced by private lenders. The annual State subsidy on country sewerage in Victoria is currently about £250,000, 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.

(iii) *Geelong Waterworks and Sewerage Trust.* (a) *General.* The Geelong Waterworks and Sewerage Trust was constituted in 1908 and reconstituted under the *Geelong Waterworks and Sewerage Act* in 1910. 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 £6,500,000 for water supply undertakings, and £5,000,000 for sewerage undertakings. The population supplied is estimated by the Trust at 96,723 persons. This and other general information relates to 30th June, 1962.

(b) *Water Supply.* The Trust operates two systems for gathering and storing water, in both systems the water being brought over fifty miles to Geelong. There are seven storage reservoirs and eleven service basins whose total storage capacity is 8,640 million gallons. The length of water mains and reticulation is 517 miles. The total expenditure on water supply to 30th June, 1962, was £5,045,085. General fund expenditure for 1961-62 comprised £156,078 for working expenses and £324,805 for interest, redemption and reserves, while revenue amounted to £501,304. The sinking fund appropriations at June, 1962, amounted to £303,555. The replacement and contingencies reserve amounted to £335,785. There is a water rate of 1s. 7d. in the £1 (with minima of 10s. for vacant land and £1 for tenements) on the net annual value of ratable properties.

(c) *Sewerage Works.* The sewerage scheme consists of a main outfall sewer to the ocean and 258.8 miles of main and reticulation sewers. The sewerage area is 11,851 acres, and the number of buildings connected within the sewered areas is 21,535. The total expenditure on sewerage works to 30th June, 1962, was £2,268,824. The revenue in 1961-62 amounted to £256,885, and the general fund expenditure comprised £93,297 on working expenses and £143,322 on interest, redemption and reserves. Sinking fund appropriations at June, 1962, were £192,660. Replacement and contingencies reserve amounted to £361,421. A general rate of 1s. 4d. in the £1 is levied on the net annual value of ratable properties.

(iv) *The Ballarat Water Commissioners and the Ballarat Sewerage Authority.* (a) *General.* The body known as the Ballarat Water Commissioners was constituted on 1st July, 1880, and the Ballarat Sewerage Authority on 30th November, 1920. The members of the Water Commissioners constitute the Sewerage Authority. The Commissioners number nine, three (one of whom is chairman) being appointed by the Government, four being elected by the Council of the City of Ballarat, one being elected by the Councils of the Borough of Sebastopol and the Shires of Buninyong and Grenville and one being elected by the Councils of the Shires of Bungaree and Ballarat. General and financial information given herein relates to the year ended 31st December, 1962.

(b) *Water Supply.* The water supply district comprises an area of about 65 square miles, containing a population of about 59,000. The total storage capacity of the seven reservoirs is 5,606 million gallons and the catchment area is 24,182 acres.

The capital cost of construction of the waterworks was £2,720,483 to 31st December, 1962. The liabilities amounted to £1,662,354 at 31st December, 1962, including loans due to the Government totalling £1,529,376. The revenue for the year 1962 was £190,632. Working expenses during 1962 amounted to £107,054 and interest and other charges to £81,336. A water rate of 1s. 1d. in the £1 on the net annual valuation is levied, with a minimum charge of £1 10s. per annum on any ratable property.

(c) *Sewerage.* 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 170 miles of sewers. The capital cost of sewerage construction works to 31st December, 1962, was £1,681,978. Two hundred and eighteen sewered areas had been declared as at 31st December, 1962. Assessments in the sewerage district numbered 19,621, while those in sewered areas numbered 14,866. There were 12,833 buildings connected.

The scheme is financed by debenture-issue loans from various financial institutions. The liabilities on account of loans secured for construction at 31st December, 1962, amounted to £1,376,681; redemption payments at that date totalled £329,892. House connexions financed by the Authority numbered 3,843. Revenue during 1962 amounted to £147,186, and expenditure, which included £88,188 on interest and redemption, was £146,299.

A sewerage rate of 1s. 4d. in the £1 on the net annual valuation is levied, with a minimum charge of £3 on any ratable property.

(v) *Latrobe Valley Water and Sewerage Board.* (a) *General.* The Latrobe Valley Water and Sewerage Board was constituted on 1st 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.

(b) *Water Supply.* 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 industrialized areas, particularly around the towns of Morwell and Traralgon. At 30th June, 1962, work was virtually completed on a reservoir with a capacity of 7,000 million gallons on the Upper Tyers River and a 60-inch diameter pipeline connecting that reservoir to the existing distribution mains. The capital cost of construction of the water works was £4,512,300 to 30th June, 1962. Liabilities amounted to £4,944,523 including loans due to the Government totalling £4,817,250. Revenue for the year was £124,046. Working expenses during 1961–62 amounted to £60,918 and interest and other charges to £57,444. The Board does not strike a rate, but supplies consumers, including local water supply authorities, by measure. The quantity supplied during the year ended 30th June, 1962, was 3,005 million gallons.

(c) *Sewerage.* The sewerage system consists of a main outfall sewer, about 50 miles in length. 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 30th June, 1962, was £2,426,759. Liabilities amounted to £2,844,866 including loans due to the Government totalling £2,600,545. Revenue in 1961–62 was £113,607 and expenditure comprised £72,452 working expenses and £69,133 interest and other charges. No sewerage rate is levied, but a charge is made by measure for wastes both from industries and public authorities.

(vi) *Other Sewerage Authorities.* At 30th June, 1962, 66 other sewerage authorities had been constituted under the provisions of the *Sewerage Districts Acts* and systems were in operation in 42 districts.

3. *Queensland.*—(i) *Brisbane City Council—to 30th June, 1962.* (a) *General.* This organization conducts the water supply and sewerage systems of the City of Brisbane. Prior to 1928, water and sewerage activities had been controlled by the Metropolitan Water and Sewerage Board, but were then absorbed by the Brisbane City Council, which also supplies, in bulk, the whole of the water used by the City of Ipswich and the major portion of that used by the City of Redcliffe. Since September, 1960, Redcliffe has supplemented its supply from that of the Pine Rivers Shire Council.

(b) *Water Supply.* Water storage facilities comprise the following (available capacities are shown in parentheses):—Somerset Reservoir, 200,000 million gallons (55,000 million gallons); Lake Manchester, 5,806 million gallons (5,720 million gallons); Brisbane River, 543 million gallons (484 million gallons); Pure Water Reservoir, Holt's Hill, 8.3 million gallons (8.3 million gallons); Enoggera Reservoir, 1,000 million gallons (600 million gallons); Gold Creek Reservoir, 407 million gallons (400 million gallons). There are 16 service reservoirs with a capacity of approximately 41 million gallons. The Somerset reservoir is a dual purpose project with a designed total holding capacity of 200,000 million gallons, 55,000 million gallons to be for water storage and 145,000 million gallons for flood mitigation. Water rating at 30th June, 1962, was 4½d. in the £1 on the unimproved valuation of all ratable land, with a minimum charge of £8 for the year for each assessment. The following table is a summary of operations of the complete Brisbane City Council system (Brisbane, Ipswich and Redcliffe) for the years 1957–58 to 1961–62.

#### WATER SUPPLY, BRISBANE(a): SERVICES

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
1957–58 .. ..	157,750	575,212	41.0	14,970	260	71.3	1,995
1958–59 .. ..	163,336	594,124	41.4	15,127	254	69.7	2,059
1959–60 .. ..	168,687	615,293	44.3	16,214	272	73.1	2,137
1960–61 .. ..	171,820	626,470	46.8	17,100	273	74.8	2,196
1961–62 .. ..	178,279	649,970	45.3	16,538	254	69.7	2,284

(a) Includes Ipswich and Redcliffe.

(c) *Sewerage.* The sewage treatment works is situated at Luggage Point at the entrance to the Brisbane River. Sewerage rating at 30th June, 1962, was 3½d. in the £1 on the unimproved valuation of each portion of land with a minimum charge of £8 10s. for the year. The following table is a summary of operations of the Brisbane sewerage scheme for the years 1957–58 to 1961–62.

#### SEWERAGE, BRISBANE: SERVICES

Year					Premises connected	Estimated population served	Total sewage pumped for the year	Length of main, branch, reticulation, etc., sewers
							Mill. gals.	Miles
1957–58 .. ..	..	..	..	..	55,846	206,630	5,316	731
1958–59 .. ..	..	..	..	..	58,616	216,879	6,043	757
1959–60 .. ..	..	..	..	..	58,942	218,185	5,626	803
1960–61 .. ..	..	..	..	..	62,781	232,290	5,222	853
1961–62 .. ..	..	..	..	..	67,407	249,406	5,808	906

(d) *Finances.* The following table shows particulars of the finances of the water supply and sewerage undertakings of the Brisbane City Council for the years 1957-58 to 1961-62.

## WATER SUPPLY AND SEWERAGE, BRISBANE: FINANCES

(£ )

Service and year	Gross capital cost to 30th June	Revenue	Expenditure			Surplus(+) or deficit(-)
			Working expenses	Interest, redemption, etc., charges	Total (a)	
Water supply—						
1957-58 ..	13,560,777	1,728,751	875,248	569,267	1,577,222	+ 151,529
1958-59 ..	14,688,559	1,786,978	907,186	629,422	1,736,230	+ 50,748
1959-60 ..	16,369,241	2,149,216	984,213	793,263	2,115,298	+ 33,918
1960-61 ..	18,437,170	2,315,102	1,044,524	879,712	2,308,682	+ 6,420
1961-62 ..	19,995,220	2,481,687	1,129,904	974,898	2,381,291	+ 100,396
Sewerage—						
1957-58 ..	13,874,524	773,337	244,774	421,004	761,118	+ 12,219
1958-59 ..	14,434,390	807,399	254,445	444,562	806,862	+ 537
1959-60 ..	15,556,266	907,148	252,211	460,896	839,761	+ 67,387
1960-61 ..	16,837,552	982,345	282,035	489,597	964,578	+ 17,767
1961-62 ..	17,953,552	1,035,872	296,234	564,903	1,045,578	- 9,706

(a) Total, including other expenditure.

(ii) *Country Towns.* (a) *Water Supply.* In addition to the City of Brisbane, there were at 30th June, 1961, 160 cities and towns in Queensland provided with water supply systems controlled by municipal and shire councils.

(b) *Sewerage Systems.* At 30th June, 1961, there were 26 cities or towns in addition to Brisbane with sewerage systems, and sewerage schemes were in course of construction at 13 other cities or towns.

(c) *Finances.* The receipts (other than loan and loan subsidy) of water undertakings controlled by the cities and towns referred to above amounted to £2,441,772 in 1960-61. Expenditure amounted to £2,584,001, including £1,114,346 for debt charges. In addition, expenditure from loans and loan subsidy amounted to £2,850,451. Finances of sewerage undertakings are incorporated in council general funds and are not available separately.

4. *South Australia.*—(i) *General.* 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

Year	Assessments(a)		Area of districts supplied (a)	Capacity of reservoirs, tanks, etc.	Length of mains	Number of meters
	Number	Annual value				
		£	Acres	Mill. gals.	Miles	
1957-58..	262,430	26,810,750	12,983,539	33,949	8,260	180,815
1958-59..	269,825	28,361,294	13,003,305	33,954	8,537	197,914
1959-60..	289,235	31,617,930	13,037,312	33,957	9,016	213,024
1960-61..	319,108	40,593,447	13,118,635	35,405	9,292	232,072
1961-62..	338,636	42,702,029	13,153,869	46,328	9,634	247,972

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

## WATERWORKS, SOUTH AUSTRALIA: FINANCES

(£ )

Year	Invested capital to 30th June	Revenue	Expenditure			Deficit
			Working expenses (a)	Interest	Total	
1957-58..	49,161,026	3,028,193	2,944,648	1,740,157	4,684,805	1,656,612
1958-59..	54,301,234	3,106,348	2,768,406	1,933,850	4,702,256	1,595,908
1959-60..	59,636,914	3,386,221	3,391,892	2,205,764	5,597,656	2,211,435
1960-61..	65,183,386	4,284,394	3,188,385	2,373,567	5,561,952	1,277,558
1961-62..	73,115,312	4,532,577	4,194,970	2,694,196	6,889,166	2,356,589

(a) Includes debt redemption.

(ii) *Adelaide Waterworks.* At 30th June, 1962, the Adelaide waterworks supplied a district of 193,923 acres. The capacity of reservoirs and storage tanks was 25,427 million gallons and there were 2,561 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 the River Torrens or, by further pumping, to the River Onkaparinga. With further development, the main will operate as a closed system connected to the metropolitan reticulation. The pipeline supplements the Warren system and other country areas.

## ADELAIDE WATERWORKS: FINANCES

(£ )

Year	Invested capital to 30th June	Revenue	Expenditure			Surplus (+) or Deficit (-)
			Working expenses (a)	Interest	Total	
1957-58..	25,900,153	2,045,625	1,612,284	915,721	2,528,005	— 482,380
1958-59..	28,719,570	2,101,768	1,437,861	1,032,464	2,470,325	— 368,557
1959-60..	32,074,743	2,311,402	1,919,538	1,136,373	3,055,911	— 744,509
1960-61..	35,078,981	2,958,675	1,731,561	1,218,096	2,949,657	+ 9,018
1961-62..	38,627,084	3,151,125	2,377,181	1,368,822	3,746,003	— 594,878

(a) Includes debt redemption.



(iii) *Adelaide Metropolitan Sewerage.* The Adelaide metropolitan sewerage system, comprising the Adelaide, Glenelg, Port Adelaide and Salisbury-Elizabeth areas of 146 square miles in all, includes a sewage farm, and treatment works at Glenelg and Port Adelaide. Work is starting on a new large treatment works at Bolivar. Financial and other particulars for 1957-58 to 1961-62 are shown hereunder.

## ADELAIDE METROPOLITAN SEWERAGE: SUMMARY

Year	Length of sewers	Number of connexions	Invested capital to 30th June	Revenue	Expenditure			Surplus
					Working expenses (a)	Interest	Total	
	miles		£	£	£	£	£	£
1957-58 ..	1,411	149,104	9,213,112	1,393,260	653,810	309,145	962,955	430,305
1958-59 ..	1,444	154,636	10,437,696	1,471,067	685,104	349,312	1,034,416	436,651
1959-60 ..	1,471	160,407	11,305,495	1,576,769	676,660	401,009	1,077,669	499,100
1960-61 ..	(b) 1,598	173,753	13,376,362	2,060,534	887,921	479,011	1,366,932	693,602
1961-62 ..	(b) 1,659	179,918	14,544,885	2,211,011	913,724	524,376	1,438,100	772,911

(a) Includes debt redemption. 1960-61; 115 miles in 1961-62).

(b) Includes sewers in the Salisbury-Elizabeth area (93 miles in

(iv) *Country Sewerage Schemes.* Sewerage schemes are operating at Port Lincoln and Naracoorte. At Port Lincoln, there are 26.5 miles of sewer with an ocean outfall. At June, 1962, there were 706 connexions. The Naracoorte system has a treatment works, covers 2.56 square miles, and comprises 26.5 miles of sewer with 563 connexions.

(v) *Country Water Supply.* Water districts systems at 30th June, 1962, comprised an area of 12,959,946 acres. Supply came from reservoirs having a total capacity of 20,901 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 1961-62, supplies made to Mount Gambier, Naracoorte and other towns amounted to 983 million gallons, and the Uley-Wanilla and Lincoln Basins contributed 805 million gallons to the Tod River Water District.

## COUNTRY WATERWORKS, SOUTH AUSTRALIA: FINANCES

(£ )

Year	Invested capital to 30th June	Revenue	Expenditure			Deficit
			Working expenses (a)	Interest	Total	
1957-58 ..	23,260,873	982,568	1,332,364	824,436	2,156,800	1,174,232
1958-59 ..	25,581,664	1,004,580	1,330,545	901,386	2,231,931	1,227,351
1959-60 ..	27,562,171	1,074,819	1,472,354	1,069,391	2,541,745	1,466,926
1960-61 ..	30,104,405	1,325,719	1,456,824	1,155,471	2,612,295	1,286,576
1961-62 ..	34,488,228	1,381,452	1,817,789	1,325,374	3,143,163	1,761,711

(a) Includes debt redemption.

(vi) *Morgan-Whyalla Water Supply Scheme.* This scheme, which has 223 miles of main, was officially opened on 31st March, 1944, the capital invested to 30th June, 1961, being £2,687,707. Particulars of the scheme, where applicable, are included in the tables of the combined waterworks in (i) above. 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 has commenced. During 1961-62, water used from the scheme amounted to 3,169 million gallons. Revenue was £489,518, working expenses £359,455, interest charges £151,865 and deficit £21,802.

5. *Western Australia.*—(i) *General.* The water supply, sewerage and drainage systems of Western Australia are principally under the management of two State Government Departments, namely, the Metropolitan Water Supply, Sewerage and Drainage Department, having as its territory the metropolitan area centred on Perth and extending to Kwinana and Serpentine in the south, Sorrento in the north and Greenmount on the east, and the Public Works and Country Water Supply Department, which controls the Comprehensive Water Supply Scheme (covering the Goldfields and Agricultural Areas Water Supply and the Great Southern Towns Water Supply) as well as supplies, from local sources, to 83 country towns not included in the scheme. Both Departments are administered under the portfolio of the Minister for Works and Water Supplies. (See also Chapter VIII. Water Conservation and Irrigation, of this Year Book, pp. 296-8.)

(ii) *Metropolitan Water Supply, Sewerage and Drainage.* (a) *General.* The sources of the metropolitan water supply are the Serpentine Dam, the Canning Dam, the Churchman Brook Reservoir, the Victoria Reservoir and the Wungong Brook Diversion Weir. The supply from these sources is supplemented as necessary from a number of artesian bores and from a pipeline link with Mundaring Weir. The largest reservoir, the Serpentine Dam, has a capacity of 39,000 million gallons. There are three treatment works included in the Department's sewerage system. The largest of these, Subiaco treatment works, serves Perth and suburbs.

(b) *Water Supply.* The following table shows particulars of water supply services for 1957-58 to 1961-62.

#### METROPOLITAN WATER SUPPLY, WESTERN AUSTRALIA: SERVICES

Year	Number of services (a)	Estimated population supplied (a)	Average daily consumption	Total consumption for year	Average daily consumption		Length of mains	Number of meters
					Per service (b)	Per head of estimated population (b)		
			Mill. gals.	Mill. gals.	Gallons	Gallons	Miles	
1957-58 ..	122,159	404,390	47.5	17,337	394	119.2	1,891	85,896
1958-59 ..	125,761	417,770	49.5	18,061	399	120.2	1,991	92,495
1959-60 ..	129,956	431,600	(c) 33.7	(c) 12,335	(c) 263	(c) 79.5	2,072	97,002
1960-61 ..	133,647	446,000	49.3	18,015	374	112.3	2,137	103,969
1961-62 ..	137,960	460,730	50.6	18,492	373	111.6	2,179	116,610

(a) Figures relate to 30th June.  
restrictions in force for 180 days.

(b) Calculated from averages for the year.

(c) Water

Water rating for 1961-62 was 1s. in the £1 on annual valuation on land used for residential purposes and 1s. 6d. in the £1 on annual valuation on land not so used.

(c) *Sewerage and Main Drainage.* Some particulars of the metropolitan sewerage and main drainage services for 1957-58 to 1961-62 are shown below.

METROPOLITAN SEWERAGE AND MAIN DRAINAGE, WESTERN AUSTRALIA:  
SERVICES

Year	Houses connected	Estimated population served	Length of sewers	Length of main drains
			Miles	Miles
1957-58 .. .. .	63,969	253,800	713	66
1958-59 .. .. .	64,944	257,500	714	67
1959-60 .. .. .	65,781	260,600	719	69
1960-61 .. .. .	66,664	264,000	724	72
1961-62 .. .. .	67,378	239,110	736	77

Sewerage rating for 1961-62 was 1s. 9d. in the £1 on annual valuation, while metropolitan main drainage rating was 4d. in the £1.

(d) *Finances.* The following table shows particulars of the finances of the Western Australian Metropolitan Water Supply, Sewerage and Drainage Department.

METROPOLITAN WATER SUPPLY, SEWERAGE AND MAIN DRAINAGE  
WESTERN AUSTRALIA: FINANCES

(£)

Service and Year	Capital cost to 30th June	Revenue	Expenditure			Surplus (+) or deficit (-)
			Working expenses	Interest and debt redemption	Total	
Water supply—						
1957-58 .. .. .	15,283,093	1,260,873	617,754	658,876	1,276,630	- 15,757
1958-59 .. .. .	17,123,762	1,338,917	637,427	744,624	1,379,051	- 40,134
1959-60 .. .. .	18,715,358	1,206,823	671,009	794,160	1,465,169	- 258,346
1960-61 .. .. .	20,256,673	1,730,433	839,876	879,902	1,719,778	+ 10,655
1961-62 .. .. .	22,156,248	1,803,303	772,501	988,140	1,760,641	+ 42,662
Sewerage—						
1957-58 .. .. .	6,108,598	698,734	333,039	306,545	639,584	+ 59,150
1958-59 .. .. .	6,453,517	735,244	401,175	310,450	711,625	+ 23,619
1959-60 .. .. .	6,915,604	772,012	420,391	319,817	740,208	+ 31,804
1960-61 .. .. .	7,643,368	934,190	505,425	361,706	867,131	+ 67,059
1961-62 .. .. .	8,301,678	938,372	525,136	446,718	971,854	- 33,482
Main drainage—						
1957-58 .. .. .	1,104,103	80,431	29,325	49,467	78,792	+ 1,639
1958-59 .. .. .	1,350,083	88,846	40,684	55,090	95,774	- 6,928
1959-60 .. .. .	1,616,772	93,013	48,867	69,831	118,698	- 25,685
1960-61 .. .. .	1,771,641	113,805	49,970	78,822	128,792	- 14,987
1961-62 .. .. .	1,974,787	120,190	63,075	90,251	153,326	- 33,136

(iii) *Country Water Supplies.* Information concerning country water supplies is included in Chapter VIII. Water Conservation and Irrigation, of this Year Book (*see p. 297*).

6. *Tasmania.*—(i) *Waterworks.* At the end of 1960-61, there were 96 municipally operated waterworks in Tasmania. The capacity of the reservoirs was 2,225 million gallons, the estimated population served was 277,000 and the number of properties was 87,900. Two regional schemes operated by the State Government supply bulk water to several municipalities, augmenting supplies for an estimated population of 49,000 and 14,000 properties.

(ii) *Sewerage*. At the end of 1961-62, there were 21 municipal sewerage schemes in operation in Tasmania. They served an estimated population of 179,000 and the number of tenements served was 47,700.

7. *Northern Territory*.—Information relating to water supply in the Northern Territory may be found in Chapter VIII. Water Conservation and Irrigation (*see p. 300*).

8. *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). Six pumps are capable of pumping approximately 20 million gallons daily.

The total population in the Australian Capital Territory served was 65,500, which during 1961-62 consumed 3,115 million gallons of water. The number of water meters at 30th June, 1962, was 13,516.

In addition, during 1961-62 the Canberra water supply system supplied 239 million gallons of water to Queanbeyan, New South Wales. The total length of water lines at 30th June, 1962, was 282 miles.

The sewerage system for Canberra and suburbs consists of a treatment works and 214 miles of sewerage line (30th June, 1962). There were also 238 miles of stormwater lines.

## § 6. Harbour Boards and Trusts

NOTE.—The number and net tonnage of vessels which entered the major ports in each State during the years 1960-61 and 1961-62 are shown in Chapter XIV. Transport and Communication (*see p. 580*). Particulars of oversea and interstate cargo discharged and shipped during 1961-62 are shown on page 582 of the same chapter.

1. *New South Wales*.—(i) *Maritime Services Board of New South Wales*. (a) *General*. 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 interests. The Board was constituted on 1st 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. At other ports of New South Wales, such work is undertaken by the Department of Public Works.

(b) *Finances*. The implementation of the *Maritime Services (Amendment) Act 1960*, as from 1st May, 1961, resulted in some marked changes in the Board's accounting system. The amendment to the Act provided for a new fund known as the Maritime Services Board Fund to be established to replace the Sydney Harbour Trust Fund. 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 now 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**

(£)

Year	Revenue				Expenditure			Surplus
	Wharfage and transhipment rates	Tonnage rates and berthing charges	Other charges	Total	Administration and maintenance	Interest, debt redemption, exchange, etc.	Total (a)	
1960-61	3,130,441	631,432	927,729	4,689,602	2,565,141	2,081,110	4,646,251	43,351
1961-62	4,654,234	699,557	1,292,632	6,646,423	3,756,694	2,857,210	6,613,904	32,519

(a) Excludes capital expenditure but includes transfer to the Renewals Fund Reserve Account, 1960-61 £1,025,000, 1961-62 £1,375,000.

(c) *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 41 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 present, there are three dolphin berths each 550 feet long, and 100 effective commercial cargo berths with a total length of 46,007 feet controlled by the Board. Accommodation for harbour craft amounts to 3,355 feet, while the length of other berths including oil and private wharves totals 28,004 feet. Depth of water at wharves is up to 40 feet. Special facilities for the storage and handling of staple products such as wheat, wool, etc., are provided, and modern plant has been installed for replenishing ships' bunkers with oil or coal.

Docking facilities are available for the largest vessel afloat. The Captain Cook Graving Dock ranks amongst 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.

(d) *Port of Newcastle.* As from 1st May, 1961, the Maritime Services Board of New South Wales became the single authority for the Port of Newcastle. This was brought about by the implementation of the *Maritime Services (Amendment) Act 1960*, which resulted in the Board's jurisdiction being extended to include the operation of the coal loading equipment formerly vested in the Department of Railways and the dredging, together with the maintenance and construction of wharves and other port facilities, which had been the responsibility of the Department of Public Works.

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 1,500 feet, and the navigable channel, with a depth of 25 feet 6 inches at low water, is 350 feet wide. Wharfage accommodation amounts to approximately 13,700 feet, including about 2,700 feet of privately owned wharfage. There are also several dolphin berths available for tie-up purposes. A floating dock of 15,000 tons capacity is available at the port.

(e) *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  $1\frac{1}{4}$  miles wide, with a minimum depth of about 36 feet in the dredged swinging basin.

(f) *Port Kembla.* As from 3rd 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. The Department, however, continues to be the constructing authority in respect of works, dredging and maintenance. An Advisory Committee consisting of eight members appointed by the Governor has been formed to assist the Board in the operation of the port. It has an area of approximately 330 acres, with depths ranging from 20 to 50 feet (low water ordinary spring tide), and wharfage accommodation totalling 6,800 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 a modern fast-loading coal berth and general cargo berths.

The first stage of the inner harbour basin was opened to shipping on 28th November, 1960. Present accommodation is 1,175 feet of wharfage, with 36 feet (low water ordinary spring tide) of water, alongside. Width in the entrance to the inner harbour basin is 400 feet.

(g) *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.

(ii) *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 *Light-houses 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 1st February, 1936, the State enactments have been administered by the Maritime Services Board. The gross collections by the State authorities amounted to £8,753,007 in 1961-62. This figure includes the revenue for the ports of Sydney, Newcastle and Botany Bay (see table on p. 827) and State navigation service collections £1,980,517 (1961-62). Commonwealth Government revenue from light dues and navigation receipts, for the whole of Australia, amounted to £746,842 in 1961-62.

2. *Victoria.*—(i) *Melbourne Harbor Trust.* (a) *General.* 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 organization, with a full-time Chairman and five part-time Commissioners with specialized knowledge of the requirements of exporters, primary producers, shipowners, importers and all aspects of port labour. The area of water and land under the control of the Trust is  $10\frac{1}{2}$  square miles, with sheds available for cargo in transit totalling 25,505 feet in length and covering an area of  $46\frac{1}{2}$  acres.

Two 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, 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  $58\frac{1}{2}$  acres with 58,466 feet of effective berthing space.

During 1961, work was commenced at South Wharf to modify two berths as specialized cargo-handling berths for the growing container cargo trade. The second berth at the Tasmanian Ferry Terminal for the roll-on, roll-off cargo service between Melbourne and Tasmania was brought into operation in March, 1961.

The depth of water (low water ordinary spring tide) from the main channels to the principal wharves is 31 to 39 feet.

(b) *Finances.* The following table shows particulars of the financial operations of the Trust.

## MELBOURNE HARBOR TRUST: FINANCES

(£ )

Year	Gross loan indebtedness at 31st December	Revenue		Expenditure				Surplus (+) or deficit (-)
		Wharfage and tonnage rates	Total	Administration and maintenance	Interest, debt redemption, exchange, etc.	Depreciation, renewals and insurance account	Total (a)	
1957 ..	12,175,428	1,882,501	2,746,513	1,557,933	520,223	250,938	2,718,159	+ 28,354
1958 ..	12,907,279	2,043,848	3,020,913	1,310,119	603,899	631,988	2,958,686	+ 62,227
1959 ..	13,833,011	2,100,924	3,292,329	1,634,513	766,909	376,397	3,201,943	+ 90,386
1960 ..	14,199,060	2,492,139	3,948,187	1,962,110	766,532	641,175	3,872,264	+ 75,923
1961 ..	14,240,702	2,303,586	3,791,495	2,246,657	910,713	203,909	3,826,008	- 34,513

(a) Includes statutory payments to Consolidated Revenue and Geelong Harbour Trust:—1957, £389,065; 1958, £412,680; 1959, £424,124; 1960, £502,447; and 1961, £464,729. Excludes capital expenditure:—1957, £1,054,236; 1958, £1,658,589; 1959, £1,458,499; 1960, £1,280,529; and 1961, £1,348,846.

(ii) *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. One of these, the chairman, is on a full time basis.

At the end of 1961, there were 19 effective berths in the port, plus two berths at the Commonwealth Explosives Pier, Pt. Wilson, owned and operated by the Commonwealth. Three major wharf projects are in course of planning, the first of which is expected to be under construction early in 1963. Four berths have a depth of 36 feet at low water, but a further two (at Bulk Wheat Pier) are expected to have 36 feet by March, 1963. All other berths, except Yarra Pier, 29 feet, and Commonwealth Explosives Pier, Pt. Wilson, 30 feet, have a depth of 32 feet at low water.

Revenue for the year 1961 was £1,214,782 and expenditure from revenue totalled £701,077. At 31st December, 1961, the value of the Trust's fixed assets was £8,362,888 and loans outstanding amounted to £2,797,401.

(iii) *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. Currently work in progress on the construction of an oil tanker berth, which is scheduled for completion in February, 1963.

Operating revenue for the year ended 30th June, 1961, was £63,183 and revenue expenditure was £48,987. The value of the Trust's fixed assets, less depreciation, was £6,358,601 at 30th June, 1961, and loans and advances outstanding amounted to £6,482,122.

3. *Queensland.*—(i) *General.* 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.

(ii) *Brisbane.* Brisbane accommodates comfortably, in its dredged and improved river, 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 1956-57 to 1960-61 are shown below.

**BRISBANE HARBOUR: FINANCES**  
(£'000)

Year	Loan indebtedness at 30th June	Receipts		Payments	
		Harbour dues	Total	Working expenses(a)	Total
1956-57 .. ..	3,011	671	918	843	1,048
1957-58 .. ..	3,042	696	938	731	944
1958-59 .. ..	2,702	709	1,097	664	883
1959-60 .. ..	2,512	772	1,059	731	953
1960-61 .. ..	2,813	763	1,164	679	901

(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 nine smaller harbours not administered by harbour boards.

(iii) *Harbour Boards.* Harbour boards control the ports of Bowen, Bundaberg, Cairns, Gladstone, Mackay, Rockhampton and Townsville. Finances for each port for the year ended 30th June, 1961, are shown below, together with a summary for the years ended 30th June, 1957 to 1960.

**HARBOUR BOARDS, QUEENSLAND: FINANCES**  
(£)

Harbour board	Loan indebtedness at 30th June	Revenue		Expenditure (excluding loan)		Surplus(+) or deficit(-)
		Wharfage and harbour dues	Total	Working expenses	Total (including interest and redemption)(a)	
Bowen .. ..	273,982	7,750	37,430	13,477	18,315	+ 19,115
Bundaberg .. ..	2,487,273	112,420	243,931	10,557	224,574	+ 19,357
Cairns .. ..	242,546	186,136	275,164	205,583	251,696	+ 23,468
Gladstone .. ..	784,968	41,650	72,740	27,655	84,804	- 12,064
Mackay .. ..	1,331,243	167,707	374,694	73,844	409,318	- 34,624
Rockhampton .. ..	629,407	39,750	119,312	21,176	104,893	+ 14,419
Townsville .. ..	3,645,928	306,774	559,898	195,098	531,673	+ 28,225
Total, 1960-61 .. ..	9,395,347	862,187	1,683,169	547,390	1,625,273	+ 57,896
1959-60 .. ..	8,430,437	908,911	1,807,041	561,425	1,526,770	+ 280,271
1958-59 .. ..	7,099,197	898,822	1,602,409	602,391	1,696,390	- 93,981
1957-58 .. ..	5,435,172	775,436	1,226,581	603,081	1,190,356	+ 36,225
1956-57 .. ..	3,567,335	757,778	1,005,986	578,259	1,170,528	- 164,542

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

4. *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 five 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 24 feet at Port Pirie to 35 feet at Port Adelaide (Outer Harbour). The following table shows the finances of the Board for 1957-58 to 1961-62.

### THE SOUTH AUSTRALIAN HARBORS BOARD: FINANCES

(£)

Year	Capital at 30th June (a)	Revenue	Expenditure from revenue			Surplus
			Working expenses	Interest	Total	
1957-58..	14,189,715	2,119,826	1,487,014	505,322	1,992,336	127,490
1958-59..	15,325,443	2,156,669	1,464,006	550,364	2,014,370	142,299
1959-60..	16,324,529	2,314,999	1,574,774	612,711	2,187,485	127,514
1960-61..	17,432,015	2,714,743	1,684,618	658,269	2,342,887	371,856
1961-62..	18,555,851	2,576,697	1,676,407	701,032	2,377,439	199,258

(a) State Treasurer's Funds and Reserve employed.

5. *Western Australia.*—(i) *Fremantle Harbour Trust.* The Port of Fremantle is operated and controlled by the Fremantle Harbour Trust, a body corporate administered by a Board of five Commissioners appointed triennially by the Governor. The port covers an extensive water area of some 180 square miles and comprises an inner and an outer harbour. The inner harbour includes 18 deep water land-backed berths, providing more than 690,000 sq. ft. of covered storage space and 11,148 feet of wharf berth accommodation. All inner harbour berths are dredged to a depth of 36 feet. The outer harbour includes three main anchorages, Gage Roads, Owen Anchorage and Cockburn Sound. Deep water jetties are available in the outer harbour including the oil refinery jetties in Cockburn Sound. Ocean going deep draft ships enter the Sound by means of channels 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 three tanker berths, each with a low water depth of 44 feet, at the Kwinana oil refinery, and one berth at the nearby steelworks jetty with a low water depth of 30 feet. There are also special berths for the off-loading of cattle and the handling of high explosives.

Gross earnings for the year 1961-62 amounted to £3,937,439, working expenses to £2,416,757, interest charges to £291,039, debt redemption to £78,807, and renewals fund to £2,000. Special loan redemptions were £291,640, and net capital totalled £8,023,190.

(ii) *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. Wharf accommodation consists of 1,115 feet, and in addition the Deepwater Jetty has 2,500 feet of accommodation. Gross earnings for the year 1961-62 amounted to £132,811, working expenses £63,392, interest and sinking fund charges, £94,553, and amounts debited to loan capital account, £1,898,474.

(iii) *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 3,700 feet. Gross earnings for the year 1961-62 amounted to £164,790, working expenses £74,570, interest and sinking fund charges £94,877, and amounts debited to loan capital account, £2,298,785.

(iv) *Other Ports.* The following ports are controlled by the State Government Harbour and Lights Department:—Broome, Busselton, Carnarvon, Derby, Esperance, Geraldton, Onslow, Point Samson, Port Hedland, Wyndham and Yampi. The Port of Esperance was under the control of the Railways Commission until 22nd January, 1962.

6. *Tasmania*.—There are eight marine boards and two harbour trusts in Tasmania. The marine boards control the ports of Hobart, Launceston, Stanley (Circular Head), Burnie and Wynyard (Table Cape), Devonport, Strahan, Currie (King Island), and White-mark (Flinders Island), and the harbour trusts those of Smithton and Ulverstone. Aggregate receipts of revenue accounts of all these authorities during the year 1960–61 were £1,621,271, and expenditures £1,382,024, including loan charges £346,112. The total receipts of the Hobart Marine Board during 1960–61 were £598,545, loan charges amounted to £118,377 and total expenditure to £450,919. Launceston Marine Board receipts during 1960–61 amounted to £332,480, loan charges to £44,570 and total expenditure to £323,625. Loan indebtedness of all marine boards and trusts at 30th June, 1961, was £4,649,213, of which £1,267,201 was in respect of Hobart (including Port Huon Wharf) and £615,780 in respect of Launceston.

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 34 feet (low water ordinary spring tide), but at Hobart there is a depth of water of from 30 to 52 feet.

## § 7. Fire Brigades

1. *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 154 fire districts had been constituted at the end of 1961. 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 £1,000,000.

At 31st December, 1961, the authorized strength of the Fire Brigade throughout the fire districts of New South Wales was 411 officers and 1,228 permanent and 2,564 volunteer firemen. Corresponding figures for the Sydney Fire District were 340, 1,110 and 317. The revenue for the year 1961 was £3,475,378, made up as follows:—from the Government, £434,398; municipal and shires, £434,398; fire insurance companies and firms, £2,576,805, and from other sources, £29,777. The disbursements for the year were £3,388,300. 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* 1949–1958, 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 30th June, 1962, Volunteer Brigades equipped by means of this fund numbered 2,500 with an active membership in excess of 65,000 persons. Up to 30th June, 1962, expenditure from the Fund for equipment amounted to £1,707,268.

2. *Victoria*.—(i) *General*. 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 also consisting of ten members.

(ii) *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 30th June, 1962, the Board had under its control 45 stations, 1,024 permanent staff, 232 special service and clerical, etc., staff, and 17 part-time firemen. The total receipts for 1961–62 were £2,162,234, comprising contributions, £1,851,410, receipts for services, £204,805 and interest and sundries, £106,019. The expenditure was £2,032,297.

(iii) *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 24 fire control regions, three of which (Ballarat, Bendigo and Geelong) 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 30th June, 1962, the *Country Fire Authority Act* applied to 206 insurance companies, 207 urban and 1,037 rural fire brigades. The effective registered strength of the brigades was 106,904 members.

Income for the year 1961-62 amounted to £690,444. Total expenditure other than loan amounted to £634,518.

3. *Queensland.*—(i) *General.* Fire Districts are constituted under the Acts of 1920-1956. 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.

(ii) *Fire Brigade Boards.* At 30th June, 1961, there were 78 Fire Brigade Boards. The total number of stations was 143 and full-time staff numbered 853, including 23 administrative, 175 officers and 655 firemen. Volunteers numbered 98. Part-time staff numbered 1,086, including 77 administrative, 111 officers, and 898 firemen. The total revenue for the year 1960-61 was £1,351,203, received mainly from the following sources:—Government £184,179, local authorities £184,179, insurance companies £920,916. Loan receipts (Government and other) were £107,741. The total expenditure for the year was £1,314,805, the chief items being salaries and wages £959,906, and interest and redemption of loans £94,092.

4. *South Australia.*—The *Fire Brigades Act* 1936-1958 provides for a board of five members, and 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. When the Treasury proportion exceeds £10,000, the excess is borne five-sevenths by insurance companies and two-sevenths by the municipalities. At 30th June, 1962, there were altogether 35 fire brigade stations, of which 12 were metropolitan and 23 country.

The strength of the permanent staff at 31st December, 1962, was 393, including 272 officers and men, 89 country auxiliary firemen and 32 other employees (including maintenance workers). The total revenue for the year 1961-62 was £512,960, including contributions of £430,094 made up as follows:—insurance companies £257,395, Treasury £68,201 and municipalities £104,498. The treasury contribution includes an additional grant of £55,603.

5. *Western Australia.*—By the provisions of the *Fire Brigades Act* 1942-1961 certain local government districts are constituted fire districts under the control of the Western Australian Fire Brigades Board. There were 44 fire districts at 30th September, 1962. The contribution to the Board is made in the proportion of two-ninths from the Government, two-ninths from local government authorities, and five-ninths from insurance companies. The number of local government authorities and insurance companies who contributed numbered 60 and 169 respectively. The brigades, throughout the State, controlled by the Western Australian Fire Brigades Board at 30th September, 1962, numbered 63, with a staff of 1,399, including 272 permanent officers and firemen and 1,127 volunteer brigade officers and firemen. The revenue for the year ended 30th September, 1962, was £609,642 and the expenditure £606,584.

Under the *Bush Fires Act*, a Bush Fires Board, consisting of ten members, five 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 1,741 at 30th June, 1962, and the establishment of bush fire brigades, 793 at 30th June, 1962. Many individual brigades are large organizations with numerous self-contained sections.

6. *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 1960–61 amounted to £175,000. There were, at 30th June, 1961, 23 brigades controlling 35 stations, and their aggregate staffs numbered 553, including 100 permanent officers, 371 part-time firemen, including officers, and 82 volunteers.