

CHAPTER XX

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 899, are known in New South Wales as cities, municipalities and shires; in Victoria as cities, towns, boroughs and shires; in Queensland as cities, towns and shires; in South Australia as cities, corporate towns and district council areas; in Western Australia as cities, towns and shires; and in Tasmania as cities and municipalities. In New South Wales some local government authorities in an area have combined to provide services such as electricity, water, sewerage and drainage—e.g. the county councils. Within shires there are also some municipal units known as urban areas. Apart from the more thinly populated parts of New South Wales and South Australia, and the Commonwealth Territories (except for the City of Darwin), practically the whole of Australia comes within local government jurisdiction.

The financial statistics in § 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 1963 the area incorporated was 272,000 square miles, or nearly nine-tenths of the total area of the State.

All local government authorities in the State are subject to the general provisions of the Local Government Act.

Municipalities and shires may combine to form county councils for the establishment and conduct of services of joint benefit, e.g., electricity, water, gas, abattoirs. At 31st December, 1963, there were 56 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 of 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 1962-63 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, 1962-63

Location	Number	Area '000 acres	Population '000	Dwellings		Value of ratable property		
				Occupied	Unoccupied	Unimproved capital value £'000	Improved capital value £'000	Annual value £'000
				No. (a)	No. (a)			
NEW SOUTH WALES(b)								
Metropolitan—								
Capital city	1	7	169	48,599	2,311	212,151	537,896	29,645
Other	34	702	2,131	570,916	22,825	1,055,768	2,984,306	178,763
Outside metropolitan area ..	190	173,648	1,735	441,537	47,267	657,361	n.a.	68,648
Total	225	174,357	4,035	1,061,052	72,403	1,925,280	n.a.	n.a.
VICTORIA(c)								
Metropolitan—								
Capital city	1	8	76	18,971	740	n.a.	331,139	16,557
Other	43	715	1,928	505,637	16,093	n.a.	1,980,474	99,863
Outside metropolitan area(d)	164	55,387	1,042	264,769	30,469	n.a.	1,370,479	68,648
Total	208	56,110	3,046	789,377	47,302	n.a.	3,682,092	185,068
QUEENSLAND(e)								
Capital city	1	246	619	160,588	5,441	72,525	n.a.	n.a.
Other(f)	130	425,980	941	236,845	28,544	257,383	n.a.	n.a.
Total	131	426,226	1,560	397,433	33,985	329,908	n.a.	n.a.
SOUTH AUSTRALIA(e)								
Metropolitan—								
Capital city	1	4	22	5,846	437	60,639	140,000	7,012
Other	20	100	578	158,054	5,157	n.a.	543,000	27,131
Outside metropolitan area ..	120	36,857	391	95,205	11,208	n.a.	501,000	25,061
Total	141	36,961	991	259,105	16,802	n.a.	1,184,000	59,204
WESTERN AUSTRALIA(e)								
Metropolitan—								
Capital city	1	16	95	26,845	1,001	2,657	n.a.	6,358
Other	16	107	350	88,003	2,686	52,950	n.a.	3,399
Outside metropolitan area ..	128	624,466	324	79,469	9,939	77,408	n.a.	1,939
Total	145	624,589	769	194,317	13,626	133,015	n.a.	11,756

NOTE.—See next page for footnotes.

LOCAL GOVERNMENT AUTHORITIES: AREA, POPULATION, DWELLINGS
AND VALUE OF RATABLE PROPERTY, 1962-63—*continued*

Location	Number	Area '000 acres	Popula- tion '000	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
TASMANIA(e)								
Metropolitan—								
Capital city	1	18	54	15,281	507	22,484	71,179	4,876
Other	2	99	64	14,483	795	17,481	57,632	3,981
Outside metropolitan area ..	46	16,661	244	61,494	7,280	68,039	234,625	15,454
<i>Total</i>	49	16,778	362	91,258	8,582	108,004	363,436	24,311

(a) Particulars of dwellings as at Census 30th June, 1961. (b) Year ended 31st December, 1962.
(c) Year ended 30th September, 1963. (d) Excludes Yalourn Works Area under the jurisdiction of
the State Electricity Commission. (e) Year ended 30th June, 1963. (f) Includes City of
Redcliffe and that part of Pine Rivers Shire within the Metropolitan Area of Brisbane but outside the
Brisbane City Area.

8. **Finances.**—(i) *General.* The following tables show the latest available financial statistics for local government authorities. The figures relate to the year 1962-63 except for New South Wales, where they relate to the year 1962. For further detail on local government finances, see *State, Territory and Local Government Authorities' Finance and Government Securities*, Bulletin No. 2, 1963-64, issued by this Bureau.

(ii) *Ordinary Services.* In the returns of revenue and expenditure for 1962-63 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, 1962-63

Particulars	N.S.W. (a)	Vic. (b)	Q'land (c)	S. Aust. (c)	W. Aust. (c)	Tas. (c)	Total
Number of local government authorities	225	208	131	141	145	49	899

REVENUE (EXCLUDING LOAN RECEIPTS) (£'000)

Taxation—							
Rates (net)	46,999	27,637	16,573	7,867	5,195	} 2,883	107,737
Penalties	456	127	..	..	..
Licences	952	240	178	197	88		
<i>Total</i>	48,407	28,004	16,751	8,064	5,283	2,917	109,426
Public works and services—							
Sanitary and garbage services ..	4,517	1,765	2,922	90	527	160	9,981
Council properties	4,068	(d) 5,522	778	616	1,556	391	12,931
Street construction	2,954	2,112	..	(e) 3,194	523	24	8,807
Other	4,667	1,066	353	107	260	225	6,678
<i>Total</i>	16,206	10,465	4,053	4,007	2,866	800	38,397
Government grants—							
Roads	13,649	395	3,415	1,494	2,458	670	22,081
Other	1,737	1,878	376	114	187	354	4,646
<i>Total</i>	15,386	2,273	3,791	1,608	2,645	1,024	26,727
Profits from business undertakings .. ..	..	454	..	..	..	..	454
Fees and fines .. ..	..	346	..	..	79	..	425
All other .. ..	..	429	(f) 6,739	115	1,805	157	9,245
Total Revenue	79,999	41,971	31,334	13,794	12,678	4,898	184,674

NOTE.—See next page for footnotes.

LOCAL GOVERNMENT AUTHORITIES: ORDINARY SERVICES—REVENUE AND EXPENDITURE, 1962-63—*continued*

Particulars	N.S.W. (a)	Vic. (b)	Q'land (c)	S. Aust. (c)	W. Aust. (c)	Tas. (c)	Total
EXPENDITURE (EXCLUDING LOAN EXPENDITURE) (£'000)							
General administration ..	5,269	5,298	2,666	1,232	1,159	494	16,118
Debt services (excluding business undertakings)—							
Interest ..	2,834	2,217	3,072	469	821	389	9,802
Redemption ..	5,090	2,615	3,422	797	1,248	365	13,537
Exchange ..	20	..	111	..	..	..	131
Other ..	..	48	44	..	..	..	92
Total Debt, etc. ..	7,944	4,880	6,649	1,266	2,069	754	23,362
Public works and services—							
Roads, streets and bridges ..	35,976	14,100	8,782	8,145	3,831	1,995	72,829
Health administration ..	2,175	449	3,292	287	257	102	17,659
Sanitary and garbage services ..	5,772	4,112					
Street lighting ..	1,834	861	450	306	205	119	3,775
Council properties ..	11,085	(g) 7,540	3,703	1,276	3,200	841	27,645
Other ..	4,003	1,293	109	210	750	55	6,420
Total ..	60,845	28,355	16,336	10,652	8,883	3,257	128,328
Grants—							
Fire brigades ..	449	603	219	141	133	53	1,598
Hospitals and ambulances ..	233	124	..	279	10	..	5,509
Other charities ..							
Other ..	(h) 2,357	(i) 1,610	705	58	58	65	..
Total ..	3,039	2,337	924	488	201	118	7,107
All other ..	2,660	987	(j) 4,376	..	223	94	8,340
Total Expenditure	79,757	41,857	30,951	13,638	12,535	4,717	183,455

(a) Figures for New South Wales relate to the year ended 31st December, 1962, 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, 1963. (c) Year ended 30th June, 1963. (d) Includes £2,611,000 plant hire. (e) Includes £1,609,000 reimbursement from Highways Department. (f) Includes the following reimbursements: £2,134,000 from Main Roads Department, £496,000 from other State Government Departments and £1,736,000 from other sources. (g) Includes £828,000 plant and equipment. (h) To Main Roads Department. (i) Includes £769,000 to Country Roads Board. (j) Includes expenditure on work done for re-imbursement: for Main Roads Department £2,131,000; for other State Government Departments £496,000; other £1,651,000.

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

Year	N.S.W.(a)	Vic.(b)	Q'land(c)	S. Aust.(c)	W. Aust.	Tas.(c)	Total
REVENUE (EXCLUDING LOAN RECEIPTS)							
1959 ..	55,946	29,456	23,618	9,977	(d) 8,544	3,147	130,688
1960 ..	61,024	32,864	25,593	10,667	(d) 9,437	3,404	142,989
1961 ..	67,624	35,836	26,698	11,890	(d) 10,495	3,799	156,342
1962 ..	75,219	39,031	28,470	13,329	(c) 10,536	4,203	170,788
1963 ..	79,999	41,971	31,334	13,794	(c) 12,678	4,898	184,674
EXPENDITURE (EXCLUDING LOAN EXPENDITURE)							
1959 ..	54,024	29,332	23,184	10,024	(d) 8,343	3,149	128,056
1960 ..	58,911	32,295	25,631	10,898	(d) 9,364	3,410	140,509
1961 ..	67,962	36,413	27,217	12,463	(d) 10,582	3,836	158,473
1962 ..	74,964	39,071	28,046	13,409	(c) 10,381	4,081	169,952
1963 ..	79,757	41,857	30,951	13,638	(c) 12,535	4,717	183,455

(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 1962-63, particulars of the revenue and expenditure, other than loan, of business undertakings under the control of local government authorities. These particulars are not included in the foregoing tables.

**LOCAL GOVERNMENT AUTHORITIES: BUSINESS UNDERTAKINGS—REVENUE
AND EXPENDITURE, 1962-63**
(£'000)

Particulars	N.S.W. (a)	Vic. (b)	Q'land (c)	S. Aust. (c)	W. Aust. (c)	Tas. (c)	Total
REVENUE (EXCLUDING LOAN RECEIPTS)							
Water supply and sewerage—							
Rates	3,742		2,473	..	..	1,340	} 11,983
Charges for services and sales of products ..	1,082	454	2,694	3	19	176	
Other (including grants) ..	(d) 1,127	12	532	..	..	227	
Total	5,951	466	5,699	3	19	1,743	13,881
Electricity and gas—							
Rates	552	..	6	..	..	..	558
Charges for services and sales of products ..	83,913	17,299	9,601	574	862	..	112,249
Other (including grants) ..	1,919	287	1,178	28	..	..	3,412
Total	86,384	17,586	10,785	602	862	..	116,219
Railways, tramways and omnibuses—							
Charges for services and sales of products ..	..	..	3,922	..	..	..	3,922
Other (including grants) ..	..	..	257	..	..	..	257
Total .. .. .	..	..	4,179	..	..	..	4,179
Other—	(e)	(f)	(g)	(h)	(i)	(j)	..
Rates	13	..	11	..	..	..	24
Charges for services and sales of products ..	4,694	1,067	402	100	48	241	6,552
Other (including grants) ..	188	33	1	48	..	..	270
Total	4,895	1,100	414	148	48	241	6,846
Grand Total	97,230	19,152	21,077	753	929	1,984	141,125

EXPENDITURE (EXCLUDING LOAN EXPENDITURE)							
Water supply and sewerage—							
Working expenses ..	2,428	351	2,469	3	9	762	6,022
Depreciation	(k) -130	22	..	..	..	..	-108
Debt charges	2,267	63	2,389	..	17	892	5,628
Other (including transfers to general revenue and construction) ..	..	29	646	..	..	66	741
Total	4,565	465	5,504	3	26	1,720	12,283
Electricity and gas—							
Working expenses ..	71,404	15,921	6,688	474	659	..	95,146
Depreciation	(k) 1,607	541	..	..	81	..	2,229
Debt charges	9,630	609	2,862	51	95	..	13,247
Other (including transfers to general revenue and construction) ..	..	419	957	87	..	..	1,463
Total	82,641	17,490	10,507	612	835	..	112,085
Railways, tramways and omnibuses—							
Working expenses ..	..	..	3,888	..	..	..	3,888
Debt charges .. .. .	..	..	373	..	..	..	373
Other (including transfers to general revenue and construction) ..	..	..	290	..	..	..	290
Total .. .. .	..	..	4,551	..	..	..	4,551
Other—	(e)	(f)	(g)	(h)	(i)	(j)	..
Working expenses ..	4,466	818	193	111	32	156	5,776
Depreciation	9	49	..	..	..	..	58
Debt charges	220	98	24	3	1	35	381
Other (including transfers to general revenue and construction) ..	..	71	36	41	..	..	148
Total	4,695	1,036	253	155	33	191	6,363
Grand Total	91,901	18,991	20,815	770	894	1,911	135,282

(a) Year ended 31st December, 1962. (b) Year ended 30th September, 1963. (c) Year ended 30th June, 1963. (d) Includes Government grant, £865,000, for part of cost of new works borne by Government. (e) Abattoirs. (f) Abattoirs, hydraulic power undertakings, quarries, iceworks and reinforced concrete pipe and culvert works. (g) Off-street car parking, municipal markets, hostels, hotels and cinemas. (h) Quarries, hospitals and cinemas. (i) Quarries, canteen and abattoirs. (j) Abattoirs. (k) Net balance after deducting charge for debt redemption. The full amount of charge for debt redemption is included under debt charges.

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 1958-59 to 1962-63.

LOCAL GOVERNMENT AUTHORITIES: BUSINESS UNDERTAKINGS—REVENUE AND EXPENDITURE
(£'000)

Year	N.S.W.(a)	Victoria(b)	Q'land(c)	S. Aust.(c)	W. Aust.	Tas.(c)	Total
REVENUE (EXCLUDING LOAN RECEIPTS)							
1959 ..	66,378	15,242	14,113	563	(d) 771	1,272	98,339
1960 ..	72,790	16,505	15,329	601	(d) 896	1,487	107,608
1961 ..	80,276	16,884	16,182	628	(d) 865	1,635	116,470
1962 ..	87,744	17,712	17,859	656	(c) 768	1,846	126,585
1963 ..	97,230	19,152	21,077	753	(c) 929	1,984	141,125
EXPENDITURE (EXCLUDING LOAN EXPENDITURE)							
1959 ..	63,777	14,815	14,296	556	(d) 747	1,269	95,460
1960 ..	69,628	16,202	15,481	625	(d) 885	1,471	104,292
1961 ..	77,585	16,732	17,317	621	(d) 869	1,626	114,750
1962 ..	83,961	17,676	17,726	648	(c) 711	1,809	122,531
1963 ..	91,901	18,991	20,815	770	(c) 894	1,911	135,282

(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 1962-63 of loan expenditure on works connected with the ordinary services and the business undertakings of local government authorities.

LOCAL GOVERNMENT AUTHORITIES: LOAN EXPENDITURE, 1962-63
(£'000)

Particulars	N.S.W.	Vic.	Q'land	S. Aust.	W. Aust.	Tas.	Total
ORDINARY SERVICES							
Roads, bridges, streets, footpaths, drainage and sewerage ..	5,113	3,058	10,221	2,111	753	936	22,192
Council properties ..	(a) 3,117	(a) 1,869	} (a) 2,345	164	(a) 1,954	(a) 445	} 12,775
Parks, gardens and recreational reserves ..	891	923		209	574	284	
Other	(b) 807	389	421	4	137	266	2,024
Total	9,928	6,239	12,987	2,488	3,418	1,931	36,991
BUSINESS UNDERTAKINGS							
Water supply	2,697	85	3,382	..	..	935	7,099
Sewerage	1,253	..	..	..	4	719	1,976
Electricity and gas ..	13,697	1,644	1,885	53	294	..	17,573
Railways, tramways and omnibuses .. .. .	..	..	133	..	..	..	133
Abattoirs	760	103	..	..	..	21	884
Other .. .. .	..	..	63	4	..	..	67
Total	18,407	1,832	5,463	57	298	1,675	27,732
Grand Total	28,335	8,071	18,450	2,545	3,716	3,606	64,723

(a) Includes plant. (b) Includes advances for homes, £217,000.

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 1958-59 to 1962-63.

LOCAL GOVERNMENT AUTHORITIES: LOAN EXPENDITURE
(£'000)

Year	N.S.W.(a)	Victoria(b)	Q'land(c)	S. Aust.(c)	W. Aust.	Tas.(c)	Total
ORDINARY SERVICES							
1959 ..	5,941	4,313	6,225	1,313	(d) 2,093	812	20,697
1960 ..	7,001	4,733	8,480	1,157	(d) 1,819	1,109	24,299
1961 ..	7,595	5,179	11,407	1,790	(d) 2,272	1,276	29,519
1962 ..	7,923	5,460	11,326	1,677	(c) 2,746	1,387	30,519
1963 ..	9,928	6,239	12,987	2,488	(c) 3,418	1,931	36,991
BUSINESS UNDERTAKINGS							
1959 ..	11,645	1,505	6,463	54	(d) 144	958	20,769
1960 ..	12,776	1,319	6,304	58	(d) 78	1,226	21,761
1961 ..	15,149	1,368	7,574	42	(d) 137	1,354	25,624
1962 ..	13,886	1,802	7,567	22	(c) 155	1,442	24,874
1963 ..	18,407	1,832	5,463	57	(c) 298	1,675	27,732

(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 Government and Semi-Governmental Authorities' Debt

1. **General.**—Statistics of local government and semi-governmental debt for 1958-59 to 1962-63 are given in the following paragraph. The information covers all local government authorities and those semi-governmental authorities responsible for the provision of the following services.

New South Wales. Water Supply, Sewerage and Drainage, Electricity and Gas Supply, Fire Brigades, Banking and Grain Elevators. County Councils are included among these authorities.

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

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

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

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

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

A detailed list of the authorities included is shown in *State, Territory and Local Government Authorities' Finance and Government Securities*, Bulletin No. 2, 1963-64.

2. **Local Government and Semi-Governmental Debt.**—The following table provides a summary of new money loan raisings, provisions for debt redemption, debt outstanding and interest payable by local government and semi-governmental authorities for the year 1962-63. For greater detail, see *State, Territory and Local Government Authorities' Finance and Government Securities*.

LOCAL GOVERNMENT AND SEMI-GOVERNMENTAL AUTHORITIES: NEW MONEY LOAN RAISINGS, REDEMPTION, DEBT AND INTEREST PAYABLE, 1962-63

(£'000)

Particulars	N.S.W.	Vic.	Q'land	S. Aust.	W. Aust.	Tas.	Total
LOCAL GOVERNMENT AUTHORITIES							
New money loan raisings—							
From government ..	95	158	1,791	611	..	109	2,764
From public ..	16,599	12,200	14,843	1,947	3,784	2,517	51,890
<i>Total</i> ..	<i>16,694</i>	<i>12,358</i>	<i>16,634</i>	<i>2,558</i>	<i>3,784</i>	<i>2,626</i>	<i>54,654</i>
Funds provided for redemption—							
Government loans ..	138	58	842	444	..	53	1,535
Loans due to public ..	6,385	4,116	5,330	375	1,367	673	18,246
<i>Total</i> ..	<i>6,523</i>	<i>4,174</i>	<i>6,172</i>	<i>819</i>	<i>1,367</i>	<i>726</i>	<i>19,781</i>
Accumulated sinking fund balance ..	4,954	3,202	9,960	..	55	294	18,465
Debt—							
Due to government ..	1,979	3,437	15,589	1,900	9	910	23,824
Due to banks (net overdraft) ..	322	515	..	..	25	..	862
Due to public creditor(a) ..	96,406	59,319	120,661	9,413	17,942	16,227	319,968
<i>Total(a)</i> ..	<i>98,707</i>	<i>63,271</i>	<i>136,250</i>	<i>11,313</i>	<i>17,976</i>	<i>17,137</i>	<i>344,654</i>
Maturing overseas(a)(b) ..	1,250	..	2,878	..	..	..	4,128
Annual interest payable(a) ..	n.a.	3,328	6,968	548	970	914	n.a.
SEMI-GOVERNMENTAL AND OTHER PUBLIC AUTHORITIES							
New money loan raisings—							
From government ..	15,717	21,651	761	11,102	5,825	10,512	65,568
From public ..	30,614	55,584	14,952	5,769	3,611	2,044	112,574
<i>Total</i> ..	<i>46,331</i>	<i>77,235</i>	<i>15,713</i>	<i>16,871</i>	<i>9,436</i>	<i>12,556</i>	<i>178,142</i>
Funds provided for redemption—							
Government loans ..	3,012	2,166	499	1,355	1,053	971	9,056
Loans due to public ..	8,704	10,822	3,867	802	896	671	25,762
<i>Total</i> ..	<i>11,716</i>	<i>12,988</i>	<i>4,366</i>	<i>2,157</i>	<i>1,949</i>	<i>1,642</i>	<i>34,818</i>
Accumulated sinking fund balance ..	41,440	15,923	8,115	777	2,244	1,059	69,558
Debt—							
Due to government ..	221,848	258,725	20,781	144,492	96,568	109,088	851,502
Due to banks (net overdraft) ..	2,570	928	59	7	103	..	3,667
Due to public creditor(a) ..	336,615	563,858	99,646	46,425	25,540	21,619	1,093,703
<i>Total(a)</i> ..	<i>561,033</i>	<i>823,511</i>	<i>120,486</i>	<i>190,924</i>	<i>122,211</i>	<i>130,707</i>	<i>1,948,872</i>
Maturing overseas(a)(b) ..	6,250	5,372	..	..	..	..	11,622
Annual interest payable(a) ..	n.a.	40,560	6,227	8,699	5,290	5,923	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 1958-59 to 1962-63. Figures for years before 1962-63 have been revised in this issue.

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

Particulars	1958-59	1959-60	1960-61	1961-62	1962-63
LOCAL GOVERNMENT AUTHORITIES					
New money loan raisings—					
From government	1,986	2,542	3,058	1,918	2,764
From public	29,669	34,148	35,641	45,485	51,890
<i>Total</i>	<i>31,655</i>	<i>36,690</i>	<i>38,699</i>	<i>47,403</i>	<i>54,654</i>
Funds provided for redemption—					
Government loans	1,478	1,518	1,585	1,549	1,535
Loans due to public	11,416	13,208	14,153	15,337	18,246
<i>Total</i>	<i>12,894</i>	<i>14,726</i>	<i>15,738</i>	<i>16,886</i>	<i>19,781</i>
Accumulated sinking fund balance	14,106	15,316	16,605	18,275	18,465
Debt—					
Due to government	18,568	19,530	21,074	22,659	23,824
Due to banks (net overdraft)	686	465	525	693	862
Due to public creditor(a)	213,733	235,676	257,660	289,163	319,968
<i>Total(a)</i>	<i>232,987</i>	<i>255,671</i>	<i>279,259</i>	<i>312,515</i>	<i>344,654</i>
Maturing overseas(a)(b)	6,140	5,962	5,501	5,322	4,128
SEMI-GOVERNMENTAL AND OTHER PUBLIC AUTHORITIES					
New money loan raisings—					
From government	54,242	57,574	62,148	63,053	65,568
From public	75,627	86,961	72,732	91,366	112,574
<i>Total</i>	<i>129,869</i>	<i>144,535</i>	<i>134,880</i>	<i>154,419</i>	<i>178,142</i>
Funds provided for redemption—					
Government loans	8,484	7,616	8,419	8,835	9,056
Loans due to public	13,457	16,053	18,078	19,770	25,762
<i>Total</i>	<i>21,941</i>	<i>23,669</i>	<i>26,497</i>	<i>28,605</i>	<i>34,818</i>
Accumulated sinking fund balance	41,882	49,447	57,557	63,524	69,558
Debt—					
Due to government	592,436	676,552	731,822	786,242	851,502
Due to banks (net overdraft)	6,410	4,415	6,093	5,844	3,667
Due to public creditor(a)	773,498	851,208	915,154	996,148	1,093,703
<i>Total(a)</i>	<i>1,372,344</i>	<i>1,532,175</i>	<i>1,653,069</i>	<i>1,788,234</i>	<i>1,948,872</i>
Maturing overseas(a)(b)	11,663	11,555	11,643	11,633	11,622

(a) See footnote (a) page 773.

(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 1959–60 to 1963–64. 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 XXII. 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.	Total
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
1963 ..	14,940	10,877	9,796	6,200	9,487	2,700	54,000
1964 ..	16,221	11,412	10,535	6,669	10,263	2,900	58,000

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 may be proclaimed by the Governor 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. Alternatively, a Council's maximum contribution may be at a rate determined annually by the Commissioner of between 10 per cent. and 15 per cent. of Council's total rate income. 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, 1964, was 25,572 miles classified as:—State highways, 6,533 miles; trunk roads, 4,163 miles; ordinary main roads, 11,590 miles; secondary roads, 132 miles; developmental roads, 3,018 miles; and tourist roads, 136 miles.

The length of main roads maintained by the Department of Main Roads at 30th June, 1964, was 5,792 miles (26 per cent.), while the length maintained by Councils was 16,494 miles (74 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, 69 per cent., 31 per cent.; and trunk and ordinary main roads, 5 per cent., 95 per cent. Unclassified roads in the Western Division of the State, totalling 1,030 miles, were maintained by the Department, while developmental roads, totalling 3,018 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, 54 per cent., 46 per cent. Secondary roads totalling 132 miles were maintained by Councils. The 136 miles of tourist roads throughout the State were maintained by Councils.

(b) *Surface of Roads.* In 1963, the total length of all roads in New South Wales was estimated at 131,140 miles. The lengths of roads, according to their surface, were as follows:—bitumen or concrete, 23,468 miles; gravel or stone, 45,513 miles; formed only, 28,660 miles; cleared only, 33,499 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 1963–64, 61 new bridges were constructed. In addition, 57 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 Clarence River at Harwood on the Pacific Highway (length 2,918 feet); over the Clyde River at Nelligen (length 827 feet); over the Parramatta River at Gladesville (length 1,900 feet); over the Darling River at Louth (length 469 feet); over the George's River at Taren Point (length 1,662 feet); over the south arm of the Hunter River at Tourle Street, Newcastle (length 978 feet); over Salt Pan Creek connecting Peakhurst and Padstow (length 600 feet); over Jugiong Creek on the Hume Highway (length 395 feet); over the Peel River at Tamworth on the New England Highway (length 386 feet); over the Minnamurra River at Minnamurra on the Prince's Highway (length 371 feet); over the Yass River near Yass on the Hume Highway (length 336 feet); over the Orara River at Ramornie on the Gwydir Highway (length 735 feet); over Tarban Creek on the North-Western Expressway (length 300 feet); over the Hawthorne Canal, Haberfield (length 359 feet); and over the Murrumbidgee River at Jugiong (length 343 feet). Also under construction was an overpass (627 feet long) at Huntley's Point, Gladesville.

(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, p. 775 and Chapter XXII. 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, 1924–1963. The State Government also makes repayable advances for Main Roads Department works.

Revenue and expenditure for the five years 1959-60 to 1963-64 are shown below.

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

Particulars	1959-60	1960-61	1961-62	1962-63	1963-64
REVENUE(a)					
Motor vehicle taxation, registration and licence fees	11,850,477	12,432,316	12,683,234	15,163,302	19,340,996
Commonwealth Aid Roads Act	7,719,608	8,239,061	8,936,462	9,539,785	10,308,711
State and Commonwealth grants	638,750	375,000	704,000	237,400	98,600
Contributions by other departments and bodies	360,978	382,689	237,572	171,010	162,997
Councils' contributions	1,649,122	1,858,878	2,269,553	2,367,351	2,881,593
Other	83,179	154,816	160,759	138,361	171,508
Total	22,302,114	23,442,760	24,991,580	27,617,209	32,964,405
EXPENDITURE(b)					
Roads and bridges—					
Construction	13,883,723	17,731,562	18,936,979	18,999,757	24,099,506
Maintenance	6,352,014	6,137,466	6,343,148	6,330,559	8,104,266
Administration	824,203	912,675	1,128,740	1,315,814	1,409,931
Interest, exchange, etc., on debt	202,439	227,238	252,649	282,872	493,133
Other(c)	351,394	542,127	531,783	620,891	687,888
Total	21,613,773	25,551,068	27,193,299	27,549,893	34,794,724

(a) Excludes repayable advances by the State Government and private loans (£800,000 in 1959-60, £575,000 in 1960-61, £635,000 in 1961-62, £890,000 in 1962-63, and £2,010,000 in 1963-64), and transfers from Sydney Harbour Bridge Account for Expressway construction (£362,000 in 1959-60, £768,000 in 1960-61, £1,822,000 in 1961-62, £2,081,000 in 1962-63 and £1,539,000 in 1963-64). Expenditure from these amounts is fully reflected in Expenditure. (b) Excludes debt redemption (£45,981 in 1959-60, £48,816 in 1960-61, £53,075 in 1961-62, £57,088 in 1962-63, and £61,996 in 1963-64) and repayment of government advances (£400,000 in 1960-61, £60,000 in 1962-63, and £60,000 in 1963-64). (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 170 feet from high water level. The deck, 160 feet wide, carries a roadway of eight traffic lanes and two railway tracks, and there is also a footway on each side. The capital cost of the bridge and associated roadways to 30th June, 1964, was £11,936,864, 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, almost £10,300,000, is repayable from toll income. Income for 1963-64 amounted to £2,007,000, including road tolls, £1,803,000, railway passenger tolls, £141,000, and omnibus passenger tolls, £15,000. Expenditure amounted to £1,146,000, including interest, exchange, flotation expenses, etc., £427,350, sinking fund, £146,720, maintenance, £318,387. The accumulated surpluses of the Bridge Account have been used to finance conversion of tram tracks to roadway and construction of city expressways. From 1958-59 to 1963-64 a total of £920,379 was expended on tram track conversion and £6,522,000 on city expressways. The account showed a deficiency of £931,513 at 30th June, 1964. During 1963-64, 35,353,591 road vehicles (excluding omnibuses and exempt vehicles), 25,798,000 rail travellers and 13,955,000 omnibus travellers crossed the bridge, contributing respectively 92 per cent., 7 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, 1964, was 14,502 miles, classified as follows:—State highways, 4,465 miles; main roads, 9,094 miles; by-pass roads, 37 miles; tourist roads, 445 miles; forest roads, 461 miles. The length of the surface sealed (bitumen or concrete) included in the foregoing mileage was 12,167 miles or 84 per cent. of the total.

(b) *Surface of Roads.* It is estimated that, in addition to the 14,502 miles of classified roads, there were approximately 87,000 miles of unclassified roads at 30th June, 1964. The latest detailed estimate of the length of roads and streets in Victoria (as at 30th September, 1963) provides the following information:—bitumen or concrete, 23,742 miles; gravel or stone, 31,510 miles; formed only, 21,318 miles; cleared only, 23,533 miles; total, 100,103 miles.

(iii) *Country Roads Board.* (a) *General.* During 1963–64, 2,088 miles of declared roads under the Board's control were treated with bitumen. In addition, 947 miles of undeclared roads, for which the Board contributed funds, were similarly treated. The total length of bitumen treatment carried out in 1963–64 was 3,147 miles (including 112 miles for other authorities). Of the work on the roads under the Board's control in 1963–64, 784 miles related to State highways and by-pass roads.

During 1963–64, 227 bridge projects of an estimated total value of £2,800,300 were initiated. Of these, 136, estimated to cost £886,300, 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, 1964, loan receipts and payments each amounted to £333,000. The total loan expenditure to 30th June, 1964, was £16,089,295. 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	1959–60	1960–61	1961–62	1962–63	1963–64
RECEIPTS					
Motor vehicle registration fees(a) ..	8,941,256	9,282,073	9,529,594	10,289,728	11,334,589
Drivers' licence fees(a)	452,324	256,673	259,890	318,653	297,541
Drivers' licence testing fees .. ..	..	38,969	76,901	74,537	81,246
Municipalities' payments	723,803	788,663	777,667	881,920	789,714
Commonwealth Aid Roads Acts(b) ..	8,460,574	8,983,776	9,877,696	10,675,566	11,215,367
Loans from State Government	160,000	283,000	683,000	301,000	333,000
Commonwealth-State contribution for restoration of flood damage ..	5,124	966	..	..	..
Road charges Commercial Goods Vehicles Act	2,117,494	2,254,421	2,262,417	2,459,557	2,818,969
Other	43,994	50,223	(c)575,704	83,757	111,706
Total	20,904,569	21,938,764	24,042,869	25,084,718	26,982,132

NOTE.—See next page for footnotes.

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

Particulars	1959-60	1960-61	1961-62	1962-63	1963-64
PAYMENTS					
Construction and maintenance of roads and bridges—					
State highways	5,852,042	6,880,998	6,836,437	6,605,006	9,575,353
Main roads	6,259,203	5,919,265	7,426,610	6,747,848	7,444,648
By-pass roads	266,880	1,096,742	682,635	431,434	1,320,502
Tourist roads	551,088	600,132	572,755	469,350	712,339
Forest roads	192,060	275,365	295,101	276,261	370,962
Unclassified roads	3,974,049	4,228,144	5,193,213	4,834,154	5,053,390
Other	124,589	88,612	69,295	69,317	43,511
Plant purchase	1,028,042	708,141	174,694	915,985	596,273
Interest, debt redemption, etc. ..	875,034	888,244	927,527	965,301	975,226
Office building, Kew—capital cost ..	452,275	528,123	19,554	270,833	188,896
Statutory payment to Tourists' Resorts Fund	151,737	187,872	191,554	197,328	213,658
Administration and other	1,122,756	1,177,903	1,651,472	1,906,301	1,884,299
Total	20,948,755	22,579,541	24,040,847	23,689,118	28,379,057

(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) Excludes portion of Commonwealth Aid Roads Acts advances drawn by the Public Works Department for expenditure on wharfs, jetties, etc.. (c) 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 construction programme of urgent highway works throughout the metropolitan area of Melbourne has been adopted. Expenditure on these projects up to 30th June, 1964, was £2,791,590.

(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 1963-64 was £424,456, consisting entirely of receipts from owners' certificates. Expenditure from the Fund amounted to £314,756, of which £253,632 was incurred by the Railways Department and £61,124 by the Country Roads Board, leaving a balance carried forward of £198,908.

4. *Queensland.*—(i) *General.* Under "The Main Roads Act of 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, and secondary roads; and the responsibility for building and maintaining these declared roads is largely that of the Commissioner. Roads of purely local importance are constructed and maintained by local authorities. In many cases construction is financed by the State Government by means of Treasury loans. Other roads may be built by the Public Estate Improvement Branch of the Lands Department in order to open up areas of previously inaccessible or undeveloped country.

(ii) *Length of Roads.* (a) *Declared Roads.* The total length of declared roads in Queensland at 30th June, 1964, was 24,454 miles; comprising State highways, 6,323 miles; main roads, 5,199 miles; developmental roads, 4,374 miles; and secondary roads, 8,558 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, 1964 was:—bitumen or concrete, 12,798 miles; gravel or stone, 19,743 miles; formed only, 41,255 miles; cleared only, 45,245 miles; total, 119,041 miles.

(iii) *Department of Main Roads.* (a) *General.* During 1962–63 the Department completed 1,289 miles of roads, including new construction and stage construction. Bridges of all types to a length of 8,470 linear feet were constructed, bringing the total constructed by the Department at 30th June, 1963, to 231,055 feet. In addition, at 30th June, 1963, 7,246 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 during each of the years 1958–59 to 1962–63 are shown below.

DEPARTMENT OF MAIN ROADS, QUEENSLAND: RECEIPTS AND PAYMENTS
(£)

Particulars	1958-59	1959-60	1960-61	1961-62	1962-63
RECEIPTS					
Motor vehicle registration, Transport Acts collections, fees, etc. ..	5,036,414	5,404,547	5,568,994	5,813,480	6,169,594
Loans from State Government ..	621,865	..	..	909,939	833,905
Grants, advances, refunds, etc. from State Government	241,861	325,755	357,942	909,012	1,152,708
Commonwealth Aid Roads and Works Acts	7,353,215	7,912,040	8,268,742	9,601,704	10,426,811
Maintenance repayments—local authorities	648,882	707,813	723,187	746,796	777,280
Hire, rent, sales of plant, etc. ..	1,126,739	1,250,205	1,219,599	1,285,370	1,482,877
Other	548,287	601,415	523,413	608,554	637,732
Total	15,577,263	16,201,775	16,661,877	19,874,855	21,480,907
PAYMENTS					
Permanent road works and surveys(a)	8,680,460	11,380,919	10,826,353	13,185,284	14,423,333
Maintenance of roads	2,790,004	2,890,698	2,456,530	2,878,765	2,969,722
Plant, machinery, buildings, etc. (including plant maintenance) ..	1,000,793	1,345,167	1,394,807	1,519,674	1,286,595
Loans—Interest	198,098	156,542	107,490	84,058	59,813
Redemption	330,561	329,722	318,288	321,978	325,091
Administration and other	1,157,569	1,270,686	1,521,589	1,787,477	2,031,261
Total	14,157,485	17,373,734	16,625,057	19,777,236	21,095,815

(a) Includes grants to local authorities for road purposes.

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, 1964, there were 8,156 miles of proclaimed main roads and approximately 79,160 miles of district roads, including roads and tracks outside local government areas, totalling 87,316 miles. Lengths of road classified by surface were estimated to be:—bitumen or concrete, 7,089 miles; gravel or stone, 11,770 miles; formed only, 10,380 miles; unformed, 58,077 miles.

(iv) *State Highways and Local Government Department, Receipts and Payments.* The following table shows particulars of receipts and payments, during the years 1959–60 to 1963–64, of funds controlled by the Highways and Local Government Department.

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

(£)

Particulars	1959–60	1960–61	1961–62	1962–63	1963–64
RECEIPTS					
Motor vehicles registration, licences, fees	3,942,087	4,111,494	4,293,105	4,537,011	4,989,229
Commonwealth Aid Roads Acts	4,923,122	5,128,065	5,752,281	6,200,066	6,668,732
Loans from State Government	85,000	90,000	200,000	290,000	475,000
Other(a)	445,484	449,333	533,812	582,788	604,917
Total	9,395,693	9,778,892	10,779,198	11,609,865	12,737,878
PAYMENTS					
Construction and reconstruction of roads and bridges(b)	6,113,227	6,465,892	7,307,955	7,678,880	9,758,376
Maintenance(a)(b)	2,183,012	2,095,253	2,337,218	2,487,972	2,791,552
Recoups to Consolidated Revenue Fund—interest, debt redemption and exchange	213,631	215,539	227,041	242,766	256,243
Advances to local and semi-governmental authorities	301,929	702,718	420,157	580,879	825,169
Stores, plant, machinery, suspense accounts, etc.(c)	439,732	495,036	406,868	—71,974	269,190
Total	9,251,531	9,974,438	10,699,239	10,918,523	13,900,530

(a) Includes reimbursement works for Commonwealth Government. (b) Includes administration expenses. (c) Represents gross repayments less recoveries by charges to works on account of depreciation and materials used.

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, 1964, was made up as follows:—bitumen or concrete 11,286 miles; gravel or stone, 21,414 miles; formed only, 43,987 miles; natural state (cleared only), 28,160 miles; total, 104,847 miles.

(b) *Roads under Main Roads Act.* The total length of constructed roads for which financial provision was made by the Main Roads Department, at 30th June, 1964, was:—main roads, 3,463 miles, including 5 miles of controlled-access roads; important secondary roads, 7,989 miles; and developmental roads, 41,121 miles. In addition, there were 74 miles gazetted as controlled-access roadway as yet not constructed.

(iii) *Main Roads Department.* (a) *General.* During the year 1963-64 the activities of the Department included clearing, 2,351 miles; forming, 3,361 miles; gravelling, 1,871 miles; reconditioning, 7,099 miles; and stabilizing, 159 miles. In addition, 1,647 miles were primed and sealed (including widening) and 34 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 to the extent of £750,000 in 1963-64 for the improvement of roads used for the transport of beef cattle in the Kimberley District. The five-year period relating to these additional grants terminates on 30th June, 1966, with a total amount of £3,450,000 of Commonwealth funds matched by a corresponding State contribution. Other sources of income include one-half of the net amount of traffic fees collected in the Metropolitan Traffic Area and an allocation of Department of Transport funds. (Outside the Metropolitan Traffic Area, motor vehicle licence fees are collected and retained by the local authorities.) Receipts and payments for the years 1959-60 to 1963-64 are shown in the following table.

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

(£)

Particulars	1959-60	1960-61	1961-62	1962-63	1963-64
RECEIPTS					
Motor vehicle registration, licences, fees, etc. ..	539,459	486,948	486,948	486,948	486,948
Central Trust Fund(a)	351,604	707,569	1,060,511	1,399,567	1,873,642
Commonwealth Aid Roads Acts	7,687,130	7,428,808	7,752,996	8,128,436	8,493,561
Commonwealth Aid Roads Acts—matching grants(a)	351,591	703,533	1,051,647	1,405,521	1,769,481
Western Australia Grant (Beef Cattle Roads) Act ..	..	..	500,000	700,000	750,000
Commonwealth-State Grant to restoration of flood-damaged roads .. ..	..	..	320,000	..	..
Recoups from other authorities	183,106	217,196	246,920	370,003	561,781
Other	4,777	3,179	5,331	6,789	35,319
Total	9,117,667	9,547,233	11,424,353	12,497,264 (b)	13,970,732 (c)

PAYMENTS					
Construction and reconstruction of roads and bridges(d)	6,434,690	5,447,028	6,469,990	7,266,896	6,935,975
Maintenance of roads and bridges(d)	910,846	974,053	1,086,042	1,007,705	1,280,563
Grants to local authorities, etc.	1,182,255	1,263,722	1,436,651	1,272,822	1,470,000
Payments to local authorities from Central Road Trust Fund and Commonwealth matching grants .. ..	..	403,799	724,873	946,233	1,258,773
Transfer to State Consolidated Revenue	70,000	70,000	70,000	70,000	70,000
Plant, machinery, etc.	160,749	368,760	240,141	485,261	573,147
Other(d)	221,817	243,896	387,522	437,796	702,346
Total	8,980,357	8,771,258	10,415,219	11,486,713	12,290,804 (e)

(a) Includes amounts to be distributed to metropolitan and country local authorities early in the following year. (b) Excludes £700,000 advance from State Treasury. (c) Excludes £500,000 advance from State Treasury. (d) Includes administration and expenditure on hire and maintenance of road construction plant, etc., and on purchase of materials. (e) Excludes £700,000 being refund of advance from State Treasury.

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 1963-64 on the construction and maintenance of roads, tracks and bridges amounted to £6,921,534, of which £4,241,145 was charged to road funds, £28,341 to revenue, £2,599,486 to loan and £52,562 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, 1964, were as follows:—State highways, 1,171 miles; main roads, 662 miles; secondary roads, 196 miles; tourist roads, 46 miles; and other roads, 135 miles. The total length of State roads in Tasmania was 2,210 miles and the length of all other roads, 10,051 miles. The mileages of sealed roads, and their proportions to the respective totals were:—State highways, 839 miles (72 per cent.); main roads, 417 miles (63 per cent.); and other roads, 79 miles (21 per cent.). The total length of State sealed roads was 1,335 miles (60 per cent.). The total length of non-State sealed roads was 1,100 miles (11 per cent.). The total length of all sealed roads in the State was 2,435 miles (20 per cent.).

(b) *Surface of Roads.* The length of all roads in Tasmania, including those with surfaces of lower grade, at 30th June, 1964, was as follows:—bitumen or concrete, 2,435 miles; gravel or stone, 8,484 miles; formed only and cleared only, 1,342 miles; total, 12,261 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 1959–60 to 1963–64.

ROAD FUNDS, TASMANIA: RECEIPTS AND PAYMENTS

(£)

Particulars	1959–60	1960–61	1961–62	1962–63	1963–64
RECEIPTS					
Motor vehicle taxation and registration, licences, fees, fines, etc. . .	1,112,674	1,162,869	1,254,327	1,416,371	1,509,372
Commonwealth Aid Roads and Works Acts	2,183,461	2,299,992	2,500,008	2,700,000	2,900,000
Recoups from local authorities, etc. . .	9,384	8,555	8,515	9,538	7,014
State Loan Fund	1,168,558	2,461,289	2,062,319	1,927,128	2,380,470
Hire of plant	1,273,535	1,393,102	1,452,402	1,474,373	1,582,455
Other	107,803	376,795	(a)496,033	(a)341,174	(a)232,467
Total	5,855,415	7,702,602	7,773,604	7,868,584	8,611,778
PAYMENTS					
Construction and reconstruction of roads and bridges	3,052,787	4,565,047	4,591,019	4,900,631	5,619,710
Maintenance	1,325,329	1,306,922	1,258,856	1,283,598	1,292,987
Other works connected with transport	18,028	36,162	19,001	22,836	36,003
Grants to local authorities, etc.	9,195	14,265	(b)117,461	(b) 25,157	16,382
Purchase, hire and maintenance of plant	1,388,877	1,528,885	1,459,697	1,535,092	1,615,670
Other	313,189	365,194	85,881	73,482	110,082
Total	6,107,405	7,816,475	7,531,915	7,840,796	8,690,834

(a) Includes Commonwealth Employment Stimulation Grant (£366,956 in 1961–62, £253,777 in 1962–63, and £7,651 in 1963–64). (b) Includes grants under Commonwealth Employment Stimulation Grant (£103,456 in 1961–62, and £11,130 in 1962–63).

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. 104).

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, 1964. 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, 1964
(Miles)

Class of road	N.S.W.	Vic.	Q'land	S. Aust.	W. Aust.	Tas.	Total
State highways	6,533	4,465	6,323	} 8,156	3,463	} 1,171	} 60,819
Trunk roads	4,163	} 9,094	5,199				
Ordinary main roads	11,590						
Total Main Roads	22,286	13,559	11,522	8,156	3,463	1,833	60,819
Secondary roads	(a) 132	..	(b) 8,558	..	7,989	196	16,875
Developmental roads	3,018	..	4,374	..	c 41,121	..	48,513
Tourist roads	136	445	..	..	..	46	627
Other roads .. .. .	..	(d) 498	..	..	(e) 74	(f) 135	707
Total Other Roads	3,286	943	12,932	..	49,184	377	66,722
Grand Total	25,572	14,502	24,454	8,156	52,647	2,210	127,541

(a) Metropolitan only. (b) Includes mining access roads, farmers' roads and tourist tracks.
(c) Maintenance of these roads is the responsibility of the several local authorities. (d) Forest roads and by-pass roads. (e) Gazetted as controlled access roadway but not constructed. (f) 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, 30th JUNE, 1964
(Miles)

Surface of roads	N.S.W. (a)	Vic. (b)	Q'land	S. Aust.	W. Aust.	Tas.	N. Terr.	A.C.T.	Total
Bitumen or concrete	23,468	23,742	12,798	7,089	11,286	2,435	1,437	379	82,634
Gravel, crushed stone or other improved surface	45,513	31,510	19,743	11,770	21,414	} 8,484	{ 940	177	139,551
Formed only	28,660	21,318	41,255	10,380	43,987				
Cleared only	33,499	23,533	45,245	58,077	28,160	} 1,342	{ 7,311	86	344,392
Total	131,140	100,103	119,041	87,316	104,847					12,261	11,227	642	566,577

(a) 30th June, 1963. (b) 30th September, 1963.

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, 1960 to 1964. 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.
1959-60 ..	42	34	23	12	11	6	2	130
1960-61 ..	50	37	24	13	10	8	3	145
1961-62 ..	52	39	24	14	12	8	4	153
1962-63 ..	53	36	27	16	12	9	5	158
1963-64 ..	63	41	34	20	13	9	5	185

§ 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, Shellharbour, and Kiama, and (b) the Hunter District Water Board serving the Newcastle-Maitland-Cessnock areas. At Broken Hill and Cobar similar boards include representatives of the mining companies. Other systems, apart from irrigation projects and water storage systems administered by the State Government, are controlled by county, municipal or shire councils.

(ii) *Water Supply—to 30th June, 1964. (a) Metropolitan*. The storage reservoirs of the metropolitan system, with a combined available capacity of 577,122 million gallons, drain catchment areas of 3,860 square miles (Warragamba, 3,480 square miles, Upper Nepean, 347 square miles, and Woronora, 33 square miles). The development of a water supply system on the Warragamba River was completed with the official opening of the Warragamba Dam in October, 1960. This dam, constructed in concrete, has a storage capacity of 452,505 million gallons. Its safe net draught is estimated to be 285 million gallons a day. A hydro-electric power station at the dam generated 341 million kWh in 1963-64. At 30th June, 1964, there were 162 service reservoirs in use with a combined capacity of 635 million gallons. Rating for water for 1963-64 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 principally 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. Two other sources of supply are being developed. Service reservoirs and tanks distributed throughout the Water Supply District have a total storage capacity of 120 million gallons. Water rating for 1963–64 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	
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
1962–63 ..	653,674	2,544	233.6	85,282	357	91.8	7,173	438,585
1963–64 ..	669,948	2,600	255.0	93,211	381	98.0	7,397	457,215

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

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
1959–60.. ..	84,497	285,346	28.6	10,474	339	100.3	1,460
1960–61.. ..	86,032	290,530	29.7	10,854	346	102.4	1,483
1961–62.. ..	87,792	296,502	31.7	11,555	361	106.8	1,512
1962–63.. ..	89,283	301,580	36.6	13,352	410	121.3	1,551
1963–64.. ..	91,616	309,609	36.4	13,336	398	117.7	1,590

(a) Newcastle, Maitland and Cessnock areas.

(iii) *Sewerage and Drainage—to 30th June, 1964.* (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, seven centres outside the metropolitan area (Camden, Campbelltown, St. Mary's, Port Kembla, Richmond, Warragamba township and Wollongong) are served by local treatment works.

Stormwater drainage channels under the control of the Metropolitan Water, Sewerage and Drainage Board at 30th June, 1964, were 180 miles long. Sewerage rating for 1963–64 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 1963–64 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
1960	395,869	1,560	4,021	180
1961	412,034	1,620	4,231	180
1962	426,333	1,710	4,489	178
1963	451,997	1,780	4,763	179
1964	475,735	1,870	5,074	180

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

At 30th June, 1964, 66,510 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 930 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 1963-64, and for the three services combined for the years 1959-60 to 1963-64.

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)							
1963-64—							
Water ..	128,460,185	15,588,061	7,288,918	6,012,511	2,276,575	15,578,004	10,057
Sewerage ..	73,069,775	9,372,067	4,922,764	3,175,539	1,270,114	9,368,417	3,650
Drainage ..	2,072,517	469,941	354,753	86,464	25,933	467,150	2,791
Total, 1963-64	203,602,477	25,430,069	12,566,435	9,274,514	3,572,622	25,413,571	16,498
1962-63	187,888,210	22,095,309	10,484,862	8,418,877	3,177,286	22,081,025	14,284
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
HUNTER DISTRICT(c)							
1963-64—							
Water ..	24,543,739	2,091,111	896,394	980,225	213,909	2,090,528	583
Sewerage ..	7,727,080	947,770	506,782	331,764	107,087	945,633	2,137
Drainage ..	355,940	63,512	41,817	14,730	2,898	59,445	4,067
Total, 1963-64	32,626,759	3,102,393	1,444,993	1,326,719	323,894	3,095,606	6,787
1962-63	29,965,556	2,906,377	1,319,991	1,215,641	361,200	2,896,832	9,545
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

(a) Includes provision for renewals, long service leave, etc. of Greater Wollongong, Shellharbour and Kiama Municipalities areas.

(b) County of Cumberland, City of Greater Wollongong, Shellharbour and Kiama Municipalities.
(c) Newcastle-Maitland-Cessnock areas.

(v) *Country Water Supply and Sewerage Systems.* (a) *Local Government.* At 31st December, 1962, country water supply services were conducted or under construction by 50 municipalities, 85 shires and 5 county councils, and country sewerage services by 50 municipalities and 36 shires. The capital indebtedness of these schemes was £34,669,485 at 31st December, 1962, namely, £24,122,334 for water and £10,547,151 for sewerage. Debt of the municipalities amounted to £18,023,887, shires to £12,122,281 and county councils to £4,523,317. Government advances amounting to £444,965 are included in these figures. Aggregate income and expenditure amounted to £5,920,192 and £4,541,205, respectively, in 1962.

(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, 1963, was £3,573,626. In 1963, income (excluding subsidies, State Government, £78,396 and mining companies, £225,855) amounted to £276,282 and expenditure (excluding debt redemption, £157,713) amounted to £419,420.

The Cobar Water Board was constituted in 1963-64. At 30th June, 1964, its capital indebtedness was £250,000.

The following country water supply systems—South-West Tablelands, Junee and Fish River—are administered by the Department of Public Works. These supply water in bulk to municipalities and shires, the Railways Department, and other large consumers. Only a small quantity is sold direct to private consumers. The capital indebtedness of these systems was £7,306,297 at 31st December, 1963.

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 36, with a total capacity of 363 million gallons.

The water rate levied by the Board in 1963-64 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 1959-60 to 1963-64.

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	
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
1962-63	547,123	1,981	151.3	55,225	277	76.4	5,622	460,866
1963-64	572,431	2,072	162.9	59,621	285	78.6	5,882	485,856

(c) *Sewerage and Drainage.* Particulars of sewerage and drainage services for 1959-60 to 1963-64 are shown below. The rate levied in 1963-64 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
1959-60 ..	384,844	1,308	83.2	30,459	216.2	63.6	3,458	181
1960-61 ..	395,109	1,331	88.1	32,159	223.0	66.2	3,550	193
1961-62 ..	399,890	1,361	83.0	30,308	207.6	61.0	3,665	198
1962-63 ..	422,899	1,402	84.9	30,997	200.8	60.6	3,769	205
1963-64 ..	443,291	1,446	89.7	32,833	202.4	62.0	3,932	211

The metropolitan sewerage system consists of the main system (serving an area of 92,231 acres) and five subsidiary systems—the Sunshine system (serving an area of 2,388 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 3,647 acres in Cheltenham, Parkdale, Mentone and Mordialloc), and the Maribyrnong system (serving an area of 167 acres). The Metropolitan Sewage Farm, 26,809 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, 1964, was £4,524,888. Revenue during 1963-64 amounted to £236,795, cost of sewage disposal to £264,255, trading expenses to £143,250, interest to £244,100, and net cost of sewerage purification to £414,810. These financial particulars are included in the sewerage items of the summary below.

(d) *Finances.* The following table provides for the year 1963-64 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 1959-60 to 1963-64.

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 ..	65,240,949	5,837,043	1,899,313	3,350,209	..	5,249,522	+ 587,521
Sewerage ..	61,540,782	5,497,690	1,645,380	2,941,106	..	4,586,486	+ 911,204
Drainage ..	11,144,333	851,858	207,876	379,861	..	587,737	+ 264,121
General(b)	5,356,689	..	904,761	..	846,517	1,751,278	-1,751,278
Total, 1963-64	143,282,753	12,186,591	4,657,330	6,671,176	846,517	12,175,023	+ 11,568
1962-63	129,213,999	11,714,465	5,034,147	5,920,195	747,000	11,701,342	+ 13,123
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

(a) Total loan indebtedness—1963-64, £134,699,022. distributed over services.

(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, 1964, the Commission provided a reticulated water supply from its own works to 136 cities and towns having a combined population of 192,000 persons.

The principal systems operated by the Commission serve part of the Mornington Peninsula—Dandenong area (about 77,000 people supplied); Bendigo, Castlemaine, etc. (56,000), and about 8,000 people in the Western District. In addition, 12,000 persons in a number of towns in the Bellarine Peninsula receive supply through a Commission-operated distributory system from headworks controlled by the Geelong Waterworks and Sewerage Trust. The Bendigo-Castlemaine supply also provides for the irrigation of 11,000 acres as well as urban requirements in the area.

Outside these areas the Commission supplies mainly small towns in the north of the State, in areas where it also supplies farms with water for irrigation or domestic and stock purposes.

Capital expenditure by the Commission on urban water supply at 30th June, 1964, was divided between the several systems as follows:—Mornington Peninsula, £10,125,000; Bendigo-Castlemaine, £4,450,000; Bellarine Peninsula, £1,125,000; Otway System (Western District), £1,125,000; other, £1,050,000; total, £17,875,000. This expenditure is net of redemption payments.

In addition to the towns supplied by the Commission, there are approximately 565,000 people in 210 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 the Geelong Trust and some other local authorities borrowed 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 346 urban centres containing more than 757,000 people. Very few towns of any importance are now without reticulated water supply.

The following table presents the financial position in respect of town water supply at 30th June, 1964.

TOWN WATER SUPPLY, VICTORIA: CAPITAL LIABILITY, 30TH JUNE, 1964
(£'000)

Particulars	Water supply provided by—		
	Local authorities	State Rivers and Water Supply Commission	Total
Government advances	24,275	18,075	42,350
Less redemption	1,800	200	2,000
Government Advances Outstanding ..	22,475	17,875	40,350
Borne by State	4,350	8,700	13,050
Borne locally	18,125	9,175	27,300

In addition, nearly £9,000,000 has been borrowed locally, mainly by the Geelong Waterworks and Sewerage Trust.

The proportion of loan capital borne by the State is much higher in the case of Commission undertakings than for towns supplied by local authorities. This is because most Commission undertakings have been developmental in nature. Besides meeting interest on capital borne by it, the State pays the difference between three per cent. and the actual rate paid on practically all the capital carried locally. The total annual subsidy on country town water supply is currently about £1,250,000.

(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 Acts.

At 30th June, 1964, there were 55 cities and towns with sewerage systems in operation. These contained about 516,000 persons, nearly one half of the total number of residents outside the metropolitan area.

Expenditure on sewerage in Victorian country towns at 30th June, 1964, was approximately £25,000,000, of which some £20,000,000 had been advanced by private lenders. The annual State subsidy on country sewerage in Victoria is currently about £400,000 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 1909*. It was further reconstituted in September, 1950, to include a government nominee (Chairman), and provision was made for a commissioner to be elected by the ratepayers of the Shire of Corio, making a total of seven commissioners. The amount of loan money which may be raised is limited to £12,000,000 for water supply undertakings, and £5,000,000 for sewerage undertakings. The population supplied is estimated by the Trust at 106,021 persons. This and other general information relates to 30th June, 1964.

(b) *Water Supply.* The Trust operates two systems for gathering and storing water, the water in both systems being brought over fifty miles to Geelong. There are seven storage reservoirs and eleven service basins whose total storage capacity is 8,623 million gallons. The length of water mains and reticulation is 541.1 miles. The total expenditure on water supply to 30th June, 1964, was £6,938,675. General fund expenditure for 1963-64 comprised £173,593 for working expenses and £403,310 for interest, redemption and reserves, while revenue amounted to £584,225. The sinking fund appropriations at June, 1964, amounted to £380,455. The replacement and contingencies reserve amounted to £408,556. 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 292.8 miles of main and reticulation sewers. The sewerage area is 11,851 acres, and the number of buildings connected within the sewered areas is 24,145. The total expenditure on sewerage works to 30th June, 1964, was £2,826,830. The revenue in 1963-64 amounted to £294,067, and the general fund expenditure comprised £101,939 on working expenses and £190,106 on interest, redemption and reserves. Sinking fund appropriations at June, 1964, were £226,273. Replacement and contingencies reserve amounted to £425,621. 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, 1964.

(b) *Water Supply.* The water supply district comprises an area of about 65 square miles, containing a population of about 61,000. The total storage capacity of the seven reservoirs is 5,435 million gallons and the catchment area is 24,182 acres.

The capital cost on construction of the waterworks was £2,843,623 to 31st December, 1964. The liabilities amounted to £1,759,231 at 31st December, 1964, including loans due to the Government totalling £1,629,097. The revenue for the year 1964 was £199,301. Working expenses during 1964 amounted to £107,791 and interest and other charges to £87,930. A water rate of 1s. 0d. 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 183 miles of sewers. The capital cost of sewerage construction works to 31st December, 1964, was £1,938,184. Two hundred and forty-eight sewered areas had been declared as at 31st December, 1964. Assessments in the sewerage district numbered 19,799, while those in sewered areas numbered 16,127. There were 13,860 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, 1964, amounted to £1,673,339; redemption payments at that date totalled £385,235. House connexions financed by the Authority numbered 4,085. Revenue during 1964 amounted to £196,354, and expenditure, which included £124,593 for interest and redemption, was £195,060.

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. With the completion of the Moondarra reservoir and pipeline, construction activities decreased during 1963–64, capital expenditure totalling £315,453 compared with £384,583 in 1962–63. The capital cost of construction of the waterworks was £4,983,258 to 30th June, 1964. Liabilities amounted to £5,515,726, including loans due to the Government totalling £5,287,840. Revenue for the year was £292,619. Working expenses during 1963–64 amounted to £77,356 and interest and other charges to £189,881. 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, 1964, was 9,850 million gallons.

(c) *Sewerage.* The sewerage system consists of a main outfall sewer, about 52 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, 1964, was £2,658,939. Liabilities amounted to £3,105,531, including loans due to the Government totalling £2,747,032. Revenue in 1963–64 was £117,101 and expenditure comprised £53,669 working expenses and £70,812 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, 1964, 74 other sewerage authorities had been constituted under the provisions of the Sewerage Districts Acts and systems were in operation in 51 districts.

3. Queensland.—(i) *Brisbane City Council—to 30th June, 1964. (a) General.* This organization conducts the water supply and sewerage systems of the City of Brisbane, and also supplies, in bulk, the whole of the water used by the City of Ipswich and the major portion of that used by the City of Redcliffe. Redcliffe also supplements 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 18 service reservoirs with a capacity of approximately 43 million gallons. The Somerset reservoir is a dual purpose project with a designed total holding capacity of 200,000 million gallons, 55,000 million gallons to be for water storage and 145,000 million gallons for flood mitigation. Water rating for the year ended 30th June, 1964, was 3d. 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 1959–60 to 1963–64.

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
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
1962–63	182,804	665,479	48.3	17,644	264	72.6	2,378
1963–64	187,502	683,223	51.2	18,684	273	74.9	2,390

(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 for the year ended 30th June, 1964, was 2½d. 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 1959–60 to 1963–64.

SEWERAGE, BRISBANE: SERVICES

Year	Premises connected	Estimated population served	Total sewage pumped for the year	Length of main, branch, reticulation, etc., sewers
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
1962–63	71,754	265,490	6,673	944
1963–64	75,964	281,067	6,959	1,042

(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 1959-60 to 1963-64.

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—						
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
1962-63 ..	21,529,419	2,824,839	1,167,228	1,084,244	2,608,922	+ 215,917
1963-64 ..	23,087,324	2,994,415	1,245,892	1,164,986	2,659,218	+ 335,197
Sewerage—						
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
1962-63 ..	19,926,939	1,262,379	296,083	651,779	1,167,970	+ 94,409
1963-64 ..	22,719,511	1,381,412	325,333	775,020	1,285,297	+ 96,115

(a) Total, including other expenditure.

(ii) *Country Towns.* (a) *Water Supply.* In addition to the City of Brisbane, there were at 30th June, 1963, 182 cities and towns in Queensland provided with water supply systems controlled by municipal and shire councils.

(b) *Sewerage Systems.* At 30th June, 1963, there were 38 cities or towns in addition to Brisbane with sewerage systems, and sewerage schemes were in course of construction at 5 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 £2,874,287 in 1962-63. Expenditure amounted to £2,895,306, including £1,282,298 for debt charges. In addition, expenditure from loans and loan subsidy amounted to £2,110,840. 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	
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	45,106	9,634	247,972
1962-63..	357,342	46,368,327	13,286,817	45,062	9,996	262,571
1963-64..	365,579	52,080,000	13,372,776	45,173	10,469	278,183

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

WATERWORKS, SOUTH AUSTRALIA: FINANCES

(£)

Year	Invested capital at 30th June (a)	Revenue	Expenditure			Deficit
			Working expenses (b)	Interest	Total	
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
1962-63..	80,908,668	4,951,534	3,987,673	3,197,520	7,185,193	2,233,659
1963-64..	86,291,552	5,551,691	3,875,750	3,479,861	7,355,611	1,803,920

(a) After deduction of depreciation.

(b) Includes debt redemption.

(ii) *Adelaide Waterworks.* At 30th June, 1964, the Adelaide waterworks supplied a district of 215,093 acres. The capacity of reservoirs and storage tanks was 24,217 million gallons and there were 3,172 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 at 30th June (a)	Revenue	Expenditure			Surplus (+) or Deficit (-)
			Working expenses (b)	Interest	Total	
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
1962-63..	41,730,576	3,436,759	2,071,396	1,689,793	3,761,189	- 324,430
1963-64..	43,345,788	3,935,945	1,968,102	1,804,978	3,773,080	+ 162,865

(a) After deduction of depreciation.

(b) Includes debt redemption.

(iii) *Adelaide Metropolitan Sewerage.* The Adelaide metropolitan sewerage system, comprising the Adelaide, Glenelg, Port Adelaide and Salisbury-Elizabeth areas of 153 square miles in all, includes a sewage farm, and treatment works at Glenelg and Port Adelaide. Construction of a large treatment works at Bolivar is in progress to supersede the sewage farm and carry the increased load due to metropolitan expansion. Financial and other particulars for 1959-60 to 1963-64 are shown hereunder.

ADELAIDE METROPOLITAN SEWERAGE: SUMMARY

Year	Length of sewers	Number of connexions	Invested capital at 30th June (a)	Revenue	Expenditure			Surplus
					Working expenses (b)	Interest	Total	
	miles		£	£	£	£	£	£
1959-60 ..	1,471	160,407	11,305,495	1,576,769	676,660	401,009	1,077,669	499,100
1960-61 ..	1,598	173,753	13,376,362	2,060,534	887,921	479,011	1,366,932	693,602
1961-62 ..	1,659	179,918	14,544,885	2,211,011	913,724	524,376	1,438,100	772,911
1962-63 ..	1,714	186,143	16,755,220	2,344,706	1,001,053	575,617	1,576,670	768,036
1963-64 ..	1,774	194,889	19,497,763	2,619,615	1,100,524	632,284	1,732,808	886,807

(a) After deduction of depreciation.

(b) Includes debt redemption.

(iv) *Country Sewerage Schemes.* Sewerage schemes are operating at Port Lincoln, Naracoorte, Nangwarry, Mount Burr, Myponga and Angaston. At Port Lincoln the sewers discharge to an ocean outfall, and treatment works are used on the other systems. There are 89 miles of sewers and 2,720 connexions in the country systems. A sewerage scheme for Mount Gambier is under construction.

(v) *Country Water Supply.* Water districts systems at 30th June, 1964, comprised an area of 13,156,585 acres. Supply came from reservoirs having a total capacity of 20,851 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 1963-64 supplies made to Mount Gambier, Naracoorte and other towns amounted to 1,199 million gallons, and the Uley-Wanilla, Lincoln and Poldas Basins contributed 708 million gallons to the Tod River Water District.

COUNTRY WATERWORKS, SOUTH AUSTRALIA: FINANCES

(£)

Year	Invested capital at 30th June (a)	Revenue	Expenditure			Deficit
			Working expenses (b)	Interest	Total	
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
1962-63..	39,178,092	1,514,775	1,916,277	1,507,727	3,424,004	1,909,229
1963-64..	42,945,764	1,615,746	1,907,648	1,674,883	3,582,531	1,966,785

(a) After deduction of depreciation.

(b) 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, 1964, being £9,794,897. Particulars of the scheme, where applicable, are included in the tables of the combined waterworks in (i), p. 796. Apart from supplying Whyalla, the main has been used to allow expansion of reservoir supplies in the northern agricultural area of the State, and to meet new demands caused by industrial growth at Whyalla, duplication of the main is under way. During 1963-64 water used from the scheme amounted to 2,660 million gallons. Revenue was £617,028, working expenses £336,984, interest charges £321,884, and deficit £41,840.

5. *Western Australia.*—(i) *General.* The water supply, sewerage and drainage systems of Western Australia are principally under the management of two State Authorities, namely, the Metropolitan Water Supply, Sewerage and Drainage Board, having as its territory the area centred on Perth and extending to Kwinana and Serpentine in the south, Sorrento in the north and Swan View on the east, and the Public Works Department, which controls the Goldfields and Agricultural Water Supply and the Great Southern Towns Water Supply as well as supplies, from local sources, to 86 country towns not included in these schemes. Both Authorities come under the portfolio of the Minister for Works and Water Supplies. The former Metropolitan Water Supply, Sewerage and Drainage Department was replaced by the Board of the same name as the result of an amendment made in 1963 to the Metropolitan Water Supply, Sewerage and Drainage Act. The amendment, operative from the 1st July, 1964, made the Board the authority responsible, subject to the Minister, for the general administration of the Act. (See also Chapter VIII. Water Conservation and Irrigation, of this Year Book, pp. 252-3.)

(ii) *Metropolitan Water Supply, Sewerage and Drainage.* (a) *General.* The sources of the metropolitan water supply are the Serpentine Reservoir, the Canning Reservoir, the Serpentine Pipehead Reservoir, 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 Reservoir, has a capacity of 39,000 million gallons. There are three treatment works included in the Board's sewerage system. The largest of these, Subiaco treatment works, services Perth and suburbs.

(b) *Water Supply.* The following table shows particulars of water supply services for 1959-60 to 1963-64.

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. (c)	Mill. gals. (c)	Gallons (c)	Gallons (c)	Miles	
1959-60	..	129,956	431,600	33.7	12,335	263	79.5	97,002
1960-61	..	133,647	446,000	49.3	18,035	374	112.3	103,969
1961-62	..	137,960	460,730	50.6	18,492	373	111.6	116,610
1962-63	..	142,246	476,000	47.1	17,214	336	100.5	123,364
1963-64	..	149,033	491,740	53.2	19,454	362	109.7	130,480

(a) Figures relate to 30th June. (b) Calculated from averages for the year. (c) Water restrictions in force for 180 days.

Water rating for 1963-64 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 1959-60 to 1963-64 are shown on the next page.

METROPOLITAN SEWERAGE AND MAIN DRAINAGE, WESTERN AUSTRALIA: SERVICES

Year				Services	Estimated population served	Length of sewers	Length of main drains
						Miles	Miles
1959-60	..	..	..	65,781	260,600	719	69
1960-61	..	..	..	66,664	264,000	724	72
1961-62	..	..	..	67,378	239,110	736	77
1962-63	..	..	..	68,223	240,700	751	81
1963-64	..	..	..	68,958	241,700	769	94

Sewerage rating for 1963-64 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 Board.

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—						
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
1962-63 ..	24,244,492	1,852,414	752,497	1,087,635	1,840,132	+ 12,282
1963-64 ..	25,741,231	2,087,727	791,365	1,250,761	2,042,126	+ 45,601
Sewerage—						
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
1962-63 ..	9,059,279	1,130,598	550,885	509,364	1,060,249	+ 70,349
1963-64 ..	9,925,444	1,161,329	607,240	507,477	1,114,717	+ 46,612
Main drainage—						
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
1962-63 ..	2,191,431	148,215	75,362	99,929	175,291	- 27,076
1963-64 ..	2,499,073	155,017	76,461	108,376	184,837	- 29,820

(iii) *Country Water Supplies.* Information concerning country water supplies is included in Chapter VIII. Water Conservation and Irrigation, of this Year Book (see pp. 252-3).

6. *Tasmania.*—(i) *Waterworks.* At the end of 1963-64 there were 96 municipally operated waterworks in Tasmania. The capacity of the reservoirs was 2,292 million gallons, the estimated population served was 299,990 and the number of properties served was 95,445. A regional scheme is operated as a State concern, supplying bulk water to the Municipalities of George Town, Lilydale and St. Leonards. In addition, this same scheme supplies water direct to industry situated near the Tamar River.

The overall control of water supply in the greater Hobart area, comprising the Municipalities of Hobart, Clarence, Glenorchy and Kingborough, is now vested in the Metropolitan Water Board, but the Municipalities retain primary responsibility for

reticulation. The Board has undertaken the construction of a new bulk supply, with an ultimate daily capacity of 20 million gallons. This scheme is now virtually complete and the anticipated total cost is £2,568,000.

(ii) *Sewerage*. At the end of 1963-64 there were 21 municipal sewerage schemes in operation in Tasmania. They served an estimated population of 195,000 and the number of tenements served was 52,500.

7. *Northern Territory*.—Information relating to water supply in the Northern Territory may be found in Chapter VIII. Water Conservation and Irrigation (*see pp. 255-7*).

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). Eight pumps are capable of pumping approximately 27 million gallons daily.

The total population served in the Australian Capital Territory, which during 1963-64 consumed 4,105 million gallons of water, was 81,670 (at 30th June, 1964). In addition, the Canberra water supply system supplied 334 million gallons of water to Queanbeyan, New South Wales.

The total number of water meters at 30th June, 1964, was 17,746 and the total length of water mains was 332 miles.

The sewerage system for Canberra and suburbs consists of a treatment works, 266 miles of sewerage reticulation and 5 miles of rising mains (at 30th June, 1964). There were also 261 miles of stormwater sewers.

§ 6. Harbour Boards and Trusts

NOTE.—The number and net tonnage of vessels which entered the major ports in each State during the years 1962-63 and 1963-64 are shown in Chapter XV. Transport and Communication (*see p. 542*). Particulars of oversea and interstate cargo discharged and shipped during 1963-64 are shown on page 544 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 maritime 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.

(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 (a)			Surplus
	Wharfage and transhipment rates	Tonnage rates and berthing charges	Other charges	Total	Administration and maintenance	Interest, debt redemption, exchange, etc.	Total	
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
1962-63	4,846,617	790,676	1,218,885	6,856,178	3,771,424	3,028,183	6,799,607	56,571
1963-64	5,419,130	877,254	1,466,466	7,762,850	3,931,901	3,783,438	7,715,339	47,511

(a) Excludes capital expenditure but includes transfer to the Renewals Fund Reserve Account (£1,025,000 in 1960-61, £1,375,000 in 1961-62, £1,545,500 in 1962-63 and £2,389,000 in 1963-64).

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

The wharves are situated close to the business centre of the city, about four or five miles from the Heads. At present there are two dolphin berths each 550 feet long, and 96 effective commercial cargo berths with a total length of 69,725 feet, controlled by the Board. Accommodation for harbour craft amounts to 3,335 feet, while the length of other berths, including oil and private wharves, totals 28,851 feet. Depth of water at wharves is up to 36 feet. Special facilities for the storage and handling of products such as wheat, wool, coal, etc., are provided, and modern plant has been installed for replenishing ships' bunkers with oil or coal.

Docking facilities are available for the largest vessel afloat. The Captain Cook Graving Dock ranks among the largest graving docks in the world, being 1,139 feet by 147 feet 7½ inches with a depth of 45 feet 2 inches over the sill at high water. There are also several smaller dry docks and floating docks in the port.

(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 1,200 feet, and the navigable channel, with a depth of 26 feet at low water, is 350 feet wide. Wharfage accommodation amounts to approximately 15,000 feet, including about 2,600 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 $1\frac{1}{2}$ 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 9 members, appointed by the Governor, has been formed to assist the Board in the operation of the port. It has an area of approximately 340 acres, with depths ranging from 20 to 50 feet (low water ordinary spring tide), and wharfrage accommodation totalling 8,000 feet has been provided for large ocean-going vessels. No cargo sheds are available, as the nature of trade at the port does not call for the provision of sheltered storage accommodation at the berths. It is the port of the southern coalfields and for the expanding industrial area in and about Wollongong. The developmental programme for Port Kembla includes the construction of an inner harbour to provide wharfrage for the steelworks in addition to modern general cargo berths; a coal loading plant capable of loading at the rate of 2,000 tons per hour is now available.

The first stage of the inner harbour basin was opened to shipping on 28th November, 1960. Present accommodation is 1,900 feet of wharfrage, 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 £10,437,121 in 1963-64. This figure includes the revenue for the ports of Sydney, Newcastle and Botany Bay (see table on p. 801) and State navigation service collections, £2,674,271 (1963-64). Commonwealth Government revenue from light dues and navigation receipts for the whole of Australia amounted to £862,120 in 1962-63.

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 exports, primary producers, shipowners, imports 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 22,928 feet in length and covering an area of $42\frac{3}{4}$ acres.

Three of the largest transit sheds on the Australian coast are now in operation at Appleton Dock. The sheds are 600 feet long by 150 feet wide, each with a cargo stacking area of 81,000 square feet. The berths are used for the general cargo trade and have both rail and crane facilities, and modern amenities for port workers. The total length of wharves, piers and jetties in the port is 61,550 feet, covering an area of $58\frac{3}{4}$ acres with 56,940 feet of effective berthing space.

During 1964 there was a continuation of major reconstruction and modernization of several cargo berths in the Port including 1-4 Victoria Dock and 19 South Wharf, as well as the construction of a new shipping control centre 74 feet above ground level, with radar and visual observation of the entire port area. Work completed during 1964 included additional amenities for waterside workers including change rooms and dining rooms. Also the specifications and design for the construction of a 250-ton dual purpose floating crane were begun.

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 (a)	Interest, debt redemption, exchange, etc.	Depreciation, renewals and insurance account		Total
1960 ..	14,199,060	2,492,139	3,948,187	2,464,557	766,532	641,175	3,872,264	+ 75,923
1961 ..	14,240,702	2,303,586	3,791,495	2,711,386	910,713	203,909	3,826,008	- 34,513
1962 ..	14,875,017	2,441,432	3,978,831	2,587,788	893,765	484,292	3,965,845	+ 12,986
1963 ..	14,917,524	2,729,596	4,484,579	2,705,730	948,921	772,942	4,427,593	+ 56,986
1964 ..	14,886,337	3,572,616	5,656,206	3,343,573	1,316,179	906,170	5,565,922	+ 90,284

(a) Includes statutory payments to Consolidated Revenue and Geelong Harbor Trust (£502,447 in 1960, £464,729 in 1961, £492,318 in 1962, £549,919 in 1963, and £718,523 in 1964). Excludes capital expenditure (£1,280,529 in 1960, £1,348,846 in 1961, £1,309,072 in 1962, £1,207,824 in 1963, and £1,410,258 in 1964).

(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.

At the end of 1963 there were 17 effective berths in the port, plus two berths at the Commonwealth Explosives Pier, Pt. Wilson, owned and operated by the Commonwealth. Two major wharf projects will be completed by the end of 1965—new Corio Quay South No. 1 berth (general cargo) and an alumina discharging berth at Point Henry. The construction of a modern dry bulk berth with an initial discharge rate of 1,000 tons per hour will commence this year. Eight berths have a depth of 36 feet at low water, while all other berths (except Commonwealth Explosives Pier, Pt. Wilson, 30 feet) have a depth of 32 feet at low water.

Revenue for the year 1963 was £1,416,283 and expenditure from revenue totalled £811,658. At 31st December, 1963, the value of the Trust's fixed assets was £9,306,710 and loans outstanding amounted to £3,056,845.

(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. A new oil tanker berth was brought into commission during 1963, from which petroleum products will be pumped to bulk terminals at North Portland, and the completion of a bulk grain terminal now provides in-transit storage for one million bushels of grain awaiting overseas shipment.

Operating revenue for the year ended 30th June, 1964, was £132,288 and revenue expenditure was £104,042. The value of the Trust's fixed assets, less depreciation, was £7,166,352 at 30th June, 1964, and loans and advances outstanding amounted to £7,522,320.

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 1958-59 to 1962-63 are shown below.

BRISBANE HARBOUR: FINANCES
(£'000)

Year	Loan indebtedness at 30th June	Receipts		Payments	
		Harbour dues	Total	Working expenses(a)	Total
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
1961-62	2,716	742	1,084	628	849
1962-63	2,648	820	1,257	887	1,073

(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, 1963, are shown below, together with a summary for the years ended 30th June, 1959 to 1963.

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	269,107	8,556	13,079	7,555	13,822	-- 743
Bundaberg	2,862,529	289,927	404,907	105,062	361,009	+ 43,898
Cairns	816,455	210,838	282,102	114,776	154,218	+ 127,884
Gladstone	1,022,126	74,814	118,625	25,446	130,717	- 12,092
Mackay	1,672,385	191,435	478,419	125,149	462,012	+ 16,407
Rockhampton	946,864	35,400	49,577	19,420	42,381	+ 7,196
Townsville	3,719,825	278,712	712,589	204,310	701,344	+ 11,245
Total, 1962-63	11,309,291	1,089,682	2,059,298	601,718	1,865,503	+ 193,795
1961-62	9,840,952	941,652	1,785,308	498,631	1,624,147	+ 161,161
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

(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 1959-60 to 1963-64.

THE SOUTH AUSTRALIAN HARBORS BOARD: FINANCES

(£)

Year	Capital at 30th June (a)	Revenue	Expenditure from revenue			Surplus
			Working expenses	Interest	Total	
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
1962-63.. ..	19,483,967	2,548,777	1,672,186	765,725	2,437,911	110,866
1963-64.. ..	20,498,021	3,056,808	1,795,274	790,647	2,585,921	470,887

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

5. *Western Australia.*—(i) *Fremantle Port Authority.* The Port of Fremantle is operated and controlled by a body corporate administered by a Board of five Commissioners appointed triennially by the Governor. The port covers an extensive water area of some 180 square miles and comprises an inner and an outer harbour. The inner harbour includes 18 deep water land-backed berths, providing 703,850 sq. ft. of covered storage space and 11,148 feet of wharf berth accommodation. All inner harbour berths are dredged to a low water depth of 36 feet. The outer harbour includes three main anchorages, Gage Roads, Owen Anchorage and Cockburn Sound. Deep water jetties, including the oil refinery jetty in Cockburn Sound, are available in the outer harbour. Ocean going deep draft ships enter the Sound by means of 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, one berth at the nearby steelworks jetty with a low water depth of 30 feet, and one berth at the alumina works jetty with a low water depth of 40 feet. There are also special berths for the off-loading of cattle and the handling of explosives.

Gross earnings for the year 1963-64 amounted to £3,320,786, working expenses to £2,581,475, interest charges on loan capital £329,331, sinking fund contributions £88,850 and capital and other funds employed totalled £8,732,672.

(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 1963-64 amounted to £136,417, working expenses £68,757, interest and sinking fund charges £99,626, and capital account totalled £1,910,252.

(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 4,300 feet. Gross earnings for the year 1963-64 amounted to £220,906, working expenses £101,157, interest and sinking fund charges £128,799, and capital account totalled £2,971,402.

(iv) *Other Ports.* The following ports are controlled by the State Government Harbour and Light Department:—Broome, Busselton, Carnarvon, Derby, Esperance, Geraldton, Onslow, Point Samson, Port Hedland, Wyndham and Yampi.

6. *Tasmania*.—There are eight marine boards and one harbour trust in Tasmania. The marine boards control the ports of Hobart, Launceston, Stanley (Circular Head), Burnie and Wynyard (Table Cape), Devonport and Ulverstone, Strahan, Currie (King Island), and Whitemark (Flinders Island), and the harbour trust controls the port of Smithton. Aggregate receipts of revenue accounts of all these authorities during the year 1963–64 were £2,084,199, and expenditures £1,512,672, including loan charges £549,845. All amounts referred to in this section exclude transfers between accounts of the same authority.

The total receipts of the Hobart Marine Board on revenue account during 1963–64 were £624,911, and total expenditure on revenue account was £404,873, of which £127,081 was spent on loan charges. Launceston Marine Board receipts on revenue account during 1963–64 amounted to £531,205, and expenditure on revenue account was £424,079, of which £85,705 was spent on loan charges. Devonport Marine Board (which is now responsible for running the facilities formerly provided by the Ulverstone Harbour Trust) had receipts of £380,784 on revenue accounts and spent £304,989 on revenue account, including £139,550 on loan charges. The total receipts on revenue account for Burnie Marine Board were £469,093 and expenditure on revenue account items totalled £301,823, of which loan charges accounted for £182,822.

The total loan indebtedness of all marine boards and the harbour trust at 30th June, 1964, amounted to £7,368,410. Of this sum, £1,432,931 was in respect of Hobart (including Port Huon), £1,107,691 in respect of Launceston, £2,991,965 in respect of Burnie, and £1,707,278 in respect of Devonport (including Ulverstone). The total of new loans raised during 1963–64 by the harbour trust and all the marine boards was £1,315,500, of which Hobart raised £200,000, Burnie £500,000 and Devonport £300,000.

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 157 fire districts had been constituted at the end of 1964. 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, 1964, the authorized strength of the Fire Brigade throughout the fire districts of New South Wales was 421 officers and 1,296 permanent and 2,676 volunteer firemen. Corresponding figures for the Sydney Fire District were 344, 1,151 and 292. The revenue for the year 1964 was £3,769,660, made up as follows:—from the Government, £466,920; municipal and shires, £466,920; fire insurance companies and firms, £2,801,520; and from other sources, £34,300. The disbursements for the year were £3,993,456. The Board of Fire Commissioners provides the fire protection services for Canberra, in the Australian Capital Territory, and the cost of these services is reimbursed by the Commonwealth Government.

Under the Bush Fires Act, 1949–1963, a Bush Fire Fighting Fund exists from which finance is provided for the prevention and fighting of bush fires. Contributions to the Fund by the Government, councils and insurance companies are in the proportion of one quarter, one quarter and one-half, respectively. At 30th June, 1964, Volunteer Brigades equipped by means of this fund numbered 2,500 with an active membership of about 100,000 persons. The approved expenditure from the Fund for equipment, up to 30th June, 1965, amounted to £2,793,629.

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, 1964, the Board had under its control 45 stations, 1,052 permanent staff, 223 special service and clerical, etc., staff, and 13 part-time firemen. The total receipts for 1963-64 were £2,428,687, comprising contributions, £1,940,100, receipts for services, £232,564, and interest and sundries, £256,023. The expenditure was £2,348,094.

(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 25 fire control regions, four of which (Ballarat, Bendigo, Geelong and the Dandenong, Chelsea and Frankston areas) are wholly urban and the remainder mixed urban and rural. The Country Fire Authority receives contributions in the proportion of two-thirds from insurance companies and one-third from the Treasury. At 30th June, 1964, the Country Fire Authority Act applied to 206 insurance companies, and 205 urban and 1,040 rural fire brigades. The effective registered strength of the brigades was 109,420 members.

Income for the year 1963-64 amounted to £815,421. Total expenditure other than loan amounted to £744,626.

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, 1963, there were 82 Fire Brigade Boards. The total number of stations was 147 and full-time staff numbered 865, including 20 administrative, 187 officers and 658 firemen. Volunteers numbered 77. Part-time staff numbered 1,124, including 86 administrative, 125 officers and 913 firemen. The total revenue for the year 1962-63 was £1,602,603, received mainly from the following sources:—Government £218,524, local authorities £218,524, insurance companies £1,092,622. Loan receipts (Government and other) were £343,240. The total expenditure for the year was £1,498,280, the chief items being salaries and wages £1,091,056, and interest and redemption of loans £138,594.

4. **South Australia.**—The Fire Brigades Act, 1936-1958 provides for a board of five members, and the expenses and maintenance of brigades are divided 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 its statutory contribution of approximately £13,000, the excess is borne five-sevenths by insurance companies and two-sevenths by the municipalities. At 30th June, 1964, there were altogether 36 fire brigade stations, of which 12 were metropolitan and 24 country.

The strength of the permanent staff at 31st December, 1964, was 409, including 282 officers and men, 93 country auxiliary firemen and 34 other employees (including maintenance workers). The total revenue for the year 1963-64 was £582,396, including contributions of £484,632 made up as follows:—insurance companies £291,629, Treasury £76,351 and municipalities £116,652. The Treasury contribution includes an additional grant of £63,457.

5. **Western Australia.**—By the provisions of the *Fire Brigades Act, 1942-1961*, certain local government areas and parts of local government areas are constituted fire districts under the control of the Western Australian Fire Brigades Board. There were 48 fire districts at 30th September, 1964. 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 66 and 162 respectively. The brigades, throughout the State, controlled by the Western Australian Fire Brigades Board at 30th September, 1964, numbered 65, with a staff of 1,550, including 307 permanent officers and firemen and 1,243 volunteer brigade officers and firemen. The revenue for the year ended 30th September, 1964 was £718,767 and the expenditure £718,155.

Under the *Bush Fires Act, 1954-1964*, a Bush Fires Board, consisting of 13 members, 6 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 1,973 at 30th June, 1964, and the establishment of bush fire brigades, 857 at 30th June, 1964. 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 1963-64 amounted to £219,856. There were, at 30th June, 1964, 23 boards controlling 36 stations, and their aggregate staffs numbered 554, including 114 permanent officers, 370 part-time firemen, including officers, and 70 volunteers.