

CHAPTER XIX.

LOCAL GOVERNMENT.

§ 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 914, 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, municipalities and road districts; and in Tasmania as cities and municipalities. In New South Wales, some local government authorities in an area have combined to provide services such as electricity, water, sewerage and drainage—e.g., the county councils. Within shires, there are also some municipal units known as urban areas. Apart from the more thinly populated parts of New South Wales and South Australia and the Commonwealth Territories, practically the whole of Australia comes within local government jurisdiction.

The financial statistics in § 2 following are classified under the headings of Ordinary Services and Business Undertakings. The former covers the obligatory and general functions referred to above. Business Undertakings include public utilities such as water supply, sewerage, electricity, gas, transport and hydraulic power undertakings, and other miscellaneous works such as abattoirs, quarries, ice works, cinemas, etc.

2. **Semi-Governmental Authorities.**—In addition to local government authorities, a large number of authorities have been set up to control specific activities, which are often identical with some of those performed by either, or both, of the other classes of public authority—central government and local government—and a complete picture of any field of activity for a State or Australia as a whole cannot be obtained without reference to each class operating in that particular field. These semi-governmental authorities differ primarily from local government authorities in that their operations are restricted to the specific activity for which they were constituted—e.g., roads and bridges, or water and sewerage, or electricity and irrigation, or 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. Although roads and bridges constructed and maintained directly by the government or by the central road authority do not properly come under the heading of "Local Government", they have been included in this chapter for the

sake of convenience. Owing to difficulty in obtaining complete particulars of receipts and expenditure by 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. 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 are appointed by the government. In a few 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.

7. Other Local or Semi-Governmental Activity.—The activities referred to above are not the only forms of local or semi-governmental undertakings. There are others, the most important being tramways and omnibus services, and electricity and gas undertakings, which are not dealt with in this chapter, except to the extent that they are represented in the finances as shown in the following section. Chapter XI.—Transport and Communication contains information on municipal transport services, and Chapter VIII.—Electric Power Generation and Distribution deals with the various types of electricity undertakings in each State. In addition, particulars of municipal electricity and gas undertakings, although not shown separately, are included in the relevant sections in Chapter VII.—Manufacturing Industry.

§ 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 embrace important towns). At the end of 1954, the area incorporated was 184,000 square miles, or nearly three-fifths of the total area of the State.

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

Municipalities and shires may combine to form county councils for the establishment and conduct of services of joint benefit, e.g., electricity, water, sewerage. There were 38 county councils and the Grafton and South Grafton Water Board at 31st December, 1954.

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 (42,000 acres) in Westernport Bay, Julia Percy Island (650 acres), off Port Fairy, and Tower Hill (1,350 acres), adjacent to the Borough of Kororoit. Melbourne and Geelong were incorporated under special statutes prior to the establishment of a general system of local government, but are now subject to several provisions of the Local Government Act.

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

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

5. Western Australia.—In this State, local government is carried on by means of municipalities and district road boards, the whole of the State being so incorporated.

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 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 1954 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 meaning 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 "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, 1954-55.

Local Bodies.	Number	Area. '000 Acres.	Popula- tion. '000.	Dwellings.		Value of Ratable Property.		
				Occu- pied. No. (a)	Unoccu- pied. No. (a)	Unim- proved Capital Value. £'000.	Im- proved Capital Value. £'000.	Annual Value. £'000.
NEW SOUTH WALES.(b)								
Metropolitan— Capital City ..	1	7	193	52,763	1,099	106,085	311,390	17,818
Other ..	34	702	1,696	470,664	13,464	292,137	1,162,505	64,219
Outside Metropolitan Area	203	117,110	1,510	385,517	28,128	337,974	(c)	(c)
Total ..	238	117,819	3,399	908,944	42,691	736,196	(c)	(c)
VICTORIA.(d)								
Metropolitan— Capital City ..	1	8	92	22,348	455	(c)	158,286	7,914
Other ..	41	438	1,528	371,340	6,316	(c)	826,053	42,696
Outside Metropolitan Area	161	55,630	921	267,089	20,713	(c)	682,957	34,241
Total ..	203	56,076	2,541	660,777	27,484	(c)	1,667,296	84,851
QUEENSLAND.(f)								
Capital City ..	1	246	502	133,064	3,948	63,142	(c)	(c)
Outside Metropolitan Area	133	428,874	809	205,598	17,436	98,514	(c)	(c)
Total ..	134	429,120	1,311	338,662	21,384	161,656	(c)	(c)
SOUTH AUSTRALIA.(g)								
Metropolitan— Capital City ..	1	4	30	7,454	211	19,435	60,000	3,019
Other ..	20	99	467	126,649	2,737	(c)	196,000	9,779
Outside Metropolitan Area	122	34,531	307	78,505	5,399	(c)	205,000	10,256
Total ..	143	34,634	804	212,608	8,347	(c)	461,000	23,054
WESTERN AUSTRALIA.(h)								
Metropolitan— Capital City ..	1	14	97	25,460	577	(c)	60,375	3,492
Other ..	19	107	260	65,281	1,262	(c)	(c)	1,455
Outside Metropolitan Area	127	624,467	301	72,082	4,775	(c)	(c)	1,334
Total ..	147	624,588	658	162,823	6,614	(c)	(c)	6,281
TASMANIA.(g)								
Metropolitan— Capital City ..	1	18	55	14,624	375	7,534	24,956	1,598
Other ..	2	99	40	9,333	531	3,917	19,259	946
Outside Metropolitan Area	46	16,661	220	54,905	4,382	30,338	103,963	5,398
Total ..	49	16,778	315	78,862	5,288	41,789	148,183	7,942

(a) Particulars of population and dwellings are as at Census 30th June, 1954. (b) Year ended 31st December, 1954. (c) Not available. (d) Year ended 30th September, 1955. (e) Excludes Yallourn Works Area under the jurisdiction of the State Electricity Commission. (f) Year ended 30th June, 1954. (g) Year ended 30th June, 1955. (h) Municipalities—Year ended 31st October, 1955; Road Districts—Year ended 30th June, 1955.

8. *Finances.*—(i) *General.* The following tables show the latest available financial statistics for local government authorities. The figures relate to the year 1954-55, except for New South Wales, where they relate to the year 1954 and for Queensland, where they relate to the year 1953-54.

(ii) *Ordinary Services.* In the returns of revenue and expenditure for 1954-55 in the following table, 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, 1954-55.

Particulars.	N.S.W. (a)	Vic. (b)	Q'land. (c)	S. Aust. (d)	W. Aust. (e)	Tas. (d)	Total.
Number of Local Government Authorities ..	238	203	134	143	147	49	914
REVENUE (EXCLUDING LOAN RECEIPTS). (£'000.)							
<i>Taxation—</i>							
Rates (net) ..	21,808	13,580	8,961	3,521	2,359	1,350	51,742
Penalties ..	122	40	75	51	58	14	754
Licences ..	484	72					
<i>Total</i> ..	22,414	13,692	9,036	3,572	2,417	1,365	52,496
<i>Public Works and Services—</i>							
Sanitary and Garbage Services	2,564	1,115	2,073	48	409	78	6,287
Council Properties	2,091	(f) 2,016	594	300	671	226	5,898
Street Construction ..	1,157	686	184	(g) 373	226	45	2,671
Other ..	1,514	244	64	126	29	25	2,002
<i>Total</i> ..	7,326	4,061	2,915	847	1,335	374	16,858
<i>Government Grants—</i>							
Roads ..	5,684	111	1,687	1,886	924	293	10,585
Other ..	924	462	(h) 1,326	32	1,018	28	3,790
<i>Total</i> ..	6,608	573	3,013	1,918	1,942	321	14,375
Profits from Business Undertakings ..		272	1		31		304
Fees and Fines ..		66		84	11		
All Other ..		149	419	139	181	130	1,179
<i>Total Revenue</i> ..	36,348	18,813	15,384	6,560	5,917	2,190	85,212
EXPENDITURE (EXCLUDING LOAN EXPENDITURE). (£'000.)							
<i>General Administration</i> ..	2,390	2,788	1,359	530	702	234	8,003
<i>Debt Services (excluding Business Undertakings)—</i>							
Interest ..	1,131	671	1,184	70	177	74	3,307
Redemption ..	2,575	884	1,752	407	396	125	6,139
Exchange ..	19		180				199
Other ..		8	18				26
<i>Total</i> ..	3,725	1,563	3,134	477	573	199	9,671
<i>Public Works and Services—</i>							
Roads, Streets and Bridges ..	16,690	6,470	5,143	4,433	1,930	1,008	35,674
Health Administration ..	625	700	225	90	161	57	1,858
Sanitary and Garbage Services	3,219	1,673	1,210	299	456	99	6,956
Street Lighting ..	875	397	220	137	80	61	1,770
Council Properties	4,316	(i) 3,649	1,484	652	1,742	302	12,145
Other ..	1,231	232	(j) 1,715	94	50	29	3,351
<i>Total</i> ..	26,956	13,121	9,997	5,705	4,419	1,556	61,754
<i>Grants—</i>							
Fire Brigades ..	231	291	156	81	67	36	862
Hospitals and Ambulances ..							
Other Charities ..	105	92	2	119	8	1	
Other ..	(k) 580	(l) 945	276	17	14	2	2,176
<i>Total</i> ..	916	1,328	437	223	89	45	3,038
All Other ..	1,016	114	193		167	206	1,696
<i>Total Expenditure</i> ..	35,003	18,914	15,120	6,935	5,950	2,240	84,162

(a) Figures for New South Wales relate to the year ended 31st December, 1954, 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, 1955. (c) Year ended 30th June, 1954. (d) Year ended 30th June, 1955. (e) Municipalities—Year ended 31st October, 1955; Road Districts—Year ended 30th June, 1955. (f) Includes £800,000 plant hire. (g) Includes £95,000 reimbursement to Highways Department for work done. (h) Includes £927,000 for sewerage and drainage. (i) Includes £774,000 plant. (j) Includes £1,148,000 for sewerage, mosquito control and drainage. (k) To Main Roads Department. (l) Includes £478,000 to Country Roads Board.

The following table shows the revenue and expenditure (excluding loan) of local government authority ordinary services for the years 1938-39 and 1950-51 to 1954-55:—

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

Year ended 30th June.	N.S.W.(a)	Victoria.(b)	Q'land.	S. Aust.	W. Aust.(c)	Tas.	Total.
REVENUE (EXCLUDING LOAN RECEIPTS).							
1939 ..	10,657	6,070	4,178	1,579	1,447	519	24,450
1951 ..	18,592	11,044	10,182	3,461	3,582	1,214	48,075
1952 ..	24,170	13,504	12,472	4,390	4,158	1,590	60,284
1953 ..	30,750	15,641	13,816	4,938	4,988	1,800	71,933
1954 ..	33,104	17,213	15,384	6,204	5,352	1,954	79,211
1955 ..	36,348	18,813	(d)	6,560	5,917	2,190	(d)
EXPENDITURE (EXCLUDING LOAN EXPENDITURE).							
1939 ..	10,790	6,193	4,335	1,558	1,489	507	24,872
1951 ..	18,521	11,659	9,995	3,491	3,425	1,237	48,328
1952 ..	24,167	14,040	12,615	4,452	4,271	1,605	61,150
1953 ..	29,605	15,457	13,151	5,032	4,793	1,781	69,819
1954 ..	31,880	16,912	15,120	5,859	5,115	1,944	76,830
1955 ..	35,003	18,914	(d)	6,935	5,950	2,240	(d)

(a) Years ended previous 31st December. (b) Years ended 30th September. (c) Municipalities—Years ended 31st October; Road Districts—Years ended 30th June. (d) Not yet available.

(iii) *Business Undertakings.* The table hereunder shows, for 1954-55, 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, 1954-55.
(£'000.)

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
REVENUE (EXCLUDING LOAN RECEIPTS).							
<i>Water Supply and Sewerage—</i>							
Rates	1,698	..	51	..	10	458	2,217
Charges for Services and Sales of Products ..	507	113	2,194	1	2	123	2,940
Other (including Grants)	(a) 618	5	975	..	..	67	1,665
<i>Total</i>	<i>2,823</i>	<i>118</i>	<i>3,220</i>	<i>1</i>	<i>12</i>	<i>648</i>	<i>6,822</i>
<i>Electricity and Gas—</i>							
Rates	247	..	10	..	..	..	257
Charges for Services and Sales of Products ..	40,544	8,015	6,217	504	506	..	55,786
Other (including Grants)	877	134	324	21	8	..	1,364
<i>Total</i>	<i>41,668</i>	<i>8,149</i>	<i>6,551</i>	<i>525</i>	<i>514</i>	<i>..</i>	<i>57,407</i>
<i>Railways, Tramways and Omnibuses—</i>							
Rates .. ..	..	..	..	..	..	45	45
Charges for Services and Sales of Products ..	..	..	3,162	..	..	531	3,693
Other (including Grants)	..	..	114	..	..	8	122
<i>Total</i>	<i>..</i>	<i>..</i>	<i>3,276</i>	<i>..</i>	<i>..</i>	<i>584</i>	<i>3,860</i>
<i>Other—</i>	(b)	(c)	(d)	(e)	(f)	(g)	
Rates .. ..	..	..	..	..	1	..	1
Charges for Services and Sales of Products ..	2,479	491	45	21	42	62	3,140
Other (including Grants)	2	12	16	..	..	2	32
<i>Total</i>	<i>2,481</i>	<i>503</i>	<i>61</i>	<i>21</i>	<i>43</i>	<i>64</i>	<i>3,173</i>
Grand Total ..	46,972	8,770	13,108	547	569	1,296	71,262

NOTE.—See next page for footnotes.

**LOCAL GOVERNMENT AUTHORITIES : BUSINESS UNDERTAKINGS—
REVENUE AND EXPENDITURE, 1954-55—continued.**

(£'000.)

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
EXPENDITURE (EXCLUDING LOAN EXPENDITURE).							
<i>Water Supply and Sewerage—</i>							
Working Expenses ..	1,302	77	1,311	1	8	284	2,983
Depreciation ..	(h) —108	9	..	..	..	..	—99
Debt Charges ..	874	21	797	..	3	273	1,968
Other (including Transfers to General Revenue and Construction) ..	..	..	973	..	..	110	1,083
<i>Total</i>	<i>2,068</i>	<i>107</i>	<i>3,081</i>	<i>1</i>	<i>11</i>	<i>667</i>	<i>5,935</i>
<i>Electricity and Gas—</i>							
Working Expenses ..	34,890	7,024	5,394	460	405	..	48,173
Depreciation ..	(h) 1,075	369	..	..	41	..	1,485
Debt Charges ..	3,249	349	746	34	38	..	4,416
Other (including Transfers to General Revenue and Construction) ..	..	274	437	42	19	..	772
<i>Total</i>	<i>39,214</i>	<i>8,016</i>	<i>6,577</i>	<i>536</i>	<i>503</i>	<i>..</i>	<i>54,846</i>
<i>Railways, Tramways and Omnibuses—</i>							
Working Expenses ..	..	..	3,081	..	..	435	3,516
Depreciation ..	..	..	..	..	..	..	..
Debt Charges ..	..	..	398	..	..	66	464
Other (including Transfers to General Revenue and Construction) ..	..	..	170	..	..	59	229
<i>Total</i>	<i>..</i>	<i>..</i>	<i>3,649</i>	<i>..</i>	<i>..</i>	<i>560</i>	<i>4,209</i>
<i>Other—</i>	(b)	(c)	(d)	(e)	(f)	(g)	
Working Expenses ..	2,262	397	52	20	33	39	2,803
Depreciation ..	19	11	..	..	..	..	30
Debt Charges ..	53	42	3	..	..	9	107
Other (including Transfers to General Revenue and Construction) ..	..	38	4	1	..	11	54
<i>Total</i>	<i>2,334</i>	<i>488</i>	<i>59</i>	<i>21</i>	<i>33</i>	<i>59</i>	<i>2,994</i>
<i>Grand Total</i>	<i>43,616</i>	<i>8,611</i>	<i>13,366</i>	<i>558</i>	<i>547</i>	<i>1,286</i>	<i>67,984</i>

(a) Includes Government grant, £554,000, for part of cost of new works borne by Government.
 (b) Abattoirs, ice-works, and production of building materials. (c) Abattoirs and hydraulic power undertakings. (d) Municipal markets, amusement parks, hotels, and cinemas. (e) Quarries.
 (f) Quarries, ice-works and abattoirs. (g) Abattoirs. (h) Net balance after deducting charge for debt redemption. The full amount of charge for debt redemption is included under debt charges.

NOTE.—For years to which particulars relate, see preceding tables. 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 1938-39 and 1950-51 to 1954-55.

LOCAL GOVERNMENT AUTHORITIES : BUSINESS UNDERTAKINGS—REVENUE AND EXPENDITURE.

(£'000.)

Year ended 30th June.	N.S.W.(a)	Victoria.(b)	Q'land.	S. Aust.	W. Aust.(c)	Tas.	Total.
REVENUE (EXCLUDING LOAN RECEIPTS).							
1939 ..	6,405	1,814	3,374	113	963	528	13,197
1951 ..	20,774	5,094	7,924	329	550	927	35,598
1952 ..	26,803	6,309	10,436	380	436	1,088	45,452
1953 ..	35,654	7,656	12,798	462	469	1,212	58,251
1954 ..	41,367	8,189	13,108	504	516	1,366	65,050
1955 ..	46,972	8,770	(d)	547	569	1,296	(d)

EXPENDITURE (EXCLUDING LOAN EXPENDITURE).

1939 ..	5,556	1,803	3,256	123	935	514	12,187
1951 ..	20,557	5,220	7,917	340	586	926	35,546
1952 ..	27,381	6,248	10,735	395	454	1,070	46,283
1953 ..	34,051	7,623	12,851	449	469	1,243	56,686
1954 ..	38,426	7,971	13,366	474	520	1,310	62,067
1955 ..	43,616	8,611	(d)	558	547	1,286	(d)

(a) Years ended previous 31st December. (b) Years ended 30th September. (c) Municipalities—Years ended 31st October; Road Districts—Years ended 30th June. (d) Not yet available.

(iv) *Loan Expenditure.* The table below shows particulars for 1954–55 of loan expenditure on works connected with the ordinary services and the business undertakings of local government authorities.

LOCAL GOVERNMENT AUTHORITIES : LOAN EXPENDITURE ON WORKS, 1954-55.

(£'000.)

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
ORDINARY SERVICES.							
Roads, Bridges, Streets, Footpaths, Drainage and Sewerage	2,034	1,143	2,435	889	574	278	7,353
Council Properties ..	1,378	1,036	479	49	458	82	4,194
Parks, Gardens and Recrea- tional Reserves ..	425	175		..	81	31	
Other	(a) 476	157	55	21	8	13	730
Total	4,313	2,511	2,969	959	1,121	404	12,277

BUSINESS UNDERTAKINGS.

Water Supply	1,842	107	1,573	..	..	757	4,834
Sewerage	555	..	..	..	..
Electricity and Gas ..	6,371	1,124	3,128	45	76	..	10,744
Railways, Tramways and Omnibuses .. ..	..	..	153	..	..	43	196
Abattoirs	269	51	..	..	..	..	320
Other .. ..	..	..	66	..	14	..	80
Total	9,037	1,282	4,920	45	90	800	16,174
Grand Total ..	13,350	3,793	7,889	1,004	1,211	1,204	28,451

(a) Includes advances for homes, £66,000.

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

The following table shows the loan expenditure on works connected with local government ordinary services and business undertakings during the years 1938-39 and 1950-51 to 1954-55 :—

LOCAL GOVERNMENT AUTHORITIES : LOAN EXPENDITURE ON WORKS.

(£'000.)

Year ended 30th June.	N.S.W.(a)	Victoria.(b)	Q'land.	S. Aust.	W. Aust.(c)	Tas.	Total.
ORDINARY SERVICES.							
1939 ..	1,758	663	1,317	43	117	39	3,937
1951 ..	3,243	1,195	3,546	281	586	347	9,198
1952 ..	4,256	1,701	4,412	512	693	468	12,042
1953 ..	4,660	1,797	2,898	410	715	351	10,831
1954 ..	4,121	1,747	2,969	785	839	237	10,698
1955 ..	4,313	2,511	(d)	958	1,121	404	(d)

BUSINESS UNDERTAKINGS.

1939 ..	1,481	452	942	10	76	233	3,194
1951 ..	8,950	1,185	3,311	75	64	450	14,035
1952 ..	12,077	1,841	5,433	101	47	811	20,310
1953 ..	10,496	1,772	5,437	115	44	732	18,596
1954 ..	10,436	1,408	4,920	62	78	642	17,546
1955 ..	9,037	1,282	(d)	45	90	800	(d)

(a) Years ended previous 31st December. (b) Years ended 30th September. (c) Municipalities—Years ended 31st October; Road Districts—Years ended 30th June. (d) Not yet available.

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

1. **General.**—Statistics of local and semi-governmental debt for the years 1938-39 and 1952-53 to 1955-56 are given in the following paragraph. The information covers all local government authorities and those semi-governmental authorities responsible for the provision of the following services :—

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

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

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

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

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

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

A detailed list of the authorities included is shown in *Finance*, Bulletin No. 47, 1955-56.

2. **Local and Semi-Governmental Authorities' Debt.**—The following table provides a summary of new money loan raisings, provisions for debt redemption, debt outstanding and interest payable by local and semi-governmental authorities for the year ended 30th June, 1956. For greater detail see *Finance*, Bulletin No. 47, 1955-56.

**LOCAL AND SEMI-GOVERNMENTAL AUTHORITIES: NEW MONEY LOAN
RAISINGS, REDEMPTION, DEBT AND INTEREST PAYABLE 1955-56.**
(£'000.)

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
LOCAL GOVERNMENT AUTHORITIES.							
<i>New Money Loan Raisings—</i>							
From Government ..	19	59	1,658	475	10	12	2,233
From Public ..	10,393	3,342	5,019	806	1,429	1,171	22,160
<i>Total ..</i>	<i>10,412</i>	<i>3,401</i>	<i>6,677</i>	<i>1,281</i>	<i>1,439</i>	<i>1,183</i>	<i>24,393</i>
<i>Funds Provided for Redemption—</i>							
Government Loans ..	42	11	1,181	308	4	9	1,555
Loans due to Public ..	4,112	1,404	2,063	189	491	368	8,627
<i>Total ..</i>	<i>4,154</i>	<i>1,415</i>	<i>3,244</i>	<i>497</i>	<i>495</i>	<i>377</i>	<i>10,182</i>
Accumulated Sinking Fund Balance ..	5,208	2,457	3,941	63	112	230	12,011
<i>Debt—</i>							
Due to Government ..	1,727	443	14,236	1,325	55	121	17,907
Due to Banks (Net Overdraft) ..	132	538	..	270	3	5	948
Due to Public Creditor(a) ..	65,379	26,217	61,473	2,862	6,387	8,500	170,818
<i>Total(a) ..</i>	<i>67,238</i>	<i>27,198</i>	<i>75,709</i>	<i>4,457</i>	<i>6,445</i>	<i>8,626</i>	<i>189,673</i>
Maturing Overseas(a)(b) ..	1,812	..	2,619	..	..	..	4,431
Annual Interest Payable(a) ..	(c)	1,168	3,117	(c)	283	364	(c)
SEMI-GOVERNMENTAL AND OTHER PUBLIC AUTHORITIES.							
<i>New Money Loan Raisings—</i>							
From Government ..	12,308	17,432	849	11,101	3,357	8,435	53,482
From Public ..	15,492	31,639	6,266	1,901	2,198	1,178	58,674
<i>Total ..</i>	<i>27,800</i>	<i>49,071</i>	<i>7,115</i>	<i>13,002</i>	<i>5,555</i>	<i>9,613</i>	<i>112,156</i>
<i>Funds Provided for Redemption—</i>							
Government Loans ..	696	3,732	315	1,158	421	544	6,866
Loans due to Public ..	3,702	2,072	1,449	3	120	158	7,504
<i>Total ..</i>	<i>4,398</i>	<i>5,804</i>	<i>1,764</i>	<i>1,161</i>	<i>541</i>	<i>702</i>	<i>14,370</i>
Accumulated Sinking Fund Balance ..	15,307	7,777	951	840	190	190	25,255
<i>Debt—</i>							
Due to Government ..	121,947	148,247	7,055	81,613	28,115	59,135	446,112
Due to Banks (Net Overdraft) ..	1,702	7,744	502	41	5	..	9,994
Due to Public Creditor(a) ..	179,062	289,701	48,382	20,310	11,142	10,550	559,147
<i>Total(a) ..</i>	<i>302,711</i>	<i>445,692</i>	<i>55,939</i>	<i>101,964</i>	<i>39,262</i>	<i>69,685</i>	<i>1,015,253</i>
Maturing Overseas(a)(b) ..	8,438	4,351	..	767	..	..	13,556
Annual Interest Payable(a) ..	(c)	17,314	2,410	3,898	1,583	2,756	(c)

(a) Includes debt or interest payable in London and New York. The former is expressed in United Kingdom currency, the latter is payable in dollars which have been converted at the rate of 4.8665 dollars to £1. (b) Included in debt figures above. (c) Not available.

In this and 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 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 1938–39 and 1952–53 to 1955–56.

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

Particulars.	1938–39.	1952–53.	1953–54.	1954–55.	1955–56.
LOCAL GOVERNMENT AUTHORITIES.					
<i>New Money Loan Raisings—</i>					
From Government	371	1,648	3,001	3,413	2,233
From Public	7,060	21,522	23,843	24,423	22,160
<i>Total</i>	<i>7,431</i>	<i>23,170</i>	<i>26,844</i>	<i>27,836</i>	<i>24,393</i>
<i>Funds provided for Redemption—</i>					
Government Loans	2,141	1,267	1,332	1,477	1,555
Loans due to Public	2,995	6,475	6,928	8,202	8,645
<i>Total</i>	<i>5,136</i>	<i>7,742</i>	<i>8,260</i>	<i>9,679</i>	<i>10,200</i>
Accumulated Sinking Fund Balance ..	(a)	9,947	10,439	11,559	12,011
<i>Debt—</i>					
Due to Government	13,207	13,642	15,290	17,265	17,907
Due to Banks (Net Overdraft)	1,544	1,990	795	362	948
Due to Public Creditor(b)	76,582	125,051	141,833	159,335	170,818
<i>Total(b)</i>	<i>91,333</i>	<i>140,683</i>	<i>157,918</i>	<i>176,962</i>	<i>189,673</i>
Maturing Overseas(b)(c)	17,893	4,025	3,914	4,499	4,431
SEMI-GOVERNMENTAL AND OTHER PUBLIC AUTHORITIES.					
<i>New Money Loan Raisings—</i>					
From Government	1,524	57,885	66,363	51,234	53,482
From Public	7,038	68,831	64,720	64,484	58,674
<i>Total</i>	<i>8,562</i>	<i>126,716</i>	<i>131,083</i>	<i>115,718</i>	<i>112,156</i>
<i>Funds provided for Redemption—</i>					
Government Loans	699	2,316	2,738	3,328	6,866
Loans due to Public	1,146	5,196	10,955	5,933	7,504
<i>Total</i>	<i>1,845</i>	<i>7,512</i>	<i>13,693</i>	<i>9,261</i>	<i>14,370</i>
Accumulated Sinking Fund Balance ..	(a)	17,487	19,517	22,240	25,255
<i>Debt—</i>					
Due to Government	(d)44,817	296,661	352,526	401,080	446,112
Due to Banks (Net Overdraft)	2,006	5,490	1,264	2,195	9,994
Due to Public Creditor(b)	118,506	376,390	438,352	502,530	559,147
<i>Total(b)</i>	<i>d165,329</i>	<i>678,541</i>	<i>792,142</i>	<i>905,805</i>	<i>1,015,253</i>
Maturing Overseas(b)(c)	12,088	13,207	13,176	13,616	13,556

(a) Not available. (b) Includes debt in London and New York. The former is expressed in United Kingdom currency, the latter is payable in dollars which have been converted at the rate of 4.8665 dollars to £1. (c) Included in debt figures above. (d) Approximate only.

§ 4. Roads and Bridges.

1. Commonwealth Government Grants.—The following table shows the allocation, under the several Commonwealth Aid Roads Acts, to the States for road construction, maintenance, repair and other works connected with transport for each of the years 1938–39 and 1950–51 to 1955–56, and to the Commonwealth for expenditure on the construction and maintenance of strategic roads and for the promotion of road safety practices for each of the years 1950–51 to 1955–56. *See also* Chapter XXI.—Public Finance, and *Finance* bulletins.

**ROAD CONSTRUCTION, MAINTENANCE, ETC. : GRANTS UNDER THE
COMMONWEALTH AID ROADS ACTS.**
(£'000.)

Year ended 30th June—	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	C'wealth. (a)	Total.
1939 ..	1,199	747	815	474	819	213	..	4,267
1951 ..	3,819	2,357	2,600	1,490	2,600	677	600	14,143
1952 ..	4,131	2,549	2,812	1,611	2,812	732	600	15,247
1953 ..	4,260	2,629	2,900	1,662	2,900	756	600	15,707
1954 ..	4,641	2,863	3,160	1,810	3,160	823	600	(b)22,057
1955 ..	5,893	3,771	4,125	2,409	4,190	1,073	900	22,361
1956 ..	7,282	4,660	5,097	2,976	5,178	1,326	950	27,469

(a) Allocation for expenditure on the construction and maintenance of strategic roads and the promotion of road safety practices. (b) Includes £5,000,000 paid into the Commonwealth Aid Roads (Supplementary) Trust Account to be expended on grants to the States for roads purposes in subsequent years.

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. Subsequently, the Main Roads administration was reorganized as a separate department under the control of a Commissioner. The activities of the Department of Main Roads embrace works on main and developmental roads throughout the State, all roads in the unincorporated portion of the Western Division, and certain associated works, principally bridges and vehicular ferries, constructed from government funds. The Department of Main Roads co-operates with the municipal and shire councils in the work of constructing and maintaining the main roads system.

Public roads, except those within the City of Sydney, may be proclaimed as main roads on the recommendation of the Commissioner for Main Roads, who takes into consideration the representations made by the councils concerned, availability of funds for construction and maintenance purposes, and the value of the roads as connecting links between centres of population or business. The classes of main roads are (i) the State Highways which form the principal avenues of road communication throughout the State and connect with similar avenues in other States; (ii) Trunk Roads, which, with the State Highways, form the framework of a general system of intercommunication throughout the State; (iii) Ordinary Main Roads, which provide a network of roads connecting towns and important centres of population with the State Highways and Trunk Roads and with each other. In addition to the Main Roads, there are also (i) Secondary Roads (in the County of Cumberland) which carry a substantial volume of through traffic and, thereby relieve neighbouring main roads of traffic, and (ii) Developmental Roads which help to develop country districts.

In the County of Cumberland, which for the purposes of the Main Roads Act is deemed to include the City of Blue Mountains and small sections of other councils' areas on the boundary of the County of Cumberland, the full cost of road and bridge construction is paid from the funds of the Department of Main Roads. The Councils contribute towards the cost at the rate of $\frac{1}{4}$ d. in the £ on the unimproved value of ratable property. The rate payable in respect of lands used principally for primary production is one-half the rate levied on other lands. In country districts, the Department meets the full cost of road and bridge works on state highways; the full cost of bridge works and three-quarters of the cost of road works on trunk roads; and three-quarters of the cost of bridge works and two-thirds of the cost of road works on 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.

(ii) *Length of Roads.* (a) *Proclaimed Roads.* The following table shows lengths of proclaimed roads at 30th June, 1956, according to class of road:—

PROCLAIMED ROADS, NEW SOUTH WALES : LENGTHS, 30th JUNE, 1956.
(Miles.)

Division.	Main Roads.				Secondary Roads.	Developmental Roads.	Total.
	State Highways.	Trunk Roads.	Ordinary Main Roads.	Total.			
Eastern and Central ..	5,201	2,874	9,699	17,774	(a) 77	2,640	20,491
Western ..	1,325	1,317	2,079	4,721	..	..	4,721
Total ..	6,526	4,191	11,778	22,495	77	2,640	25,212

(a) Metropolitan area.

During 1955–56, 62 miles of new developmental roads were proclaimed and 158 miles were removed from the list of proclaimed roads. There were no new main roads proclaimed during the year.

The length of main and secondary roads maintained by the Department of Main Roads at 30th June, 1957 (excluding the Western Division) was 2,979 miles (17 per cent.), while the length maintained by councils was 14,872 miles (83 per cent.). The proportions of the several classes of main roads maintained by the Department and councils respectively were :—State highways, 45 per cent., 55 per cent. ; trunk roads, 2 per cent., 98 per cent. ; ordinary main roads, 6 per cent., 94 per cent. Secondary roads were wholly maintained by councils. In the County of Cumberland (the metropolis and adjoining areas), the Department maintained 56 per cent. of the roads (516 miles).

(b) *Composition of Roads.* In 1956, the total length of all roads in New South Wales was estimated at 125,040 miles, including 8,645 miles in the Western Division. The lengths of roads, according to their composition or nature, were as follows :—cement concrete, 404 miles ; asphaltic concrete, 200 miles ; tar or bituminous macadam, 4,684 miles ; surface water-bound macadam, 5,440 miles ; water-bound macadam, 1,794 miles ; gravel or crushed rock, 39,550 miles ; formed only, 27,281 miles ; cleared or natural surface only, 45,687 miles.

(iii) *Main Roads Department.* (a) *General.* Progress has continued with the implementation of the Main Roads Department plan for main road development in the metropolis and the balance of the County of Cumberland. The plan has been incorporated in the County of Cumberland Planning Scheme approved by Parliament under the Local Government (Amendment) Act 1951. Detailed planning of the Newcastle and District Arterial Roads System is well advanced and some sections of the system have already been constructed. Surveys and designs have been advanced in the planned Wollongong-Port Kembla District Main Roads System.

In addition to its construction and maintenance work on roads, the Main Roads Department is engaged on a scheme for widening metropolitan roads. The acquisition of land required to implement approved schemes is proceeding.

During 1956–57, 67 new bridges were constructed. In addition, 45 concrete box culverts having a waterway width of 20 feet or more were completed. Major bridge works under construction include steel and concrete bridges over Middle Harbour at the Spit, Sydney (length 745 feet), George's River at Liverpool (length 912 feet), the Karuah River at Karuah (length 716 feet), the Wallambo River at Nahiab (length 668 feet), the Macleay River at Kempsey (length 917 feet) and the Wallambo River to connect Forster and Tuncurry (length 2,000 feet).

(b) *Receipts and Payments.* The funds of the Department of Main Roads are derived principally from taxation of motor vehicles, contributions by the Commonwealth Government under the Commonwealth Aid Roads Acts (see Chapter XXI.—Public Finance, for some particulars of the basis and distribution of grants under these Acts and para. 1 of this section for particulars of the amounts allocated in recent years), contributions by municipal and shire councils, and special (not statutory) assistance by the State Government by way of loan moneys or special grants from revenue funds. Receipts and payments for the four years 1953–54 to 1956–57 compared with the income and expenditure for 1938–39 are shown below.

DEPARTMENT OF MAIN ROADS, NEW SOUTH WALES : RECEIPTS AND PAYMENTS.

(£.)

Item.	1938–39. (a)	1953–54.	1954–55.	1955–56.	1956–57.
RECEIPTS.					
Motor Vehicle Taxation, and Registration and Licence Fees ..	2,018,556	6,693,215	7,279,705	7,675,281	7,944,583
Commonwealth Aid Roads and Works Acts	1,176,039	3,236,940	4,132,187	4,646,788	5,165,020
Councils' Contributions	250,679	559,780	707,230	878,621	971,198
Consolidated Revenue (State) ..	..	850,000	..	..	298,072
Loans from State Government ..	302,643	..	200,000	150,000	150,000
Grants and Contributions from State Government and Departments, etc.	13,549	89,266	115,983	110,545	161,937
Commonwealth Funds for Special Works .. ..	..	358,206	261,554	301,225	113,718
Other	54,782	98,935	48,350	58,177	58,646
Total	3,816,248	11,886,342	12,745,009	13,820,637	14,863,174

NOTE.—See next page for footnotes.

DEPARTMENT OF MAIN ROADS, NEW SOUTH WALES: RECEIPTS AND PAYMENTS—*continued*.

(£.)

Item.	1938-39. (a)	1953-54.	1954-55.	1955-56.	1956-57.
PAYMENTS.					
Roads and Bridges—					
Construction	1,736,898	6,314,770	6,896,403	7,160,708	7,813,534
Maintenance	1,519,929	5,146,618	5,546,974	5,946,283	6,174,524
Other Works .. ..	..	27,156	2,546	702	..
Debt Charges—					
Interest, Exchange, etc. ..	152,469	136,450	140,233	151,652	171,242
Debt Redemption	200,591	31,442	33,735	36,299	38,677
Purchase of Assets(b) .. ..	..	308,580	81,584	260,551	168,766
Suspense Accounts(c) .. ..	..	107,327	—326,317	—156,924	—217,258
Administration, etc.	100,583	410,547	458,428	515,715	562,056
Other	914	73,275	33,950	55,752	52,918
Total	3,711,384	12,556,165	12,867,536	13,970,738	14,764,459

(a) Income and expenditure. (b) Excludes plant and motor vehicles. (c) Includes purchase and operation of Department's Plant and Vehicles not included elsewhere.

NOTE.—Minus sign (—) indicates excess of receipts over payments.

The figures shown above represent the aggregate receipts and payments of three funds—the County of Cumberland Main Roads Fund, the Country Main Roads Fund and the Developmental Roads Fund.

The total expenditure on roads, streets and bridges in the State by all authorities during the years 1938-39 and 1951-52 to 1955-56 was, respectively, £8,891,000, £14,904,000, £20,004,000, £22,510,000, £26,878,000, and £29,595,000. These figures are approximate and they include expenditure on construction, maintenance and direct administration, but not on debt charges. Expenditure on the Sydney Harbour Bridge is not included.

(c) *Sydney Harbour Bridge*. The Sydney Harbour Bridge was opened for traffic on 19th March, 1932. The main span is 1,650 feet and the clearance for shipping 170 feet from high water level. The deck, 160 feet wide, carries a roadway, two railway tracks and two tramway tracks, and there is also a footway on each side. The capital cost of the bridge to the 30th June, 1957, was £9,578,006, but this amount will be reduced slightly on completion of the disposal of the remaining surplus resumed property. The portion met from repayable loan funds, over £7,900,000, is repayable from toll income. The accumulated balance of the Bridge Account at 30th June, 1957, showed a surplus of £40,095, after the transfer of sums totalling £2,085,000 to a reserve account. Annual income, after a decline to less than £300,000 during the 1939-45 War, has risen from about £400,000 in 1938-39 to over £980,000 in 1956-57, while expenditure over the same period has remained relatively stable, varying between £424,000 and £656,000. In 1956-57, income included road tolls, £803,012, railway passenger tolls, £136,095, and tram and omnibus passenger tolls, £18,763. Expenditure amounted to £656,613, including interest, exchange, flotation expenses, etc., £296,669, sinking fund, £98,000, and maintenance and improvement £150,991. During 1956-57, 24,075,000 rail travellers, 17,455,000 tram and omnibus travellers, and 36,724,000 road travellers in 22,094,000 road vehicles crossed the bridge, contributing, respectively, 14 per cent., 2 per cent. and 84 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 the main roads, State highways, tourists' roads, etc., 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 communication or to improve the conditions of traffic.

(ii) *Length of Roads*. (a) *Declared Roads*. The total length of declared roads in Victoria at 30th June, 1956, the latest date for which details are available, was 14,430 miles, classified as follows:—State highways, 3,850 miles; main roads, 9,787 miles; tourist roads, 416 miles; forest roads, 377 miles. The total length of the surface treated (black) or higher type of pavements included in the foregoing totals was 8,571 miles or 59 per cent.

(b) *Composition of Roads.* It is estimated that, in addition to the 14,430 miles of classified roads as above, there were approximately 85,500 miles of unclassified roads at 30th June, 1954. The latest detailed estimate of the length of roads and streets in Victoria (as at 30th September, 1954) provides the following information:—Wood or stone, 61 miles; portland cement concrete, 135 miles; asphaltic concrete and sheet asphalt, 233 miles; tar or bitumen surface seal, 12,197 miles; water-bound macadam, gravel, sand and hard loam pavements, 31,766 miles; formed only, 25,040 miles; not formed, 30,531 miles; total, 99,963 miles.

(iii) *Country Roads Board.* (a) *General.* During 1955–56, 1,117 miles of declared roads under the Board's control were treated with bitumen. In addition, 329 miles of undeclared roads, for which the Board contributed funds, were similarly treated. Work for other authorities carried out by the Board's plant amounted to 141 miles. The total length of bitumen treatment carried out in 1955–56 was 1,587 miles. Of the work on the roads under the Board's control, 367 miles related to State highways.

During 1955–56, 221 bridge projects with a total value of £1,363,500 were initiated. Of these new projects, 47 with a total value of £857,000 were supervised by the Board and 174 with a total value of £506,500 were supervised by municipalities.

(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' 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, 1956, loan receipts and payments each amounted to £1,092,950, and expenditure included £460,755 for restoration of flood and bush fire damage. The total loan expenditure to 30th June, 1956, was £12,125,808. 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.

Total receipts and payments during each of the years 1938–39 and 1952–53 to 1955–56 are shown below :—

COUNTRY ROADS BOARD, VICTORIA : RECEIPTS AND PAYMENTS.

(£.)

Item.	1938–39. (a)	1952–53.	1953–54.	1954–55.	1955–56.
RECEIPTS.					
Motor Vehicle Registration Fees ..	1,690,962	3,702,131	3,791,643	4,647,372	4,984,855
Drivers' Licence Fees(b) ..	..	159,402	178,885	181,728	199,852
Municipalities' Payments ..	318,878	344,320	331,605	387,561	501,110
Commonwealth Aid Roads Acts(c) ..	716,019	2,446,029	2,741,608	3,802,369	4,430,575
Loans from State Government ..	57,972	1,191,509	1,512,741	1,102,309	1,092,950
Surplus Transport Regulation Fund ..	..	..	..	387,992	..
Advance from Public Account ..	..	..	..	..	500,000
Stores and Materials ..	233,104	..	..	..	..
Hire of Plant ..	53,724	..	..	..	..
Road Charges—Commercial Goods Vehicles Act ..	..	..	..	..	215,789
Other ..	117,341	2,092	1,841	1,309	24,809
Total ..	3,188,000	7,845,483	8,558,323	10,510,640	11,949,940

NOTE.—See next page for footnotes.

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

Item.	1938-39. (a)	1952-53.	1953-54.	1954-55.	1955-56.
PAYMENTS.					
Construction and Maintenance of Roads and Bridges—					
State Highways	453,708	2,250,803	2,503,912	3,033,653	3,495,182
Main Roads	1,027,210	2,492,855	2,843,251	3,566,478	3,889,291
Tourist Roads	77,694	232,778	217,804	294,590	342,839
Forest Roads .. .. .	..	113,895	108,504	139,119	144,684
Unclassified Roads	468,122	918,946	995,787	1,445,032	1,947,134
Roads adjoining Commonwealth Properties	13,321	..	..	..	..
Other	(d) 58,729	13,843	17,032	30,181	50,484
Relief to Municipalities	240,170	..	..	..	..
Plant, Stores and Materials	310,332	840,258	670,389	584,826	627,011
Interest, Debt Redemption, etc.	427,445	570,001	611,154	676,012	745,873
Administration Expenditure and Other	230,125	449,030	551,046	621,478	789,374
Total	3,306,856	7,882,409	8,518,879	10,391,369	12,031,872

(a) Figures for 1938-39 are not directly comparable with those of succeeding years owing to a change in the method of compilation adopted by the Country Roads Board. (b) Prior to 1st July, 1949 drivers' licence fees were paid into Consolidated Revenue Fund. From that date until 31st December, 1950 the fees were credited to the funds of the Country Roads Board. Since then one half of the fees has been credited to the funds of the Country Roads Board while the remaining half has been credited to the Municipalities Assistance Fund. (c) Excludes portion of Commonwealth Aid Roads Acts advances drawn by the Public Works Department for expenditure on wharfs, jetties, etc. (d) Includes £54,662 expenditure on unemployment relief works.

(iv) *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. A third of all moneys received by way of owners' certificates is paid into the Fund as well as payments under other Acts for similar purposes. In 1955-56, the Fund received £225,397 from collections in respect of additional registration fees. Expenditure from the Fund amounted to £227,378 comprising £51,936 incurred by the Railways Department and £175,442 incurred by the Country Roads Board.

4. *Queensland*—(i) *General.* Under the Main Roads Act 1920, a Main Roads Board was constituted, consisting of three members appointed by the Governor-in-Council. In 1925, the Board was abolished and its powers conferred upon a single Commissioner. The Main Roads Commission was constituted a Department under the name of the Department of Main Roads in February, 1951, with the Commissioner of Main Roads as its permanent head. The duties of the Commissioner are to carry out surveys and investigations necessary to determine State highways, main, developmental, secondary, mining access, farmers' and tourist roads and tourist tracks, and the responsibility for building and maintaining these declared roads is largely that of the Commissioner. Roads of purely local importance are constructed and maintained by local authorities. In many cases, construction is financed by the State Government by means of Treasury loans. Other roads are 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, 1956, was 20,985 miles, comprising State highways, 8,252 miles; main roads, 10,635 miles; developmental roads, 235 miles; secondary roads, 646 miles; mining access roads, 606 miles; farmers' roads, 311 miles; tourist roads, 299 miles; tourist tracks, one mile. The length of roads improved in Queensland from the date of commencement of work under the Main Roads Acts 1920-1952 to 30th June, 1956, was 13,194 miles (63 per cent.). At that date also, 1,183 miles of new road construction and 644 miles of stage construction work were proceeding.

(b) *Composition of Roads.* The total length of roads and streets in Queensland at 30th June, 1956, was:—Concrete, 101 miles; bitumen, 6,604 miles; macadam, 15,238 miles; other formed, 41,815 miles; unconstructed, 59,558 miles; total, 123,316 miles.

(iii) *Department of Main Roads. (a) General.* During 1955–56, the Department completed 1,227 miles of roads including new construction and stage construction. Bridges of all types to a length of 6,559 linear feet were constructed, bringing the total constructed by the Department at 30th June, 1956, to 184,050 feet. In addition, at 30th June, 1956, 6,540 feet were under construction.

(b) *Receipts and Payments.* The funds of the Department of Main Roads are obtained chiefly from motor vehicle registration and collections, fees, etc.; under the Transport Acts, contributions under the Commonwealth Aid Roads Acts and loans, grants and advances from the State Government. The total receipts and payments, including amounts for defence works, during each of the years 1938–39 and 1952–53 to 1955–56 are shown below :—

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

Item.	1938–39.	1952–53.	1953–54.	1954–55.	1955–56.
RECEIPTS.					
Motor Vehicle Registration, Transport Acts Collections, Fees, etc. . .	938,227	3,523,958	3,766,460	4,075,193	4,342,483
Loans from State Government . .	392,225	825,000	100,000	..	380,000
Grants, Advances, Refunds, etc. from State Government . .	579,775	103,855	349,315	..	..
Commonwealth Aid Roads and Works Acts . .	806,218	3,135,034	3,454,665	4,414,226	5,135,202
Maintenance Repayments—Local Authorities . .	98,154	308,178	311,212	368,711	406,998
Hire, Rent, Sales of Plant, etc. . .	288,330	107,468	91,875	615,080	765,687
Other . .		386,210	400,676	329,549	415,931
Total	3,102,929	8,389,703	8,474,203	9,802,759	11,446,301
PAYMENTS.					
Permanent Road Works and Surveys	2,045,900	4,113,945	3,930,659	6,091,811	6,344,024
Maintenance of Roads . .	331,734	1,180,788	1,603,418	2,077,429	2,521,193
Plant, Machinery, Buildings, etc. (including Plant Maintenance) . .	73,632	966,963	837,504	1,390,728	1,070,648
Loans—Interest . .	38,861	265,074	264,619	265,079	253,050
Redemption . .	78,153	239,066	250,156	250,817	255,224
Payments to State Consolidated Revenue . .	340,244	..	..	..	..
Payments to Local Authorities . .	27,418	1,625	1,625	1,625	1,625
Administration, etc. . .	151,700	682,729	699,428	803,671	905,599
Total	3,087,642	7,450,190	7,587,409	10,881,160	11,351,363

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 main highways of the State. In addition the Commissioner—

(a) allocates grants to councils for roadworks and supervises the expenditure.

(b) assists Councils to purchase road-making plant and to defray the cost of roadworks.

(c) advises Councils on any question concerning the construction, maintenance or repair of road-works.

(ii) *Source of Funds.* Funds of the Department are derived mainly from—

(a) *State Government.* The Highways Fund, into which are paid the proceeds from motor vehicle registrations and drivers' licences (less cost of collection), appropriations from loan funds, repayments of advances made to Councils and contributions by the Municipal Tramways Trust.

(b) *Commonwealth Government.* 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, 1957, there were 8,188 miles of proclaimed Main Roads and 44,743 miles of District Roads, totalling 52,931 miles. Of these, 24,719 miles are unformed and carry little or no traffic and a further 8,880 miles, which have been formed only, are open to traffic during most of the year. Of the remainder, there are 13,636 miles of road constructed with gravel or crushed rock and 5,696 miles of a higher standard constructed with either bitumen or concrete.

(iv) *State Highways and Local Government Department, Receipts and Payments.* The following table shows particulars of receipts and payments, during the years 1938-39 and 1952-53 to 1955-56, of funds controlled by the Highways and Local Government Department.

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

(£.)

Item.	1938-39. (a)	1952-53.	1953-54.	1954-55.	1955-56.
RECEIPTS.					
Motor Vehicle Registration, Licences, Fees, Fines, etc. . .	690,849	1,497,227	2,230,045	2,997,668	3,221,230
Commonwealth Aid Roads and Works Acts	479,922	1,682,961	1,873,227	2,555,471	2,958,943
Loans from State Government . .	200,000	360,000	..	200,000	100,000
Recoups—Local and Semi-govern- mental Authorities	1,531	38,267	10,443	9,978	..
Other		864,480	263,456	348,467	399,192
Total	1,372,302	4,442,935	4,377,171	6,111,584	6,679,365
PAYMENTS.					
Construction and Reconstruction of Roads and Bridges	1,150,082	1,786,777	2,142,728	2,877,748	3,658,078
Maintenance		666,239	918,582	825,371	1,562,515
Recoups to Consolidated Revenue Fund—Interest, Debt Redem- ption and Exchange	d 178,273	148,651	157,749	168,297	182,910
Grants and Advances to Local and Semi-governmental Authorities Administration	(e)	670,460	1,343,381	1,209,958	470,243
Stores, Plant, Machinery, Suspense Accounts, etc.	45,753	231,542	267,042	310,971	403,014
Other		252,135	161,562	722,539	424,206
		48,506	36,644	31,949	50,790
Total	1,374,108	3,804,310	5,027,688	6,146,833	6,751,756

(a) Figures for 1938-39 are not completely comparable with those for following years. (b) Includes special contribution of £620,000 from Consolidated Revenue for roads for war service land settlement and developmental roads. (c) Roads, plant, etc. (d) Interest and sinking fund payments. (e) Not separately available ; included elsewhere.

The total expenditure, both revenue and loan, by State and local governments on roads, streets and bridges in South Australia during the years 1938-39 and 1952-53 to 1955-56 was, respectively, £1,966,000, £4,667,000, £6,131,000, £7,539,000 and £8,812,000.

6. *Western Australia.*—(i) *General.* Under the Main Roads Act 1930-54, the Main Roads Board previously existing was abolished and a Commissioner of Main Roads was

appointed. His duties relate to the determination of main roads after consideration of the funds available and the services to be rendered by the roads, the declaration and provision of developmental roads, the construction and maintenance of main roads, and the carrying out of surveys, investigations and experiments connected with roads and road materials. The Act authorizes two trust accounts (Main Roads Trust Account and Main Roads Contribution Trust Account) to record the moneys prescribed as available to the Commissioner for expenditure associated with roads, etc. In addition, the Commissioner operates on other Trust Accounts which are used for funds made available under the Commonwealth Aid Roads Acts.

(ii) *Length of Roads and Streets.* The total known lengths of roads and streets in existence in the various municipalities at 31st October, 1956, and in road districts at 30th June, 1956, were as follows :—Bituminous, 5,876 miles ; gravel water-bound, 14,214 miles ; other constructed surfaces, 1,354 miles ; formed only, 39,580 miles ; unprepared, 26,978 miles (incomplete) ; total, 88,002 miles.

The lengths of declared roads at 30th June, 1956, were :—Main roads, 3,487 miles ; important secondary roads, 6,929 miles ; developmental roads, 12,775 miles ; total, 23,191 miles.

(iii) *Main Roads Department.* During the year 1955–56, the activities of the Department included :—clearing, 1,838 miles ; forming, 1,994 miles ; gravelling, 1,275 miles ; reconditioning, 4,495 miles ; stabilizing, 200 miles ; side drains, 111 miles. In addition, the length of tar and bitumen work performed aggregated 1,049 miles. Construction of the 260 miles of the Wyndham-Ord River-Nicholson road was continued during the year. Bridges constructed numbered 22. Two major bridges, one of timber over the Swan River at Upper Swan and the other also of timber over the Moore River, 20 miles west of Gingin, were completed during the year. Tenders were called later in 1956 for the construction of the projected bridge across the Swan River at the Narrows, Perth.

(iv) *Receipts and Payments—Combined Road Funds.* The following table shows the combined transactions of the Main Roads Trust Account, the Main Roads Contributions Trust Account, the Metropolitan Traffic Trust Account, and the Commonwealth Aid Roads and Works Trust Accounts during the years ended 30th June, 1939 and 1953 to 1956.

ROAD FUNDS, WESTERN AUSTRALIA : RECEIPTS AND PAYMENTS.

(£.)

Item.	1938–39. (a)	1952–53.	1953–54.	1954–55.	1955–56.
RECEIPTS.					
Motor Vehicle Registration, Licences, Fees, Fines, etc. . .	218,962	472,477	523,495	584,454	636,464
Commonwealth Aid Roads and Works Acts	823,162	2,886,672	3,212,454	4,411,656	5,110,892
Recoups from Local Authorities, etc.	1,958	210,777	199,591	273,886	233,285
Other		43,129	116,373	96,174	224,768
Total	1,044,082	3,613,055	4,051,913	5,366,170	6,205,409
PAYMENTS.					
Construction and Reconstruction of Roads and Bridges	922,756	3,079,210	2,492,320	2,947,597	4,497,015
Maintenance		258,289	214,217	255,181	309,276
Grants to Local Authorities, etc. . .	143,544	273,796	295,713	323,410	368,410
Transfer to State Consolidated Revenue		70,000	70,000	70,000	70,000
Interest, Debt Redemption and Exchange—State Consolidated Revenue	7,616	7,396	7,396	7,396	7,396
Administration	52,176	68,703	47,583	69,947	72,354
Plant, Machinery, etc.		502,444	276,686	545,833	481,536
Other	19,181	640,478	540,945	463,969	520,405
Total	1,145,273	4,900,316	3,944,860	4,683,333	6,326,392

(a) Figures not completely comparable with those for following years. Includes Transport Co-ordination Trust Account.

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, tourists' 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 1955–56 on the construction of roads, tracks and bridges amounted to £2,798,238 of which £1,898,207 was charged to road funds, £41,446 to revenue, £781,347 to loan and £77,238 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, 1956 were as follows:—State highways, 1,161 miles; main roads, 651 miles; secondary roads, 186 miles; tourist roads, 45 miles; developmental roads, 50 miles; subsidized roads, 92 miles; total 2,185 miles. Country roads totalled more than 10,000 miles. The mileages of sealed roads, and their proportions to the respective totals, were:—State highways, 586 miles (50 per cent.); main roads, 228 miles (35 per cent.); secondary and other roads, 23 miles (6 per cent.); total, 837 miles (38 per cent. of all classified roads, and 6 per cent. of all roads, in Tasmania).

(b) *Composition of Roads.* The length of all roads in Tasmania, including those with surfaces of lower grade, at 30th June, 1956, was as follows:—Bituminous, 1,166 miles; concrete, 22 miles; granite, limestone, etc., water-bound, 8,560 miles; surfaces of lower grade, 2,926 miles; total, 12,674 miles.

(iii) *Receipts and Payments—Combined Road Funds.* The table hereunder shows particulars of the receipts and payments of the combined Road Funds for the years 1939–40 and 1952–53 to 1955–56:—

ROAD FUNDS, TASMANIA : RECEIPTS AND PAYMENTS.
(£.)

Item.	1939–40. (a)	1952–53.	1953–54.	1954–55.	1955–56.
RECEIPTS.					
Motor Vehicle Taxation and Registration, Licences, Fees, Fines, etc.	193,165	432,738	450,962	523,138	623,782
Commonwealth Aid Roads and Works Acts	220,241	745,985	830,922	1,125,259	1,303,299
Recoups from Local Authorities, etc.	..	11,539	10,076	8,339	10,765
State Loan Fund .. .. .	..	494,125	825,502	860,862	782,264
Hire of Plant .. .. .	..	553,678	741,383	807,525	813,593
Other	719	152,556	115,064	167,414	171,205
Total	414,125	2,390,621	2,973,909	3,492,537	3,704,908
PAYMENTS.					
Construction and Reconstruction of Roads and Bridges	130,924	716,223	1,070,414	1,562,003	1,624,722
Maintenance	113,199	768,395	977,403	1,041,981	1,079,893
Jetties, etc.	22,467	..	..	..	..
Other works connected with Transport	5,748	15,566	9,823	10,480	11,558
Grants to Local Authorities, etc. .. .. .	..	2,762	3,671	5,018	5,401
Administration	15,053	58,736	56,807	39,315	40,213
Purchase, Hire and Maintenance of Plant	(b)	586,409	809,546	848,738	839,360
Other	31,894	120,925	22,558	93,332	70,535
Total	319,285	2,269,016	2,905,106	3,600,867	3,671,682

(a) First year of operation of Transport Commission. Figures not completely comparable with those for following years. (b) Not available, included with other.

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

8. **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, 1956. These proclaimed or declared roads are those for which the central road authority assumes responsibility under the Act for the whole, or a proportion, of the cost of construction and/or maintenance, 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, 1956.
(Miles.)

Class of Road.	N.S.W.	Vic. (a)	Q'land.	S Aust. (b)	W. Aust.	Tas.	Total.			
State highways	6,526	3,849	8,252	8,188	3,487	1,161	68,509			
Trunk roads	4,191	9,791	10,635			651				
Ordinary main roads	11,778									
Total Main Roads	22,495	13,640	18,887	8,188	3,487	1,812	68,509			
Secondary roads	77	..	646	..	6,929	186	7,838			
Developmental roads	2,640	..	235	..	12,775	50	15,700			
Tourist roads .. ..	..	414	299	..	..	45	758
Other roads .. ..	..	(c) 376	(d) 918	..	..	(e) 92	1,386
Total Other Roads	2,717	790	2,098	..	19,704	373	25,682			
Grand Total	25,212	14,430	20,985	8,188	23,191	2,185	94,191			

(a) As at 30th June, 1954. (b) As at 30th June, 1957. (c) Forest roads. (d) Includes mining access roads, 606 miles; farmers' roads, 311 miles; tourist tracks, 1 mile. (e) Subsidized roads.

(ii) *Composition 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 composition groups. The results are not entirely satisfactory, (i) because it is doubtful whether the whole of Australia is covered, (ii) because the dates of reference differ, and (iii) because the figures constituting each group are not wholly comparable for the States and Territories. It is hoped, however, that despite these defects the table will provide an approximate and general idea of the main types of roads in Australia.

The figures in the table for the States are obtained from the State Government Statisticians, and are derived mainly from local government sources. Unincorporated areas in some States are probably excluded and the figures on the returns supplied by the local government authorities are in some cases of doubtful accuracy. Details of the composition of roads, as far as they are available, vary to such an extent that it is considered preferable to show here only major divisions.

Groups 1-4 as shown in the table include, respectively, the following types of composition :—

1. *Wood or Stone.* Wood blocks ; stone paved.
2. *Concrete.* Cement concrete ; asphaltic concrete ; bituminous concrete ; sheet asphalt on concrete base.
3. *Bituminous.* Tar or bituminous macadam ; tar and bituminous surface seal ; surfaced water-bound macadam or gravel ; bituminous or cement penetration.

4. *Macadam and Other.* Water-bound macadam ; granite, limestone, and blast-furnace slag, water-bound ; water-bound gravel ; gravel or crushed rock ; metalled (gravel or rubble) ; gravel, sand and hard loam pavements.

Groups 5 and 6 include roads so-called mainly because they are used for general traffic, irrespective of their surfaces, prepared or otherwise.

It will be noticed that some of the terms used above are practically synonymous. Such terms are, of course, not used by any one State, but are the classifications adopted by different States.

For details of any particular State, *see* the respective paragraphs in the preceding pages.

ALL ROADS USED FOR GENERAL TRAFFIC : LENGTHS.

(Miles.)

Composition of Road.	N.S.W. 30th June, 1956.	Vic. 30th Sept., 1954.	Q'land. 30th June, 1956.	S. Aust. 30th June, 1953.	W. Aust. 1956. (a)	Tas. 30th June, 1955.	N. Terr. 30th June, 1956.	A.C.T. 30th June, 1956.	Total.
1. Wood or stone ..		61		6					67
2. Concrete ..	604	368	101	605		22		3	1,703
3. Bituminous	10,124	12,197	6,604	2,914	5,876	1,166	1,287	186	40,354
4. Macadam	41,344	31,766	15,238	16,829	15,568	8,560	190	159	129,654
5. Formed only	27,281	25,040	41,815	12,956	39,580		9,119	227	
6. Cleared, or natural surface, only	45,687	30,531	59,558	22,270	26,978	2,926	1,424		345,392
Total ..	125,040	99,963	123,316	55,580	88,002	12,674	12,020	575	517,170

(a) Municipalities, 31st October ; Road Districts, 30th June.

It will be seen from the foregoing table that only about one-third of the road lengths of Australia have actually been constructed, the remainder, for the greater part, being in little more than the natural state. The percentages for each group are as follows :—Group 1, 0.01 ; group 2, 0.33 ; group 3, 7.80 ; group 4, 25.07 ; groups 5 and 6, 66.79. The percentage of constructed lengths to total length in each State is as follows :—New South Wales, 42 ; Victoria, 44 ; Queensland, 18 ; South Australia, 37 ; Western Australia, 24 ; Tasmania, 77 ; Northern Territory, 12 ; Australian Capital Territory, 61. Comparisons between the States should be made with caution, however, because, in addition to the defects enumerated at the beginning of this section, factors such as the area, physiography, density and distribution of population, nature of economic activity, other facilities for transport, etc., in each State must be taken into account.

9. *Summary of Expenditure on Roads and Bridges.*—(i) *General.* In most States there are three classes of authorities—the State Government, the central road authority, and the numerous local government bodies. Most of these authorities may expend money either directly on road construction or indirectly by means of grants and miscellaneous payments to other authorities. Insufficient information is given in the accounts of many authorities to permit the exclusion of these indirect payments which would, if included in the aggregate, duplicate the expenditure. In addition, a number of authorities are not able to supply separate information concerning their expenditure on roads. For these reasons it has not been possible, up to the present, to compile statistics of the aggregate expenditure on roads.

The two paragraphs following therefore represent only : (a) aggregate expenditure from the various State road funds referred to in the foregoing pages, and (b) loan fund expenditure by State Governments. Expenditure by local government bodies is not included. Paragraph 8, *Finances*, of § 2. *Local Government Authorities*, contains some particulars of local government revenue and expenditure on roads, streets and bridges (*see* pages 682 and 685).

(ii) *Aggregate Expenditure from State Road Funds.* The following table shows expenditure on the construction and maintenance of roads, including payments to local government bodies, by each State during the years 1938–39 and 1951–52 to 1955–56, as summarized from the foregoing tables dealing with the receipts and payments of the various State road authorities. Expenditure on plant and materials, not charged to construction

and maintenance of roads and bridges and expenditure on debt charges and payments to State consolidated revenues are not included. In some instances, expenditure on works other than roads and bridges is included. Because of differing accounting methods, figures are not completely comparable as between States, nor, in some States, as from year to year.

ROADS AND BRIDGES : AGGREGATE EXPENDITURE FROM ROAD FUNDS.
(£'000.)

Year ended 30th June—	N.S.W.(a)	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Total.
1939.. ..	3,358	2,569	2,557	1,374	1,138	(b) 319	11,091
1952.. ..	9,006	6,576	7,379	3,267	3,564	1,550	31,272
1953.. ..	9,357	6,472	5,979	3,404	4,320	1,683	31,215
1954.. ..	11,972	7,237	6,235	4,708	3,591	2,096	35,839
1955.. ..	12,938	9,131	8,975	5,256	4,060	2,752	43,112
1956.. ..	13,679	10,659	9,772	6,145	5,768	2,832	48,855

(a) Excludes Sydney Harbour Bridge.

(b) Year 1939-40.

The foregoing particulars do not represent the total expenditure on roads and bridges in each State. To obtain this information, additions must be made on account of (a) State Government expenditure from revenue and loan through Departments or authorities other than the central road authority and (b) local government expenditure from revenue and loan, while, on the other hand, allowances must be made for grants and miscellaneous payments to other authorities (*see* (i) above).

(iii) *State Net Loan Expenditure.* In recent years, expenditure from State loan funds on roads and bridges has not been large, and it would appear, also, that a considerable proportion passes through the funds of the central road authorities and is therefore included in the figures of their financial operations in the foregoing sections. Gross loan expenditure by all State Governments during 1955-56 amounted to over £2,000,000, while net expenditure was about £350,000 less. Aggregate net loan expenditure on roads and bridges in each State to 30th June, 1956, amounted to the following approximate sums :—New South Wales, £22,000,000 ; Victoria, £20,000,000 ; Queensland, £11,000,000 ; South Australia, £5,000,000 ; Western Australia, £3,000,000 ; Tasmania, £10,000,000 ; total, £71,000,000.

§ 5. Water Supply, Sewerage and Drainage.

NOTE.—*See also* Chapter IX.—Water Conservation and Irrigation.

1. **New South Wales.**—(i) *General.* The two largest domestic water supply and sewerage systems are controlled by statutory boards each consisting of a president and a vice-president appointed by the State Government and five members elected by local councils. These are (a) the Metropolitan Water, Sewerage and Drainage Board, which administers the systems in the County of Cumberland, i.e., in Sydney and in the surrounding districts, and, in addition, has jurisdiction over territory extending along the South Coast beyond Wollongong to Lake Illawarra, and (b) the Hunter District Water Board, serving the Newcastle area. At Broken Hill, a similar board includes a representative of the mining companies. Other systems, apart from irrigation projects and water storage systems administered by the State Government, are controlled by county, municipal or shire councils.

(ii) *Water Supply—to 30th June, 1956.* (a) *Metropolitan.* The storage reservoirs of the metropolitan system, with a combined available capacity of 124,944 million gallons, drain catchment areas of 376 square miles (Upper Nepean, 347 square miles and Woronora, 29 square miles). Water is drawn also from the Warragamba River, with a catchment of 3,383 square miles. This system is being developed, and building has commenced on a dam to have an overall height of 415 feet (greatest depth of water 340 feet) having a storage capacity of 460,000 million gallons and giving a net safe draught estimated at 263 million gallons per day in addition to 11 million gallons per day for riparian purposes. The existing temporary storage is supplied by a weir 50 feet high with a maximum storage of 579 million gallons. At 30th June, 1956, there were 112 service reservoirs in use with a

combined capacity of 554 million gallons. Rating for water for 1955-56 was 10d. in the £1 of assessed annual value and the charge for water measured by meters 1s. 9d. per 1,000 gallons.

(b) *Newcastle*. The water supply is drawn from two sources (1) the Chichester Reservoir, with a storage capacity of about 5,000 million gallons and draining a catchment of 76 square miles, and (2) the Tomago Sandbeds, which extend northerly along the coast towards Port Stephens. Service reservoirs and tanks distributed throughout the Water Supply District have a total storage capacity of 111 million gallons. Water rating for 1955-56 was 1s. 6½d. in the £1 on assessed annual value for occupied properties and 1s. 3½d. in the £1 for unoccupied properties. The price of water to domestic and industrial consumers is 2s. per 1,000 gallons.

(c) *Water Supplied, etc.* The following tables show, for the Sydney and Newcastle systems, the number of properties, the estimated population supplied, and other details for the years 1938-39 and 1951-52 to 1955-56 :—

WATER SUPPLY, SYDNEY(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.		
			Mill. gals.	Mill. gals.	Gallons.	Gallons.	Miles.	
1938-39 ..	350,161	1,466,000	106.3	38,790	304	72.5	4,539	126,754
1951-52 ..	461,294	1,942,000	155.9	57,069	338	80.3	5,252	227,850
1952-53 ..	478,598	1,958,000	149.6	54,621	313	76.4	5,357	246,383
1953-54 ..	496,025	1,975,000	163.9	59,810	330	83.7	5,502	270,239
1954-55 ..	513,855	2,014,000	161.8	59,064	315	80.4	5,656	294,463
1955-56 ..	531,977	2,053,000	174.3	63,791	332	85.6	5,788	308,511

(a) Includes part of South Coast.

WATER SUPPLY, NEWCASTLE : 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.
1938-39.. ..	48,370	193,480	11.9	4,331	245	61.3	936
1951-52.. ..	67,122	268,488	25.1	9,144	373	93.1	1,257
1952-53.. ..	69,244	276,976	23.9	8,719	345	86.3	1,262
1953-54.. ..	71,307	285,228	25.5	9,416	362	90.4	1,284
1954-55.. ..	73,770	295,080	25.1	9,179	341	85.2	1,322
1955-56.. ..	76,272	305,088	27.2	9,945	356	89.1	1,354

(iii) *Sewerage and Drainage—to 30th June, 1956.* (a) *Metropolitan.* Sydney and suburbs are served by 3 major sewerage systems and 5 minor systems consisting of 6 outfalls discharging direct into the Pacific Ocean and 2 treatment works. A further treatment works is in course of construction near Kurnell and is designed to serve the whole of the Cronulla Peninsula. In addition, 4 centres outside the metropolitan area (Camden, Campbelltown, Liverpool 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, 1956 were 175 miles long. Sewerage rating for 1955-56 was 9½d. in the £1 of assessed annual value and drainage rating ¾d. in the £1.

(b) *Newcastle.* The main sewerage system of the Newcastle area discharges into the Pacific Ocean at Merewether Gulf. In some of the outlying districts, treatment works have been installed.

Sewerage rates for 1955-56 were 1s. 1½d. in the £1 of assessed annual value of occupied lands and 10½d. 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 as at 30th June, 1939 and 1952 to 1956.

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.
						Miles.	Miles.
1939	..	..	..	254,632	1,066,000	2,561	87
1952	..	..	..	309,995	1,266,000	3,000	176
1953	..	..	..	316,439	1,293,000	3,055	174
1954	..	..	..	324,737	1,354,000	3,163	175
1955	..	..	..	334,280	1,390,000	3,252	175
1956	..	..	..	344,655	1,425,000	3,349	175

(a) Includes part of South Coast.

At 30th June, 1956, 50,209 premises had been connected to the Hunter District Water Board's sewerage system (Newcastle area). The total length of sewers under the Board's control was 655 miles, and the length of drains was 49 miles.

(iv) *Finances, Sydney and Newcastle 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 1955-56 and for the three services combined during the years 1938-39 and 1951-52 to 1955-56.

WATER SUPPLY, SEWERAGE AND DRAINAGE, METROPOLITAN AND NEWCASTLE : FINANCES.
(£.)

Year.	Capital Debt at 30th June.	Revenue.	Expenditure.				Surplus (+) or Deficit (—).
			Working Expenses. (a)	Interest and Exchange.	Debt Redemption.	Total.	
METROPOLITAN.(b)							
1955-56—							
Water ..	69,102,688	5,923,997	2,788,588	2,406,665	725,810	5,921,063	+ 2,934
Sewerage..	28,413,666	3,252,856	1,947,053	998,631	304,678	3,250,362	+ 2,494
Drainage..	1,285,460	172,557	115,947	41,302	13,615	170,864	+ 1,693
Total 1955-56	98,801,814	9,349,410	4,851,588	3,446,598	1,044,103	9,342,289	+ 7,121
1954-55	91,434,271	8,507,664	4,732,625	3,109,747	641,164	8,483,536	+ 24,128
1953-54	84,474,951	7,891,016	4,365,926	2,878,004	598,634	7,842,564	+ 48,452
1952-53	77,117,666	6,672,577	3,494,464	2,618,630	554,435	6,667,529	+ 5,048
1951-52	70,670,899	6,199,094	3,313,807	2,343,923	540,680	6,198,410	+ 684
1938-39	43,769,741	2,926,694	957,422	1,727,708	241,564	2,926,694	..
NEWCASTLE.							
1955-56—							
Water ..	9,710,068	1,081,178	675,480	320,802	60,078	1,056,360	+ 24,818
Sewerage..	3,271,699	418,866	282,169	108,058	21,128	411,355	+ 7,511
Drainage..	193,990	34,547	23,824	6,343	1,561	31,728	+ 2,819
Total 1955-56	13,175,757	1,534,591	981,473	435,203	82,767	1,499,443	+ 35,148
1954-55	11,842,265	1,465,655	943,382	382,663	73,330	1,399,375	+ 66,280
1953-54	10,439,017	1,245,444	828,021	332,628	66,407	1,227,056	+ 18,388
1952-53	9,431,369	1,119,775	726,137	294,769	59,747	1,080,653	+ 39,122
1951-52	8,794,710	858,729	572,382	278,211	55,888	906,481	- 47,752
1938-39	4,574,880	385,732	167,620	188,185	20,886	376,691	+ 9,041

(a) Includes provision for renewals, long service leave, loss on exchange, etc. (b) Includes part of South Coast. (c) Excludes non-interest bearing capital in respect of stormwater drains transferred from Public Works Department—£2,219,823 at 30th June, 1956.

(v) *Country Water Supply and Sewerage Systems.* At 31st December, 1954, country water supply services were conducted or under construction by 62 municipalities, 64 shires and 4 county councils, and country sewerage services by 57 municipalities and 20 shires. The capital indebtedness of these schemes was £17,560,325 at 31st December, 1954, namely, £12,455,748 for water and £5,104,577 for sewerage. Debt of the municipalities amounted to £9,498,540, shires to £4,327,433 and county councils to £3,734,352. Government advances amounting to £485,684 are included in these figures. Aggregate income and expenditure amounted to £2,822,749 and £2,067,653, respectively, in 1954.

(vi) *Other Water Supply and Sewerage Systems.* The water supply and sewerage services for Broken Hill are operated by a statutory board, the Broken Hill Water Board. Its capital indebtedness at 31st December, 1955, was £2,981,865. In 1955, income (excluding subsidies, State Government £96,513 and Mining Companies £276,985) amounted to £176,033 and expenditure (excluding debt redemption £138,294) amounted to £409,266.

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 directly to private consumers. The capital indebtedness of these systems was £4,035,467 at 31st December, 1956.

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 was established by Act of Parliament on 20th December, 1890. Since August, 1955, the Board has consisted of a Chairman and 50 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 until 1954 were to control and manage the metropolitan water supply system; to provide the metropolitan area with an efficient main and general sewerage; to deal with main drains and main drainage works; and to control and manage the rivers, creeks and watercourses within the metropolitan area. The Board has carried out since December, 1954, the additional functions of a permanent planning authority and in June, 1956, it became the authority directly responsible for metropolitan main highways, bridges, parks and foreshores.

(b) *Water Supply.* There are five storage reservoirs serving the metropolitan area—Yan Yean, 7,234 million gallons (available for consumption, 6,649 million gallons); Toorourrong, 60 million gallons; Maroondah, 6,289 million gallons (4,870 million gallons); O'Shannassy, 930 million gallons; and Silvan, 8,853 million gallons (8,823 million gallons); total, 23,366 million gallons (21,332 million gallons). Service reservoirs number 25, with a total capacity of 257 million gallons. Two major projects, which were under construction at 30th June, 1956, have been completed. One is the 18 mile conduit carrying water from the Silvan Reservoir to the existing Mt. Waverley service reservoir and to the new service reservoir (Mount View) south of Glen Waverley which is able to supply an additional 110 million gallons a day. The other project is a dam on the River Yarra immediately upstream from the confluence of the Yarra and Doctors Creek. This dam is 293 feet high and impounds 45,800 million gallons of water.

The water rate levied by the Board in 1955–56 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 1s. per 1,000 gallons would equal the water rates payable on each property was 1s. 6d. per 1,000 gallons. The following table shows particulars of Melbourne metropolitan water supply services for the years 1938–39 and 1951–52 to 1955–56.

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.		
			Mill. gals.	Mill. gals.	Gallons.	Gallons.	Miles.	
1938-39 ..	285,408	1,133,000	76.8	28,040	269	67.8	3,234	189,617
1951-52 ..	364,248	1,350,000	107.4	39,293	295	79.5	4,075	256,462
1952-53 ..	378,439	1,382,000	102.4	37,383	271	74.1	4,134	264,916
1953-54 ..	390,035	1,404,000	110.6	40,354	283	78.8	4,213	266,395
1954-55 ..	405,464	1,460,000	110.3	40,270	272	75.6	4,300	273,856
1955-56 ..	424,500	1,528,000	113.0	41,377	266	74.0	4,381	289,567

(c) *Sewerage and Drainage.* Particulars of sewerage and drainage services for 1938-39 and 1951-52 to 1955-56 are shown below. The rate levied in 1955-56 in respect of sewerage was 1s. 1d. 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.		
			Mill. gals.	Mill. gals.	Gallons.	Gallons.	Miles.	Miles.
1938-39 ..	269,411	1,070,000	48.2	17,601	179.0	45.1	2,586	97
1951-52 ..	329,872	1,223,000	66.9	24,490	202.8	54.7	2,958	128
1952-53 ..	338,314	1,236,000	73.1	26,692	216.1	59.2	2,989	131
1953-54 ..	345,370	1,243,000	70.1	25,599	203.1	56.4	3,019	134
1954-55 ..	351,617	1,266,000	74.8	27,315	212.8	59.1	3,071	137
1955-56 ..	358,805	1,292,000	76.8	28,118	214.1	59.4	3,125	151

The metropolitan sewerage system consists of the Main system (serving an area of 71,372 acres) and three subsidiary systems—the Sunshine system (serving an area of 1,526 acres), the Kew system (serving an area of 103 acres) and the South-eastern system (serving an area of 2,559 acres in Cheltenham, Parkdale, Mentone and Mordialloc). The Metropolitan Sewage Farm, 26,854 acres in extent and situated about 24 miles south-west of Melbourne beyond the township of Werribee, serves to purify and dispose of approximately 95 per cent. of the sewage flow of the metropolis before its discharge into Port Phillip Bay. The total capital cost (less depreciation) of the Farm to 30th June, 1956 was £3,025,374. Revenue during 1955-56 amounted to £122,623, cost of sewage disposal to £189,029, trading expenses to £99,578, interest to £122,303, and net cost of sewerage purification to £288,287. These financial particulars are included in the sewerage items of the summary below.

(d) *Finances.* The following table provides a summary for the year 1955-56 of the financial operations of the three services conducted by the Melbourne and Metropolitan Board of Works.

MELBOURNE AND METROPOLITAN BOARD OF WORKS : FINANCES, 1955-56
(£.)

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 ..	33,147,749	2,554,114	1,076,001	1,260,799	..	2,336,800	+ 217,314
Sewerage..	24,081,299	2,634,596	1,145,299	972,285	..	2,117,584	+ 517,012
Drainage..	4,909,452	415,093	279,945	158,503	..	438,448	- 23,355
General(b)	2,418,989	..	398,646	175,000	132,466	706,112	- 706,112
Total ..	64,557,489	5,603,803	2,899,891	2,566,587	132,466	5,598,944	+ 4,859

(a) Total loan indebtedness—1955-56, £52,986,275. (b) Statutory and general expenditure not distributed over Services.

The following table shows the financial operations of the Melbourne and Metropolitan Board of Works (all services combined) for the years 1938-39 and 1951-52 to 1955-56 :—

MELBOURNE AND METROPOLITAN BOARD OF WORKS : FINANCES.
(£.)

Year.	Capital Cost of Works and Buildings at 30th June.	Revenue.	Expenditure.				Surplus(+) or Deficit(-).
			Working Expenses.	Interest and Exchange.	Debt Redemption.	Total.	
1938-39 ..	28,513,539	2,214,295	762,558	1,316,603	64,269	2,143,430	+ 70,865
1951-52 ..	44,416,680	3,590,571	2,011,265	1,549,009	93,398	3,653,672	- 63,101
1952-53 ..	48,162,372	3,862,048	2,230,431	1,691,613	101,564	4,023,608	- 161,560
1953-54 ..	52,068,617	4,712,533	2,384,131	2,010,730	106,796	4,501,657	+ 210,876
1954-55 ..	57,747,795	5,091,108	2,744,555	2,211,592	123,977	5,080,124	+ 10,984
1955-56 ..	64,557,489	5,603,803	2,899,891	2,566,587	132,466	5,598,944	+ 4,859

(ii) *Geelong Waterworks and Sewerage Trust.* (a) *General.* The Geelong Waterworks and Sewerage Trust was constituted in 1908 and reconstituted under the Geelong Waterworks and Sewerage Act in 1910. It was further reconstituted in September, 1950, to include a Government nominee (Chairman) and provision was made for a commissioner to be elected by the ratepayers of the Shire of Corio, making a total of seven commissioners instead of five as formerly. The amount of loan money which may be raised is limited to £6,500,000 for water supply undertakings, and £1,250,000 for sewerage undertakings. The population supplied is estimated by the Trust at 86,000. This and other general information relates to 30th June, 1956.

(b) *Water Supply.* The catchment area is about 32,000 acres. There are seven storage reservoirs and eleven service basins whose total storage capacity is 8,640 million gallons. The length of water mains and reticulation is 423 miles. The total expenditure on water supply to 30th June, 1956 was £1,959,544. Expenditure for 1955-56 comprised £116,121 for working expenses and £100,158 for interest, redemption and reserves, while revenue amounted to £206,974. The sinking fund appropriations at June, 1956, amounted to £161,371. The replacement and contingencies reserve amounted to £245,845. There is a water rate of 1s. 5d. 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 at Black Rock, about 9 miles from Geelong, and 193 miles of main and reticulation sewers. The sewerage area is 10,559 acres, and the number of buildings within the sewered areas is 17,800, of which 17,716 have been connected. The total expenditure on sewerage works to 30th June, 1956, was £1,104,667. The revenue in 1955-56 amounted to £131,962 and the expenditure comprised £70,995 on working expenses and £63,531 on interest, redemption and reserves. Sinking fund appropriations at June, 1956, were £133,806.

Replacement and contingencies reserve amounted to £235,128. A general rate of 1s. 4d. in the £1 is levied on the net annual value of ratable properties.

(iii) *The Ballarat Water Commission and the Ballarat Sewerage Authority.* (a) *General.* The Ballarat Water Commission was constituted on 1st July, 1880, and the Ballarat Sewerage Authority on 30th November, 1920. The members of the Water Commission constitute the Sewerage Authority. The Commissioners number eight, three (one of whom is chairman) being appointed by the Government, four being elected by the Council of the City of Ballarat and one being elected by the Councils of the Borough of Sebastopol and the Shires of Ballarat, Bungaree, Buninyong and Grenville. General and financial information given herein relates to the year ended 31st December, 1956.

(b) *Water Supply.* The Water Supply District embraces an area of about 65 square miles, containing a population of about 53,000. The total storage capacity of the seven reservoirs is 5,605 million gallons and the catchment area is 22,562 acres.

The capital cost of construction of the waterworks was £2,122,890 to 31st December, 1956. The liabilities amounted to £1,149,720 at 31st December, 1956, including loans due to the Government totalling £1,100,508. The revenue for the year 1956, was £145,548. Working expenses during 1956 amounted to £64,358 and interest and other charges to £81,015. A rate of 1s. 1d. in the £1 is levied on the net annual value of all ratable properties, with a minimum of £1 per annum for land on which there is a building or water supply.

(c) *Sewerage.* The Ballarat sewerage district embraces the City of Ballarat and parts of the Shires of Ballarat and Bungaree and the Borough of Sebastopol. Work was commenced in 1922 and up to 31st December, 1956 the Authority had constructed a disposals works, a nightsoil depot, an ejector station and more than 100 miles of sewers. The capital cost of sewerage construction works to 31st December, 1956, was £748,363. The method of sewage disposal is by sedimentation, oxidation and sludge digestion. One hundred and fifty-four sewered areas had been declared as at 31st December, 1956. Assessments in the sewerage district numbered 15,748, while those in sewered areas numbered 12,356. There were 10,674 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, 1956, amounted to £595,026; redemption payments at that date totalled £231,547. An expenditure of £157,122 was incurred for house connexions, the whole of which has been redeemed. Revenue during 1956 amounted to £75,720 and expenditure, which included £36,634 on interest and redemption, was £73,907.

A sewerage rate of 1s. 4d. in the £1 is levied, with a minimum charge of £2 4s., on the net annual value of any ratable sewered property on which there is a building and £1 on any ratable sewered property on which there is no building.

(iv) *Other Sewerage Authorities.* At 30th June, 1955, 60 sewerage authorities had been constituted under the provisions of the Sewerage Districts Acts in districts outside the areas under the control of the Melbourne and Metropolitan Board of Works, the Geelong Waterworks and Sewerage Trust, and the Ballarat Sewerage Authority, and systems were in operation in 30 districts (including five partly operating) serving a population of 269,000 persons.

The operations of the other 30 districts constituted at this date had either been suspended or not commenced.

(v) *Water Supply in Country Towns and Districts.* Most of the country waterworks are controlled by the State Rivers and Water Supply Commission, but in some instances the control is by waterworks trusts or by municipal corporations.

The waterworks controlled by the State Rivers and Water Supply Commission at 30th June, 1956, included 38 large reservoirs and 240 subsidiary reservoirs and service basins with a total storage capacity of 1,342,070 million gallons (4,929,550 acre feet). Length of channels was 15,122 miles (irrigation, 4,976 miles, domestic and stock 8,012 miles, drainage and flood protection, 2,134 miles) and of pipe lines 1,281 miles. The quantity of water delivered to water users during 1955–56 was 744,391 acre feet which was well below normal because of the wet summer. The Commission administered 65 rural districts during 1955–56 (29 irrigation districts, 31 waterworks districts, 4 flood protection districts and 1 drainage district), and the reticulated pipe supplies for domestic and industrial purposes in 130 urban districts. In addition, 127 urban districts were administered by waterworks trusts and 16 by local governing bodies. The population served in these groups of urban districts numbered, respectively, 194,990, 357,910 and 103,810 persons. The table below is a summary of the Commission's finances for operations in districts under its control for the years 1938–39 and 1951–52 to 1955–56.

STATE RIVERS AND WATER SUPPLY COMMISSION, VICTORIA : FINANCES.(a)
(£.)

Year.	Total Loan Capital Expenditure to 30th June.	Receipts.	Payments.				Total.
			Operating Expenses.	Interest on Capital Allotted.	Depreciation.	Debt Redemption.	
1938-39 ..	24,223,037	560,680	476,085	145,105	27,553	4,922	653,665
1951-52 ..	51,082,707	1,871,810	2,292,995	47,547	92,573	1,497	2,434,612
1952-53 ..	57,464,776	1,989,289	2,669,419	26,555	90,024	3,284	2,789,282
1953-54 ..	65,143,250	2,412,382	2,717,862	75,101	90,616	5,181	2,888,760
1954-55 ..	73,456,588	2,532,946	2,781,621	95,335	120,475	2,465	2,999,896
1955-56 ..	79,847,923	2,779,599	2,940,637	118,379	127,774	5,491	3,192,281

(a) Excludes waterworks and river improvement trusts and local governing bodies under the general supervision of the Commission.

The total loan capital expenditure of waterworks and river improvement trusts and local governing bodies to 30th June, 1956, was £10,806,505, making a grand total of £90,654,428 when added to the figure for works under the control of the Commission. The net loan capital after redemption payments of £3,032,252 was £87,622,176.

The financial operations of the State Rivers and Water Supply Commission form part of the Consolidated Revenue Fund, but are included in this section for convenience. The major proportion of the interest payable is borne by the State and is additional to that shown above. The net expenditure borne by the State during 1955-56 was £3,246,477.

3. *Queensland.*—(i) *Brisbane City Council—to 30th June, 1956.* (a) *General.* This organization conducts the water supply and sewerage systems of the City of Brisbane. Prior to 1928, water and sewerage activities had been controlled by the Metropolitan Water and Sewerage Board, but were then absorbed by the Brisbane City Council, which also supplies, in bulk, the whole of the water used by the City of Ipswich and the Town of Redcliffe.

(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 (5,725 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 sixteen service reservoirs with a capacity of approximately 41 million gallons. The Somerset reservoir is under the control of Stanley River Works Board and is a dual purpose project with a designed total holding capacity of 200,000 million gallons, 55,000 million gallons to be for water storage and 145,000 million gallons for flood mitigation. Water rating at 30th June, 1956, was 3½d. in the £1 of unimproved capital value for improved properties, and 2d. in the £1 for vacant lands, with a minimum charge of £5 5s. and £4 0s. 0d. respectively. The following table is a summary of operations of the complete Brisbane City Council system (metropolitan area, Ipswich and Redcliffe) for the years 1938-39 and 1951-52 to 1955-56:—

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.	Number of Meters.
					Per Service.	Per Head of Estimated Population.		
1938-39 ..	81,389	345,903	Mill. gals. 15.9	Mill. gals. 5,791	Gallons. 195	Gallons. 45.9	Miles. 1,169	(b)
1951-52 ..	124,992	483,000	32.4	11,860	239	66.2	1,696	52,496
1952-53 ..	131,895	501,000	31.5	11,486	239	61.0	1,760	52,360
1953-54 ..	139,172	520,000	33.9	12,379	244	62.3	1,817	51,976
1954-55 ..	144,459	530,000	34.1	12,458	236	64.3	1,870	51,138
1955-56 ..	148,632	543,000	36.4	13,283	245	67.0	1,929	(b)

(a) Includes Ipswich and Redcliffe.

(b) Not available.

(c) *Sewerage.* The sewage treatment works is situated at Luggage Point at the entrance to the Brisbane River. An activated sludge system of treatment was originally planned but, since the commencement of pumping operations, a sedimentation plant only has been used. Sewerage rating at 30th June, 1956, was 2½d. in the £1 of unimproved capital value for improved properties, and 2d. in the £1 for vacant lands, with a minimum charge of £6 and £5 respectively. The following table is a summary of operations of the Brisbane sewerage scheme for the years 1938–39 and 1951–52 to 1955–56:—

SEWERAGE, BRISBANE : SERVICES.

Year.					Premises Connected.	Estimated Population Served.	Total Sewage Pumped for the Year.	Length of Main, Branch, Reticulation etc., Sewers.
							Mill, Galls. (a)	Miles.
1938–39	..	..	..	..	33,200	150,000		484
1951–52	..	..	..	..	46,300	179,000	4,663	615
1952–53	..	..	..	..	47,500	182,000	4,791	630
1953–54	..	..	..	..	48,700	183,000	4,868	647
1954–55	..	..	..	..	50,400	187,000	4,944	665
1955–56	..	..	..	..	53,100	196,000	6,222	696

(a) Not available.

(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 1938–39 and 1951–52 to 1955–56 :—

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.	
Water Supply—						
1938–39 ..	4,849,732	606,244	129,219	280,827	422,366	+ 183,878
1951–52 ..	8,915,401	1,036,944	494,136	347,000	979,916	+ 57,028
1952–53 ..	9,861,885	1,280,390	587,695	403,349	1,164,278	+ 116,112
1953–54 ..	10,672,306	1,326,644	640,838	434,073	1,237,040	+ 89,604
1954–55 ..	12,248,875	1,296,624	697,625	492,951	1,275,644	+ 20,980
1955–56 ..	12,618,584	1,479,045	765,970	549,707	1,459,738	+ 19,307
Sewerage—						
1938–39 ..	5,992,936	240,963	52,792	403,386	485,974	– 245,011
1951–52 ..	9,794,052	499,935	127,417	302,252	467,774	+ 32,161
1952–53 ..	10,863,167	591,584	171,614	330,642	564,704	+ 26,880
1953–54 ..	11,898,902	603,141	163,397	349,692	552,651	+ 50,490
1954–55 ..	12,705,307	578,257	166,609	391,744	628,081	– 49,824
1955–56 ..	13,125,463	719,623	217,238	408,917	707,476	+ 12,147

(ii) *Country Towns.* (a) *Water Supply.* In addition to the City of Brisbane, there were, at 30th June, 1955, 118 cities and towns in Queensland provided with water supply systems controlled by municipal and shire councils.

(b) *Sewerage Systems.* At 30th June, 1955, there were 13 cities and towns outside the metropolitan area—Bundaberg, Charleville, Cunnamulla, Goondiwindi, Hughenden, Ipswich, Mackay, Maryborough, Quilpie, Rockhampton, Toowoomba, Townsville and Warwick—with sewerage systems. Sewerage systems were in course of construction at Mt. Isa, Dalby, Barcardine and Longreach.

(c) *Finances.* The receipts (other than loan) of water undertakings controlled by the cities and towns referred to above amounted to £1,750,102 in 1953-54. Expenditure amounted to £1,688,672, including £364,248 for debt charges. In addition, loan expenditure amounted to £1,105,034.

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 and are maintained by the Engineering and Water Supply Department under the control of the Minister of Works. The works controlled comprise the Adelaide, Barossa, Baroota Creek, Beetaloo, Bundaleer, Tod River, Warren and other country water districts systems, the Morgan-Whyalla water supply system, the Adelaide metropolitan sewerage system, the Murray River Weirs water conservation, and the Metropolitan Flood Waters Scheme. In 1955-56, construction commenced on the Salisbury-Elizabeth Sewerage Scheme.

(ii) *South Australian Waterworks.* (a) *Services.* The table hereunder shows particulars of the area, capacity, etc. of combined metropolitan and country waterworks for the years 1938-39 and 1952-53 to 1956-57 :—

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.	
1938-39.. ..	185,625	6,302,445	11,857,968	23,814	6,384	97,074
1952-53.. ..	234,269	13,366,875	11,976,503	24,009	7,478	119,349
1953-54.. ..	237,742	14,319,989	11,985,353	24,013	7,555	125,144
1954-55.. ..	239,389	15,307,092	12,100,784	24,014	7,700	134,058
1955-56.. ..	243,809	20,827,954	12,106,795	24,014	7,777	150,317
1956-57.. ..	250,306	22,687,480	12,860,508	24,015	7,916	166,350

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

(b) *Finances.* Figures for 1938-39 and 1952-53 to 1956-57 are shown in the following table.

WATERWORKS, SOUTH AUSTRALIA : FINANCES.

(£.)

Year.	Invested Capital to 30th June.	Revenue.	Expenditure.			Deficit.
			Working Expenses.	Interest and Debt Redemption.	Total.	
1938-39.. ..	14,649,052	654,688	242,528	651,972	894,500	239,812
1952-53.. ..	28,573,826	1,415,713	1,377,212	789,517	2,166,729	751,016
1953-54.. ..	32,156,877	1,505,690	1,424,169	883,876	2,308,045	802,355
1954-55.. ..	37,353,231	1,725,017	1,855,026	1,095,914	2,950,940	1,225,923
1955-56.. ..	41,501,133	2,082,694	1,920,666	1,328,068	3,248,734	1,166,040
1956-57.. ..	45,239,197	2,318,072	2,295,444	1,485,486	3,780,930	1,462,858

(iii) *Adelaide Waterworks.* At 30th June, 1957, the Adelaide waterworks supplied a district of 144,772 acres. The capacity of its five reservoirs and storage tanks was 14,469 million gallons and there were 1,982 miles of mains.

The Mannum-Adelaide pipeline conveys water from the River Murray to Angas Creek and supplements the Metropolitan and Warren systems, serving country areas en route. Another major project, the construction of a large reservoir on the South Para River, is still under construction but is nearing completion. This reservoir will provide additional storage to serve the lower northern areas of the State and will make some additional provision for the metropolitan area. The capacity of the new reservoir will be about 10,000 million gallons.

Particulars of finances for the years 1938-39 and 1952-53 to 1956-57 are shown below :—

ADELAIDE WATERWORKS : FINANCES.

(£.)

Year.	Invested Capital to 30th June.	Revenue.	Expenditure.			Surplus (+) or Deficit (—).
			Working Expenses.	Interest and Debt Redemption.	Total.	
1938-39 ..	4,676,110	446,459	111,347	202,279	313,626	+ 132,833
1952-53 ..	11,849,046	908,177	534,074	313,252	847,326	+ 60,851
1953-54 ..	14,438,595	968,575	614,308	377,909	992,217	— 23,642
1954-55 ..	17,922,472	1,078,614	939,317	511,127	1,450,444	— 371,830
1955-56 ..	20,434,323	1,358,896	930,138	646,720	1,576,858	— 217,962
1956-57 ..	23,115,689	1,506,592	1,232,267	759,012	1,991,279	— 484,687

(iv) *Adelaide Metropolitan Sewerage.* The Adelaide metropolitan sewerage system, comprising the Adelaide, Glenelg and Port Adelaide areas, with drainage areas of 109 square miles in all, includes a sewage farm, and treatment works at Glenelg and Port Adelaide. The total quantity of sewage pumped by the various stations was 6,342 million gallons during 1956-57. Other particulars for 1938-39 and 1952-53 to 1956-57 are shown hereunder :—

ADELAIDE METROPOLITAN SEWERAGE : SUMMARY.

Year.	Length of Sewers.	Number of Connexions.	Invested Capital to 30th June.	Revenue.	Expenditure.			Surplus (+) or Deficit (—)
					Working Expenses.	Interest and Debt Redemption.	Total.	
	Miles.		£	£	£	£	£	£
1938-39 ..	923	80,745	3,361,034	268,880	77,023	150,273	227,296	+ 41,584
1952-53 ..	1,206	120,510	5,860,255	551,843	399,327	162,015	561,342	— 9,499
1953-54 ..	1,244	126,375	6,325,084	601,253	440,028	179,435	619,463	— 18,210
1954-55 ..	1,292	131,932	6,974,042	641,194	468,969	205,594	674,563	— 33,369
1955-56 ..	1,335	137,995	7,602,416	866,754	577,872	238,748	816,620	+ 50,134
1956-57 ..	1,370	143,743	8,273,936	1,167,508	648,999	263,270	912,269	+ 255,239

(v) *Country Sewerage Schemes.* In 1956-57, the total length of the Salisbury sewerage scheme was 42 miles and the number of its connexions 3,242. The Port Lincoln scheme, which is one mile in length, had 31 connexions in that year.

(vi) *Country Water Supply.* Water district systems outside Adelaide at 30th June, 1957, comprised an area of 12,715,736 acres, and the capacity of the reservoirs was 9,546 million gallons. These figures exclude the Morgan-Whyalla supply system, which obtains its water from the River Murray. The storage tanks of this system had a capacity of 44 million gallons.

The Uley-Wanilla sub-artesian basin has been utilized to augment the Tod River District supplies. Pumping began in 1947. In 1956-57, nine bores were in operation and 374 million gallons were pumped from the basin to meet the needs of Port Lincoln. At 30th June, 1957, £5,112,810 had been invested in the Tod River District.

Construction work is proceeding on the scheme to reticulate water to Yorke Peninsula. The section of the new 20 inch to 26 inch steel main between Bundaleer Reservoir and Bute is in service.

The following table gives financial information on country waterworks for 1938-39 and 1952-53 to 1956-57 :—

COUNTRY WATERWORKS, SOUTH AUSTRALIA : FINANCES.(a)
(£.)

Year.	Invested Capital to 30th June.	Revenue.	Expenditure.			Deficit.
			Working Expenses.	Interest.	Total.	
1938-39..	10,015,613	207,569	130,523	449,691	580,214	372,645
1952-53..	14,018,673	407,944	757,727	394,750	1,152,477	744,533
1953-54..	17,718,282	630,466	903,212	505,967	1,409,179	778,713
1954-55..	19,430,759	646,403	915,709	584,787	1,500,496	854,093
1955-56..	21,066,810	861,564	1,128,294	681,348	1,809,642	948,078
1956-57..	22,123,508	963,406	1,215,103	726,474	1,941,577	978,171

(a) Excludes Morgan-Whyalla system.

(vii) *Morgan-Whyalla Water Supply Scheme.* This scheme, which involved the laying of 223 miles of main, was officially opened on 31st March, 1944, the capital invested to 30th June, 1957, being £2,593,554. Particulars of this scheme, where applicable, are included in the tables of the combined waterworks in (ii) above. During 1956-57, the water used from the system between Hanson and Whyalla amounted to 1,239 million gallons. Revenue for the year 1956-57 was £195,876, working expenses, etc., £175,519, interest charges, £83,983 and deficit, £63,626. Corresponding figures for 1955-56 were respectively, £182,398, £178,248, £83,734 and £79,584.

5. *Western Australia.*—(i) *General.* The water supply and sewerage systems of Western Australia are principally under the management of Government Departments, and are divided into the following categories :—(a) Metropolitan Water Supply, Sewerage and Drainage area bounded by Kwinana, Marmion, Greenmount and Serpentine; (b) **Country Areas Water Supply** consisting of the Goldfields and Agricultural Water Supply (formerly the Goldfields Water Supply), the Great Southern Towns Water Supply, and water supplies to other country towns (except those controlled by the Local Authority). Individual water supplies serve railways, isolated mines, stock routes and agricultural areas.

(ii) *Metropolitan Water Supply, Sewerage and Drainage.* (a) *General.* The sources of the metropolitan water supply are the Canning Dam, Churchman's Brook, Wungong Brook, and Victoria Reservoir, supplemented by a number of artesian bores. The largest reservoir, the Canning Dam, has a capacity of 20,550 million gallons, about 5,000 million gallons more than that of the Mundaring Reservoir.

The sewage treatment works of both Perth and suburbs consist of primary sedimentation with separate sludge digestion and discharge of all effluent direct to the ocean. Fremantle treatment works consists of septic tanks with ocean outfall for effluent. There are three treatment works, situated at West Subiaco, Swanbourne and Fremantle.

(b) *Water Supply.* The following table shows particulars of water supply services for 1938-39 and 1951-52 to 1955-56.

METROPOLITAN WATER SUPPLY, WESTERN AUSTRALIA : SERVICES.

Year.	Number of Services.	Estimated Population Supplied.	Average Daily Consumption.	Total Consumption for Year.	Average Daily Consumption.		Length of Mains.	Number of Meters.
					Per Service.	Per Head of Estimated Population.		
1938-39 ..	61,467	248,248	Mill. gals. 14.1	Mill. gals. 5,147	Gallons. 229	Gallons. 56.8	Miles. 953	40,014
1951-52 ..	90,436	309,854	31.0	11,337	343	100.0	1,327	61,146
1952-53 ..	96,155	316,423	30.7	11,201	319	97.0	1,422	69,262
1953-54 ..	102,093	323,131	34.9	12,743	342	108.0	1,500	73,780
1954-55 ..	108,755	367,429	38.2	13,948	351	104.0	1,597	78,194
1955-56 ..	113,437	380,294	39.5	14,408	348	103.5	1,709	82,636

Water rating for 1955-56 was 1s. 9d. in the £1 on annual valuation.

(c) *Sewerage and Drainage.* Some particulars of the metropolitan sewerage and drainage services for 1938-39 and 1951-52 to 1955-56 are shown below :—

METROPOLITAN SEWERAGE AND DRAINAGE, WESTERN AUSTRALIA : SERVICES.

Year.			Houses Connected.	Estimated Population Served.	Sewage Pumped for the Year.(a)	Length of Sewers.	Length of Stormwater Drains.
					Mill. gals.	Miles.	Miles.
1938-39 ..	..	..	36,652	162,457	1,030	444	31
1951-52 ..	..	..	52,171	224,000	3,080	626	34
1952-53 ..	..	..	54,467	229,700	3,333	648	34
1953-54 ..	..	..	56,526	238,400	3,372	654	34
1954-55 ..	..	..	58,543	232,000	3,214	675	34
1955-56 ..	..	..	60,702	240,860	3,067	692	34

(a) Aggregate of quantities pumped by the various stations.

Sewerage rating for 1955-56 was 1s. 9d. in the £1 on annual valuation, while storm-water drainage rating was 4d.

(d) *Finances.* The following table shows particulars of the finances of the Western Australian Metropolitan Water Supply, Sewerage and Drainage Department for the years 1938-39 and 1951-52 to 1955-56 :—

METROPOLITAN WATER SUPPLY AND SEWERAGE AND 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—						
1938-39 ..	4,898,167	285,313	50,975	228,527	279,502	+ 5,811
1951-52 ..	7,665,863	543,872	288,525	284,820	573,345	- 29,473
1952-53 ..	8,817,351	618,603	364,638	324,107	688,745	- 70,142
1953-54 ..	9,874,822	811,500	408,714	380,729	789,443	+ 22,057
1954-55 ..	11,255,210	946,922	498,254	428,169	926,423	+ 20,499
1955-56 ..	12,267,020	1,080,601	560,776	484,164	1,044,940	+ 35,661
Sewerage and Drainage—						
1938-39 ..	3,497,938	174,950	30,630	149,714	180,344	- 5,394
1951-52 ..	5,169,227	339,917	156,507	238,599	395,106	- 55,189
1952-53 ..	5,449,248	402,808	182,184	252,256	434,440	- 31,632
1953-54 ..	5,749,506	542,476	235,826	263,713	499,539	+ 42,937
1954-55 ..	6,170,669	601,802	254,062	281,590	535,652	+ 66,150
1955-56 ..	6,421,032	675,419	313,514	296,904	610,418	+ 65,001

(iii) *Country Areas Water Supply.* (a) *Goldfields and Agricultural Water Supply.* The source of supply for Kalgoorlie (370 miles from Perth), Coolgardie and adjacent goldfields, as well as for agricultural districts and some 65 towns situated on or near the pipe line and its branches, is the Mundaring Reservoir (26 miles from Perth) whose capacity is 15,100 million gallons. The Reservoir is linked by pipe line to the Metropolitan system, which thereby supplements its summer requirements.

(b) *Great Southern Towns Water Supply.* This system is currently under construction as part of the Comprehensive Water Supply Scheme to serve principally the towns on the Great Southern Railway between Brookton and Katanning. For this purpose, it is planned to increase the storage capacity of Wellington Dam to 40,800 million gallons.

(c) *Other Country Towns.* Water is derived from stream flow, natural and artificial catchments, bores and wells. A total of 44 such supplies is administered by the Minister of Works.

The Comprehensive Scheme is now under construction in two main parts. The northern section is an enlargement and extension of the Goldfields and Agricultural Water Supply; and the Southern section is the Great Southern Towns Water Supply Scheme. When completed, over 4 million acres of agricultural land will be served, and increased supply to the Eastern Goldfields will permit expansion of the gold mining industry. The cost of the scheme now estimated to be about £10 million is being shared by the Commonwealth and State Governments. Expenditure on this work to 30th June, 1956 totalled £4,387,681.

The following table shows details of the Country Areas Water Supply for 1938-39 and 1951-52 to 1955-56 :—

COUNTRY AREAS WATER SUPPLY, WESTERN AUSTRALIA : SUMMARY.

Year.	Number of Services.	Total Consumption.	Length of Water Mains.	Number of Meters.	Capital Cost.	Revenue.	Expenditure.(a)	Surplus (+) or Deficit (-).
		Mill. gals.	Miles.		£	£	£	£
1938-39 ..	13,670	1,735	1,720	10,872	5,527,890	331,457	298,531	+ 32,926
1951-52 ..	16,598	2,314	1,802	14,640	7,916,564	366,755	806,398	- 439,643
1952-53 ..	17,124	2,374	1,810	15,289	8,314,816	398,057	1,010,036	- 611,979
1953-54 ..	17,375	2,565	1,821	15,500	8,770,042	432,496	1,071,597	- 639,101
1954-55 ..	18,034	2,536	1,841	16,045	9,417,014	443,096	998,202	- 555,106
1955-56 ..	18,458	2,812	1,864	16,477	9,984,368	469,232	1,103,344	- 634,112

(a) Includes interest and debt redemption.

(iv) *Water Supply of Other Towns, etc.* (a) *Controlled by Public Works Department.* During 1955-56, water supplied to other towns and districts, excluding minor water supplies, amounted to 950 million gallons, including service to adjacent mines, 31 million gallons, and railways, 69 million gallons. There were in all 17,852 services connected.

(b) *Controlled by Commonwealth and State Government Railways.* Consumption for the year ended 30th June, 1956 was 212 million gallons. In addition, 358 million gallons were obtained from other sources, mainly the Country Areas Water Supply and the Metropolitan Water Supply.

(c) *Water Boards not Controlled by Government.* During 1955-56, approximately 455 million gallons of water were supplied, the number of services being 5,140.

(v) *Agricultural Water Supply.* From 1st July, 1904 to 30th June, 1956, 586 tanks were built, 1,159 wells sunk, and 5,630 bores (including artesian) put down. Of the bores put down, 1,604 yield fresh or stock water.

(vi) *Artesian and Sub-artesian Waters.* Up to 30th June, 1956, the total number of bores put down in search of artesian or sub-artesian water (inclusive of operations by Defence Services) was 346, ranging in depth from 21 to 4,006 feet. Water (fresh or stock) was struck in 295 bores, 178 of which were artesian and 117 sub-artesian.

6. *Tasmania.*—(i) *Waterworks.* At the end of 1956-57, there were 64 municipal waterworks in Tasmania. The capacity of the reservoirs was 1,002 million gallons, the estimated population served was 243,000, the number of tenements served was 61,000. In addition, two regional schemes operated by the State Government were serving an estimated population of 28,000 in 7,000 tenements.

(ii) *Sewerage.* At the end of 1956-57, there were 11 municipal sewerage schemes in operation in Tasmania. They served an estimated population of 155,000 and the number of tenements served was 39,000.

§ 6. Harbour Boards and Trusts.

NOTE.—The number and net tonnage of all vessels which entered the major ports in each State during the years 1955–56 and 1956–57 are shown in Chapter XI.—Transport and Communication, Part I, Division A. §5. Shipping at Principal Ports. Particulars of oversea and interstate cargo discharged and shipped during 1956–57 are shown in Part I, Division A. §6 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 five Commissioners comprising three full-time members and two part-time members representing shipping and other interests. The Board was constituted on 1st February, 1936, under the Maritime Services Act 1935, to co-ordinate the port and navigation services of the State, which had previously been administered by the Sydney Harbour Trust and by the State Department of Navigation.

The Board exercises general control over intra-state shipping, including the survey and certification of vessels, the licensing of harbour craft, and the examination and issue of certificates to officers. It is responsible for the provision of pilotage services, lights, beacons, buoys and other port facilities, imposes and collects rates and charges on goods and vessels, and is vested with the general control and management of the navigable waters and ports within the State.

At the Port of Sydney, the Board is also responsible for the provision of adequate wharfage and channels, and carries out all construction, maintenance and dredging work. At other ports of New South Wales, such work is undertaken by the Department of Public Works.

(b) *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 4 miles, there are two separate channels, each 700 feet wide, the Western Channel not less than 42 feet deep (low water ordinary spring tide) and the Eastern Channel 41 feet deep. The foreshores, which have been reduced by reclamations, are 152 miles in length and the total area of the port is 13,600 acres, or 21 square miles, of which about one-half has a depth of 30 feet or more at low water ordinary spring tide. The mean range of tides is 3 feet 6 inches.

The wharves are situated in close proximity to the business centre of the city, about four or five miles from the Heads. At present, there are 6 dolphin berths each 550 feet long, and 122 effective commercial cargo berths with a total length of 49,948 feet controlled by the Board. Accommodation for harbour craft amounts to 4,835 feet while the length of other berths including oil and private wharves totals 25,463 feet. Depth of water at wharves is up to 40 feet. Special facilities for the storage and handling of staple products such as wheat, wool, etc., are provided and modern plant has been installed for replenishing ships' bunkers with oil or coal.

Docking facilities are available for the largest vessel afloat. The Captain Cook Graving Dock, opened in March, 1945, ranks amongst the largest graving docks in the world being 1,133 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.

The following table shows particulars of the finances of the Board in respect of the Port of Sydney for 1938–39 and 1951–52 to 1955–56 :—

MARITIME SERVICES BOARD : FINANCES OF THE PORT OF SYDNEY.
(£.)

Year.	Total Capital Debt at 30th June.	Revenue.			Expenditure.			Surplus(+) or Deficit(–).
		Wharfage and Transhipment Rates.	Tonnage Rates and Berthing Charges.	Total.	Administration and Maintenance.	Interest, Debt Redemption, Exchange, etc.	Total. (a)	
1938–39	11,276,399	773,501	38,180	1,155,627	380,120	536,781	916,901	+ 238,726
1951–52	12,194,585	1,107,933	334,530	2,354,154	1,455,711	533,401	2,189,112	+ 165,042
1952–53	12,562,700	971,553	254,637	2,021,121	1,529,050	546,590	2,075,640	– 54,519
1953–54	12,799,104	1,482,492	333,320	2,471,540	1,517,811	550,654	2,318,465	+ 153,075
1954–55	13,408,326	1,814,226	515,480	3,093,315	1,735,504	593,478	2,978,982	+ 114,333
1955–56	13,775,278	1,688,743	459,783	3,042,924	1,740,698	644,783	2,910,481	+ 132,443

(a) Excludes capital expenditure but includes transfers to the Renewals Fund Reserve Account: 1951–52, £200,000; 1953–54, £250,000; 1954–55, £650,000; and 1955–56, £525,000.

Capital expenditure for each of the years 1938-39 and 1951-52 to 1955-56 was £28,576, £496,489, £468,026, £473,516, £599,752, and £553,329 respectively. Expenditure on renewals and replacements from the Renewals Fund Reserve Account was: 1951-52, £291,454; 1952-53, £299,286; 1953-54, £317,493, 1954-55, £306,542 and 1955-56, £630,537.

(c) *Port of Newcastle.* The Maritime Services Board of New South Wales is the port authority but other government bodies are responsible for certain functions and activities of a maritime character at Newcastle. These include—

- (i) The Department of Public Works, which is the constructing, dredging and maintenance authority at Newcastle as well as at other New South Wales ports except Sydney ;
- (ii) The Department of Railways, which is responsible for the control of wharfage and shipping arrangements in connexion with the coal industry and the provision and maintenance of appliances necessary for the transport and shipment of coal.

An Advisory Committee consisting of eight members, appointed by the Governor, assists the Board in matters associated with the operation of the port. In respect of volume of trade, Newcastle ranks second in importance in New South Wales. 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 25 feet 6 inches at low water, is 350 feet wide. Wharfage accommodation amounts to 16,100 feet, the Maritime Services Board controlling 6,500 feet and the Railways Department 7,000 feet while 2,600 feet is privately owned. There are also several dolphin berths available for tie-up purposes. A floating dock of 15,000 tons capacity is available at the port.

(d) *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 seven members appointed by the Governor has been formed to assist the Board in the operation of the Port. In respect of volume of trade, Port Kembla ranks third in the ports of New South Wales. It has an area of approximately 330 acres, with depths ranging from 20 to 50 feet (low water ordinary spring tide), and wharfage accommodation totalling 4,800 feet has been provided for large ocean-going vessels. No cargo sheds are available as the nature of trade at the port does not call for the provision of sheltered storage accommodation at the berths. It is the port of the southern coalfields and for the expanding industrial area in and about Wollongong. The developmental programme for Port Kembla includes the construction of an inner harbour to provide wharfage for the steelworks in addition to general cargo berths.

(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 and two berths are available as well as tanker mooring buoys. The entrance to the Bay is approximately $1\frac{1}{4}$ miles wide, with a minimum depth of about 36 feet.

(f) *Other Ports.* In addition to the ports of Sydney, Newcastle, Port Kembla and Botany Bay, the Board controls 28 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 £4,587,796 in 1955-56. These figures include the Port of Sydney revenue (*see table above*)

and State navigation service collections (£1,544,872 in 1955-56). Commonwealth Government revenue from light dues and navigation receipts, for the whole of Australia, amounted to £270,011 in 1955-56.

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, p. 970 *et seq.* The membership of the Board of the Melbourne Harbor Trust Commissioners was increased to five during 1954 by the appointment of a further part-time Commissioner to represent waterside workers' interests. At 31st December, 1956, the sheds available for wharfage accommodation had a length of 21,579 feet, covering an area of 1,561,162 square feet. The area of water in Port Philip Bay and the River Yarra under the control of the Trust is approximately 5,327 acres and the total length of wharves, piers and jetties in the port is 66,083 feet, giving an area of over 63 acres of wharfage, and 58,170 feet of effective berthing space. During 1956, work was continued on the new berths at Appleton Dock (ultimately to have eighteen berths), Victoria Docks, South Wharf and Williamstown. The depth of water (low water ordinary spring tide) from the main channels to the principal wharves is about 31 to 34 feet, the maximum being about 40 feet.

(b) *Finances.* The following table shows particulars of the financial operations of the Trust during the years 1939 and 1952 to 1956.

MELBOURNE HARBOR TRUST : FINANCES.
(£.)

Year.	Gross Loan Indebtedness at 31st December.	Revenue.		Expenditure.				Surplus (+) or Deficit (-).
		Wharfage and Tonnage Rates.	Total.	Administration and Maintenance.	Interest, Debt Redemption, Exchange, etc.	Depreciation, Renewals and Insurance Account.	Total. (a)	
1939 ..	4,018,527	689,100	843,899	282,533	270,650	129,160	837,577	+ 6,322
1952 ..	7,914,146	1,256,581	1,941,252	1,204,863	292,485	179,047	1,947,085	- 5,833
1953 ..	9,581,933	1,423,345	2,052,272	1,230,195	381,914	98,182	2,013,554	+ 38,718
1954 ..	9,641,361	1,800,811	2,593,347	1,232,574	418,818	479,393	2,509,947	+ 83,400
1955 ..	9,978,842	2,120,780	3,019,048	1,475,467	446,348	532,372	2,906,406	+ 112,642
1956 ..	11,296,811	1,841,176	2,676,698	1,649,047	483,905	145,825	2,662,047	+ 14,651

(a) Includes statutory payments to Consolidated Revenue and Geelong Harbor Trust :—1939 £155,234; 1952, £270,690; 1953, £303,263; 1954, £379,162; 1955, £452,219; 1956, £383,270. Excludes capital expenditure :—1939, £128,567; 1952, £2,246,097; 1953, £1,255,613; 1954, £1,255,625; 1955, £1,509,665; 1956, £1,609,928.

(ii) *Geelong Harbor Trust.* The Geelong Harbor Trust, which was constituted in 1905, was reconstituted in 1934 under the provisions of the Melbourne and Geelong Harbor Trusts Act 1934. The Trust is under the control of three Commissioners appointed by the Governor-in-Council. At 31st December, 1955, the minimum depth of all berths (except Yarra Pier 29 feet) was 32 feet low water. During 1956, a contract was arranged to carry out the dredging, to 36 feet low water, of the approaches to Refinery Pier.

Revenue for the year 1956 was £937,581, and revenue expenditure was £488,738. The value of the Trust's fixed assets less depreciation was £4,270,378 and £5,431,089 at 31st December, 1955 and 1956 respectively. Loans outstanding at the end of 1956 amounted to £2,990,219.

(iii) *Other Ports.* Apart from Melbourne and Geelong, Portland is the only Victorian port of other than minor importance.

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. The maximum depths (low water ordinary spring tide) of the shipping channel decrease from 32 feet in the North-West channel to 20 feet in the Bulimba Reach to Victoria Bridge section. Depths at wharves vary between 23 and 33 feet. Adequate dry-docking facilities are available. The finances of Brisbane Harbour for the years 1938-39 and 1951-52 to 1955-56 are shown below :—

BRISBANE HARBOUR : FINANCES.
(£'000.)

Year.	Loan Indebtedness at 30th June.	Receipts.		Payments.	
		Harbour Dues.	Total.	Working Expenses.	Total (including Interest and Redemption).
1938-39	1,179	165	173	36	112
1951-52	1,862	276	326	348	463
1952-53	2,168	318	393	426	558
1953-54	2,528	603	753	460	611
1954-55	2,633	688	853	522	693
1955-56	2,899	701	817	582	772

In addition to Brisbane Harbour, the Department of Harbours and Marine also controls the Brisbane Dry Dock, the Cairncross Dock, the Brisbane River, and ten smaller harbours not administered by harbour boards.

(iii) *Harbour Boards.* Harbour boards control the ports of Bowen, Bundaberg, Cairns, Gladstone, Mackay, Rockhampton and Townsville. From 1st January, 1953, the harbour boards adopted the financial year ended 30th June for accounting purposes instead of the calendar year as previously. Finances for each port for the year ended 30th June, 1956, are shown below, together with a summary for the years 1939, 1951 and 1952, for the period of eighteen months ended 30th June, 1954 and for the year ended 30th June, 1955.

HARBOUR BOARDS, QUEENSLAND : FINANCES.
(£.)

Harbour Board.	Loan Indebtedness at 30th June. (a)	Revenue.		Expenditure (excluding Loan).		Surplus (+) or Deficit (-).
		Wharfage and Harbour Dues.	Total.	Working Expenses.	Total (including Interest and Redemption). (c)	
Bowen	362,128	48,332	59,247	24,113	67,188	— 7,941
Bundaberg	76,545	2,935	7,423	5,768	9,128	— 1,705
Cairns	233,968	170,435	219,875	195,134	230,403	— 10,528
Gladstone	498,347	25,985	88,122	37,271	85,447	+ 2,675
Mackay	728,388	181,354	220,917	68,018	659,798	— 438,881
Rockhampton	535,172	66,052	81,491	40,446	58,186	+ 23,305
Townsville	450,980	225,549	278,771	142,026	251,418	+ 27,353
Total, 1955-56 ..	2,885,528	720,642	955,846	512,776	1,361,568	— 405,722
„ 1954-55 ..	2,807,527	766,504	1,108,613	530,541	996,604	+ 112,009
„ 1954(b) ..	2,713,679	955,464	1,413,894	789,346	1,167,936	+ 245,958
„ 1952 ..	2,059,080	455,677	713,312	440,784	696,843	+ 16,469
„ 1951 ..	1,786,774	402,903	599,505	370,040	534,095	+ 65,410
„ 1939 ..	1,548,144	249,510	401,439	139,752	343,083	+ 58,356

(a) Years 1939, 1951 and 1952, 31st December. (b) Eighteen months ended 30th June, 1954.
(c) Includes expenditure on capital works from accumulated revenue.

4. *South Australia.—The South Australian Harbours Board.* All South Australian harbours are controlled by the South Australian Harbours 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 Whyalla (controlled by the Broken Hill Pty. Co. Ltd. under a Private Act of Parliament), Ardrossan where the Broken Hill Pty. Co. Ltd. has installed a bulk loading plant for handling dolomite, grain and salt and Rapid Bay which is also controlled by the Broken Hill Pty. Co. Ltd. Maximum depths of water (low water ordinary spring tide) at the wharves of the main ports range from 20 to 24 feet at Port Pirie to 35 feet at Port Adelaide (Outer Harbour). The following table shows the finances of the Board for 1938-39 and 1952-53 to 1956-57:—

THE SOUTH AUSTRALIAN HARBORS BOARD : FINANCES.

(£.)

Year.	Capital at 30th June. (a)	Revenue.	Expenditure from Revenue.				Surplus(+) or Deficit(—).
			Working Expenses.	Interest.	Debt Redemption.	Total.	
1938-39 ..	8,026,441	664,915	205,848	326,719	50,000	582,567	+ 82,348
1952-53 ..	10,047,582	1,240,679	1,083,322	286,456	..	1,369,778	— 129,099
1953-54 ..	10,782,702	1,382,276	1,280,709	312,333	..	1,593,042	— 210,766
1954-55 ..	11,604,213	1,842,796	1,315,349	352,005	..	1,667,354	+ 175,442
1955-56 ..	12,366,653	1,920,340	1,451,296	404,188	..	1,855,484	+ 64,856
1956-57 ..	13,232,185	2,112,718	1,427,882	434,042	..	1,861,924	+ 250,794

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

5. *Western Australia.—(i) Fremantle Harbour Trust.* Fremantle Harbour is controlled by a board of five Commissioners appointed by the Government. The Inner Harbour has a maximum water depth of 36 feet at the entrance and 33 feet depth at the wharf face. Wharf berth accommodation is 10,432 feet. The Outer Harbour consists of various sections south of the Inner Harbour with jetty facilities including the Kwinana Oil Refinery jetties which are approached through the Success and Parmelia Channels each 500 feet wide and 38 feet deep. The depth of water at the berths is a minimum of 44 feet.

Gross earnings for the years 1955-56 and 1956-57 amounted to £2,056,141 and £2,515,118 respectively, working expenses to £1,838,650 and £2,031,368, interest charges to £174,280 and £209,519, debt redemption to £51,723 and £55,806 and renewals fund to £2,000 in each year. Special payments were £155,848 and £213,432 and the total amounts debited to loan capital account were £4,655,975 and £6,260,562.

(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 Harbour is 30 feet but dredging to accomplish a water depth of 34 feet is nearing completion. Wharf accommodation consists of 563 feet and in addition the Deepwater Jetty has 2,500 feet of accommodation. Gross earnings for the years 1955-56 and 1956-57 amounted to £50,975 and £92,431 respectively, working expenses to £41,311 and £48,487, interest and sinking fund charges to £15,521 and £19,650 and amounts debited to loan capital account to £1,535,902 and £1,652,461.

(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 27 feet and berthing accommodation is 3,700 feet. Gross earnings for the years 1955-56 and 1956-57 amounted to £33,955 and £47,338 respectively, working expenses to £45,978 and £39,197, interest charges to £29,084 and £32,719 and amounts debited to loan capital account to £1,458,788 and £1,521,691.

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

6. *Tasmania.*—There are eight marine boards and two harbour trusts in Tasmania. The marine boards control the ports of Hobart, Launceston, Stanley (Circular Head), Burnie and Wynyard (Table Cape), Devonport, Strahan, Currie (King Island), and White-mark (Flinders Island) and the harbour trusts those of Smithton and Leven. Aggregate receipts of revenue accounts of all these authorities during the year 1955-56 were £1,068,087.

and expenditures £1,091,044 including loan charges £165,282. The total receipts of the Hobart Marine Board during 1955-56 were £496,201, loan charges amounted to £54,202 and total expenditure to £536,372. Launceston Marine Board receipts during 1955-56 amounted to £223,473, loan charges to £17,709 and total expenditure to £217,687. Loan indebtedness of all marine boards and trusts at 30th June, 1956, was £2,568,502, of which £815,130 was in respect of Hobart and £311,835 in respect of Launceston.

Hobart, Launceston, Burnie and Devonport are the principal ports of Tasmania. In addition to their interstate and intra-state traffic, there is also considerable overseas shipping. Depths of water at wharves vary, in general between 16 and 34 feet (low water ordinary spring tide), but at Hobart there is a depth of water of from 30 to 52 feet.

§ 7. Fire Brigades.

1. *New South Wales.*—A Board of Fire Commissioners, consisting of five members, one each representing the State Government, (President), insurance companies, local government authorities, volunteer firemen and permanent firemen, operates under the Fire Brigades Act 1909-1956, and 154 fire districts had been constituted at the end of 1956. Up to the end of 1949, the cost of maintenance of fire brigades was borne in proportions of one quarter, one quarter, and one half respectively by the Government, the municipalities, and the insurance companies concerned and the expenditure was so regulated that the proportion payable by the councils in a fire district should not, except in special circumstances, exceed the amount obtainable from $\frac{1}{4}$ d. in the £1 rate on the unimproved capital value of ratable land in the fire district. In June, 1949, legislation was introduced (i) increasing the limit of the Board's borrowing power from £250,000 to £500,000, (ii) providing for the varying of the maximum rate that may be levied by councils and (iii) altering the basis of contributions so that from 1st January, 1950, local councils and the Government will each pay one-eighth and the insurance companies three-quarters.

Other legislation, introduced in September, 1949, to improve and modernize the law dealing with the prevention of bush fires and to build up the organization of the bush fire-fighting services, provided for the establishment of Fire Regions and a Bush Fire Fighting Fund to be financed from contributions by the Government, councils and insurance companies in the proportion of one-quarter, one-quarter and one-half, respectively. The contribution of any council shall not exceed one-twentieth of a penny in the £1 on the unimproved capital value of ratable land in the area of the council not being land within a fire district constituted under the Fire Brigades Act 1909-1956.

At 31st December, 1956, the authorized strength of the Fire Brigade throughout the fire districts of New South Wales was 366 officers and 954 permanent and 2,510 volunteer firemen. Corresponding figures for the Sydney Fire District were 303, 895 and 355. The revenue for the year 1956 was £2,371,788, made up as follows:—From the Government, £294,253, municipalities and shires, £294,253; fire insurance companies and firms, £1,765,518; and from other sources, £17,764. The disbursements for the year were £2,269,436.

2. *Victoria.*—(i) *General.* The Fire Brigades Act of 1928 provided for a Metropolitan Fire Brigades Board and a Country Fire Brigades Board each consisting of nine members. In December, 1944, the latter Board was superseded by the Country Fire Authority under an Act of that title, and the number of members was increased to ten. The number of members of the Metropolitan Fire Brigades Board was increased in December, 1954, from nine to ten to include an employees' representative.

(ii) *Metropolitan Fire Brigades Board.* Since 1st October, 1952, the Metropolitan Fire Brigades Board has received contributions from the municipalities and the insurance companies in the proportion of one-third and two-thirds respectively. Prior to 1st October, 1952, the Board received contributions in equal proportions from the Treasury, the municipalities and the insurance companies. On 30th June, 1956, the Board had under its control 44 stations, 709 permanent staff, 74 special service and clerical, etc., staff, and 15 part-time firemen. The total receipts for 1955-56 were £1,118,088 comprising contributions, £889,767, receipts for services, £115,470 and interest and sundries, £112,851. The expenditure was £1,174,584.

(iii) *Country Fire Authority.* This authority, constituted in 1944, is responsible for the prevention and suppression of fires in the "country area of Victoria", which embraces the whole of the State outside the metropolitan fire district, excluding State forests and certain crown lands. The country area has been divided into 24 fire control regions, three of which (Ballarat, Bendigo and Geelong) are wholly urban and the remainder mixed urban and rural. The Country Fire Authority has received contributions in the proportion of two-thirds from

insurance companies and one-third from the Treasury as from 1st January, 1954. Prior to that date the Treasury contributed two-thirds while the insurance companies contributed one-third. At 30th June, 1956, the Act applied to 169 insurance companies, 200 urban and 1,020 rural fire brigades. The effective registered strength of the brigades was 93,222 members.

The receipts for the year 1955–56 amounted to £397,169. Total expenditure other than loan amounted to £405,095.

3. *Queensland.*—(i) *General.* The Acts of 1920–1931 made provision for the retention of existing fire districts, and for the constitution of new districts. 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:—The Treasury two-sevenths, insurance companies three-sevenths, and local authorities two-sevenths. All volunteer fire brigades in a district must be registered.

(ii) *Fire Brigade Boards.* At 30th June, 1956, there were 72 Fire Brigade Boards. The total number of stations was 124 and full-time staff numbered 494, including 13 administrative, 93 officers and 388 firemen. Workshop staff numbered 16. Volunteers numbered 326. Part-time staff numbered 653 including 70 administrative, 96 officers and 487 firemen. The total revenue for the year 1955–56 was £639,023, received mainly from the following sources:—Government £170,532, local authorities £170,532, insurance companies £255,834. Loan receipts (Government and other) were £75,226. The total expenditure for the year was £650,514, the chief items being salaries and wages £465,935 and interest and redemption of loans £41,899.

4. *South Australia.*—The Fire Brigades Act 1936–1944 provides for a board of five members, and the expenses and maintenance of brigades are defrayed in the proportion of two-ninths by the Treasury (subject to certain limits when the contribution exceeds £10,000), five-ninths by insurance companies, and two-ninths by the municipalities concerned. At 30th June, 1956, there were altogether 35 fire brigade stations, of which 12 were metropolitan and 23 country.

The authorized strength of the permanent staff was 383, including 273 officers and men and 87 country auxiliary firemen. The total revenue for the year 1955–56 was £344,517, including contributions of £303,840 made up as follows:—insurance companies £183,014, Treasury £47,620 and municipalities £73,206. The Treasury contribution includes an additional grant of £35,670.

5. *Western Australia.*—In 1942, certain municipal and road board districts were constituted fire districts under the control of the Western Australian Fire Brigades Board. There were 35 fire districts at 30th September, 1956. 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 59 and 143 respectively. The brigades throughout the State controlled by the Western Australian Fire Brigades Board at 30th September, 1956 numbered 52, with a staff of 1,533 including 252 permanent officers and firemen and 1,250 volunteer brigade officers and firemen. The revenue for the year ended 30th September, 1956, was £343,204 and the expenditure £345,886.

Under the Bush Fires Act, a Bush Fires Board (appointed April 1955 and superseding the Rural Fires Prevention Advisory Committee) consisting of ten members, five of whom are nominated by the Road Board 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 1,009 at 30th June, 1956 and the establishment of bush fire brigades, the number of which was 627 at 30th June, 1956.

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 brigades boards, while leaving the responsibility for individual control and management with the boards. The Commission consists of five members nominated or elected by the fire brigades boards and one member nominated by the Minister. Contributions towards the cost of operations are on the basis of one-third each from the Treasury, the municipalities, and the insurance companies concerned. The cost for the year 1955–56 amounted to £110,438. There were at 30th June, 1956, 24 brigades controlling 33 stations and their aggregate staffs numbered 512, including 85 permanent officers and 427 part-time firemen, including officers.