

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 upkeep and construction 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. In Western Australia, there are local health boards, whose personnel in most cases coincide with those of municipalities and road boards. 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, and 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 regard to roads under their control, the details of receipts and expenditure given in § 4 are those of the Government 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 1953, 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 35 county councils and the Grafton and South Grafton Water Board at 31st December, 1953.

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. The law relating to local government was consolidated by the Local Government Act 1946.

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. Certain functions are delegated to health boards, whose personnel, in most cases, coincide with those of the municipalities and district road boards.

6. **Tasmania.**—The whole State is divided into municipal districts, Hobart and Launceston being incorporated 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 the results of 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, 1953-54.(a)

Local Bodies.	Number	Area. '000 Acres.	Popula- tion. (a) '000.	Dwellings.(a)		Value of Ratable Property.		
				Occu- pied. No.	Unoccu- pied. No.	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	101,588	289,452	17,059
Other ..	34	702	1,696	470,664	13,464	259,053	970,563	55,715
Outside Metropolitan Area	205	117,110	1,510	385,517	28,128	303,555	(c)	(c)
<i>Total</i>	<i>240</i>	<i>117,819</i>	<i>3,399</i>	<i>908,944</i>	<i>42,691</i>	<i>664,196</i>	(c)	(c)
VICTORIA.(d)								
Metropolitan—								
Capital City ..	1	8	93	22,348	455	(c)	154,155	7,708
Other ..	40	438	1,329	371,340	6,316	(c)	789,383	39,674
Outside Metropolitan Area	160	55,630	1,022	267,089	20,713	(c)	601,780	30,081
<i>Total</i>	<i>201</i>	<i>56,076</i>	<i>2,444</i>	<i>660,777</i>	<i>27,484</i>	(c)	<i>1,545,318</i>	<i>77,463</i>
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)
<i>Total</i>	<i>134</i>	<i>429,120</i>	<i>1,311</i>	<i>338,662</i>	<i>21,384</i>	<i>161,656</i>	(c)	(c)
SOUTH AUSTRALIA.(f)								
Metropolitan—								
Capital City ..	1	4	30	7,454	211	19,435	54,000	2,717
Other ..	20	99	454	126,649	2,737	(c)	172,000	8,598
Outside Metropolitan Area	122	34,423	298	78,505	5,399	(c)	199,000	9,962
<i>Total</i>	<i>143</i>	<i>34,526</i>	<i>782</i>	<i>212,608</i>	<i>8,347</i>	(c)	<i>425,000</i>	<i>21,277</i>
WESTERN AUSTRALIA.(g)								
Metropolitan—								
Capital City ..	1	14	97	25,460	577	(c)	55,750	2,926
Other ..	19	107	251	65,281	1,262	(c)	(c)	1,049
Outside Metropolitan Area	127	624,467	289	72,082	4,775	(c)	(c)	4,556
<i>Total</i>	<i>147</i>	<i>624,588</i>	<i>637</i>	<i>162,823</i>	<i>6,614</i>	(c)	(c)	<i>4,487</i>
TASMANIA.(f)								
Metropolitan—								
Capital City ..	1	18	55	14,624	375	7,052	24,433	1,499
Other ..	2	99	38	9,333	531	3,626	16,993	867
Outside Metropolitan Area	46	16,661	215	54,905	4,382	26,478	84,920	4,556
<i>Total</i>	<i>49</i>	<i>16,778</i>	<i>308</i>	<i>78,862</i>	<i>5,288</i>	<i>37,156</i>	<i>126,346</i>	<i>6,922</i>

(a) Particulars of population and dwellings are as at Census 30th June, 1954. (b) Year ended 31st December, 1953. (c) Not available. (d) Year ended 30th September, 1954. (e) Excludes Yallourn area under the jurisdiction of the State Electricity Commission. (f) Year ended 30th June, 1954. (g) Municipalities—Year ended 31st October, 1954; Road Districts—Year ended 30th June, 1954.

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

(ii) *Ordinary Services.* In the returns of revenue and expenditure for 1953-54 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, 1953-54.

Particulars.	N.S.W. (a)	Vic. (b)	Q'land. (c)	S. Aust. (c)	W. Aust. (d)	Tas. (c)	Total.
Number of Local Government Authorities	240	201	134	143	147	49	914
REVENUE (EXCLUDING LOAN RECEIPTS). (£.)							
<i>Taxation—</i>							
Rates (net) ..	20,186,689	12,480,001	8,960,942	3,262,235	2,154,825	1,282,156	48,471,324
Penalties ..	107,973	36,085	75,209	48,109	55,697	418	253,085
Licences ..	441,266	70,925	..	..	..	14,834	706,040
<i>Total</i> ..	<i>20,735,928</i>	<i>12,587,011</i>	<i>9,036,151</i>	<i>3,310,344</i>	<i>2,210,522</i>	<i>1,297,408</i>	<i>49,177,364</i>
<i>Public Works and Services—</i>							
Sanitary and Garbage Services	2,437,794	935,851	2,073,065	77,146	386,300	86,438	5,996,594
Council Properties	1,808,446	1,778,985	594,228	261,753	631,587	186,478	5,261,477
Street Construction ..	1,227,731	622,645	183,841	(e) 309,054	165,969	23,887	2,533,127
Other ..	1,270,754	299,143	63,351	90,332	24,436	30,318	1,778,334
<i>Total</i> ..	<i>6,744,725</i>	<i>3,636,624</i>	<i>2,914,485</i>	<i>738,285</i>	<i>1,208,292</i>	<i>327,121</i>	<i>15,569,532</i>
<i>Government Grants—</i>							
Roads ..	4,749,997	108,981	1,687,540	1,728,639	741,152	165,123	9,181,432
Other ..	872,931	428,570	(f) 1,325,782	205,048	962,610	27,101	3,822,042
<i>Total</i> ..	<i>5,622,928</i>	<i>537,551</i>	<i>3,013,322</i>	<i>1,933,687</i>	<i>1,703,762</i>	<i>192,224</i>	<i>13,003,474</i>
<i>Profits from Business Undertakings ..</i>	<i>..</i>	<i>259,162</i>	<i>1,126</i>	<i>..</i>	<i>30,809</i>	<i>..</i>	<i>291,097</i>
<i>Fees and Fines ..</i>	<i>..</i>	<i>43,781</i>	<i>..</i>	<i>64,481</i>	<i>13,846</i>	<i>137,654</i>	<i>1,169,082</i>
<i>All Other ..</i>	<i>..</i>	<i>148,744</i>	<i>418,928</i>	<i>157,730</i>	<i>183,918</i>	<i>..</i>	<i>1,169,082</i>
<i>Total Revenue ..</i>	<i>33,103,581</i>	<i>17,212,873</i>	<i>15,384,012</i>	<i>6,204,527</i>	<i>5,351,149</i>	<i>1,954,407</i>	<i>79,210,549</i>
EXPENDITURE (EXCLUDING LOAN EXPENDITURE). (£.)							
<i>General Administration ..</i>	<i>2,305,395</i>	<i>2,424,868</i>	<i>1,359,061</i>	<i>495,351</i>	<i>639,177</i>	<i>218,430</i>	<i>7,442,282</i>
<i>Debt Services (excluding Business Undertakings)—</i>							
Interest ..	975,656	574,310	1,184,442	49,701	139,646	61,266	2,985,021
Redemption ..	2,166,595	802,910	1,752,635	344,153	317,794	123,360	5,507,447
Exchange ..	19,657	11,706	179,587	..	..	..	210,950
Other ..	..	..	17,810	..	..	170	17,980
<i>Total</i> ..	<i>3,161,908</i>	<i>1,388,926</i>	<i>3,134,474</i>	<i>393,854</i>	<i>457,440</i>	<i>184,796</i>	<i>8,721,398</i>
<i>Public Works and Services—</i>							
Roads, Streets and Bridges ..	15,190,050	5,694,016	5,143,166	3,564,727	1,701,269	793,491	32,086,719
Health Administration ..	605,118	693,510	225,421	81,570	152,996	42,846	1,801,461
Sanitary and Garbage Services	3,040,875	1,507,385	1,209,622	311,876	424,983	94,688	6,589,429
Street Lighting ..	825,325	393,912	219,543	125,259	77,092	50,340	1,691,471
Council Properties	3,943,798	3,348,870	1,484,516	553,747	1,349,708	256,700	10,937,339
Other ..	1,081,076	133,066	1,714,752	102,900	49,945	39,990	3,121,729
<i>Total</i> ..	<i>24,686,242</i>	<i>11,770,759</i>	<i>9,997,020</i>	<i>4,740,079</i>	<i>3,755,993</i>	<i>1,278,055</i>	<i>56,228,148</i>
<i>Grants—</i>							
Fire Brigades ..	230,175	291,587	155,739	79,974	60,908	34,647	853,030
Hospitals and Ambulances ..	88,563	64,006	1,927	119,900	5,004	175	1,981,033
Other Charities ..	(h) 510,477	(i) 857,274	276,317	2,775	14,456	582	1,604,725
Other ..	..	..	..	27,183	..	9,199	..
<i>Total</i> ..	<i>829,215</i>	<i>1,212,867</i>	<i>437,178</i>	<i>229,832</i>	<i>80,368</i>	<i>44,603</i>	<i>2,834,063</i>
<i>All Other ..</i>	<i>897,876</i>	<i>114,541</i>	<i>192,676</i>	<i>..</i>	<i>182,501</i>	<i>217,131</i>	<i>1,604,725</i>
<i>Total Expenditure</i>	<i>31,880,636</i>	<i>16,911,961</i>	<i>15,120,409</i>	<i>5,859,116</i>	<i>5,115,479</i>	<i>1,943,015</i>	<i>76,830,616</i>

(a) Figures for New South Wales relate to the year ended 31st December, 1953, 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, 1954. (c) Year ended 30th June, 1954. (d) Municipalities—Year ended 31st October, 1954, Road Districts—Year ended 30th June, 1954. (e) Includes £72,816 reimbursement from Highways Department for work done. (f) Includes £927,005 for sewerage and drainage. (g) Includes £1,148,415 for sewerage, mosquito control and drainage. (h) To Main Roads Department. (i) Includes £385,725 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 1949-50 to 1953-54 :—

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

Year ended 30th June.	N.S.W.(a)	Victoria.(b)	Q'land.	S. Aust.	W. Aust.(c)	Tas.	Total.
REVENUE (EXCLUDING LOAN RECEIPTS).							
1939 ..	10,657,409	6,070,551	4,177,632	1,578,688	1,447,154	518,755	24,450,189
1950 ..	16,293,311	9,454,755	8,291,960	2,917,606	2,858,147	1,050,939	40,866,718
1951 ..	18,591,800	11,044,520	10,182,127	3,460,747	3,581,714	1,214,430	48,075,338
1952 ..	24,169,405	13,503,694	12,471,901	4,390,093	4,158,300	1,590,395	60,283,788
1953 ..	30,750,584	15,640,763	13,816,308	4,937,701	4,987,847	1,799,958	71,933,161
1954 ..	33,103,581	17,212,873	15,384,012	6,204,527	5,351,149	1,954,407	79,210,549
EXPENDITURE (EXCLUDING LOAN EXPENDITURE).							
1939 ..	10,790,273	6,192,859	4,334,634	1,558,169	1,489,079	506,976	24,871,990
1950 ..	15,923,965	9,737,254	8,379,575	2,965,857	2,808,053	1,049,961	40,864,665
1951 ..	18,520,494	11,658,885	9,995,576	3,491,448	3,424,844	1,237,117	48,328,364
1952 ..	24,166,870	14,040,324	12,614,922	4,451,992	4,270,946	1,604,932	61,149,986
1953 ..	29,605,365	15,457,485	13,150,493	5,031,698	4,793,057	1,780,648	69,818,746
1954 ..	31,880,636	16,911,961	15,120,409	5,859,116	5,115,479	1,943,015	76,830,616

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

(iii) *Business Undertakings.* The table hereunder shows, for 1953-54, 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, 1953-54.
(£.)

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
REVENUE (EXCLUDING LOAN RECEIPTS).							
<i>Water Supply and Sewerage—</i>							
Rates	1,504,671	..	50,655	..	9,650	418,698	1,983,674
Charges for Services and Sales of Products ..	475,834	103,308	2,194,542	1,641	2,061	96,799	2,874,185
Other (including Grants)	(a)625,679	3,821	974,778	..	..	40,212	1,644,490
<i>Total</i>	<i>2,606,184</i>	<i>107,129</i>	<i>3,219,975</i>	<i>1,641</i>	<i>11,711</i>	<i>555,709</i>	<i>6,502,349</i>
<i>Electricity and Gas—</i>							
Rates	191,263	..	10,213	1,893	..	..	203,369
Charges for Services and Sales of Products ..	35,247,729	7,480,662	6,216,524	458,161	460,497	..	49,863,573
Other (including Grants)	945,180	124,916	324,170	18,827	5,761	..	1,418,854
<i>Total</i>	<i>36,384,172</i>	<i>7,605,578</i>	<i>6,550,907</i>	<i>478,881</i>	<i>466,258</i>	<i>..</i>	<i>51,485,796</i>
<i>Railways, Tramways and Omnibuses—</i>							
Rates .. .. .	..	..	..	..	..	39,677	39,677
Charges for Services and Sales of Products ..	..	..	3,162,022	..	..	703,102	3,865,124
Other (including Grants)	..	..	114,039	..	..	9,790	123,829
<i>Total</i>	<i>..</i>	<i>..</i>	<i>3,276,061</i>	<i>..</i>	<i>..</i>	<i>752,569</i>	<i>4,028,630</i>
<i>Other—</i>							
Rates	(b) ..	(c) ..	(d) ..	(e) 3,947	(f) 590	(g) 194	4,731
Charges for Services and Sales of Products ..	2,373,934	461,379	45,109	15,566	37,539	56,303	2,989,830
Other (including Grants)	2,868	14,370	16,180	3,661	..	1,522	38,601
<i>Total</i>	<i>2,376,802</i>	<i>475,749</i>	<i>61,289</i>	<i>23,174</i>	<i>38,129</i>	<i>58,019</i>	<i>3,033,162</i>
Grand Total ..	41,367,158	8,188,456	13,108,232	503,696	516,098	1,366,297	65,049,937

NOTE.—See next page for footnotes.

LOCAL GOVERNMENT AUTHORITIES : BUSINESS UNDERTAKINGS—
REVENUE AND EXPENDITURE, 1953-54—*continued.*

(£.)

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 ..	1,179,393	69,009	1,310,962	1,658	8,088	198,967	2,768,077
Depreciation ..	<i>h</i> -77,834	4,784	..	..	..	..	-73,050
Debt Charges ..	736,218	19,050	797,390	..	2,740	230,697	1,786,095
Other (including Transfers to General Revenue and Construction) ..	..	695	973,384	..	..	99,292	1,073,371
<i>Total</i>	<i>1,837,777</i>	<i>93,538</i>	<i>3,081,736</i>	<i>1,658</i>	<i>10,828</i>	<i>528,956</i>	<i>5,554,493</i>
<i>Electricity and Gas—</i>							
Working Expenses ..	30,548,292	6,507,897	5,394,242	404,465	377,125	..	43,232,021
Depreciation ..	<i>h</i> 1,056,818	267,305	..	..	40,346	..	1,364,469
Debt Charges ..	2,688,491	389,145	745,636	29,734	32,827	..	3,885,833
Other (including Transfers to General Revenue and Construction) ..	..	280,680	437,542	14,908	15,764	..	748,894
<i>Total</i>	<i>34,293,601</i>	<i>7,445,027</i>	<i>6,577,420</i>	<i>449,107</i>	<i>466,062</i>	<i>..</i>	<i>49,231,217</i>
<i>Railways, Tramways and Omnibuses—</i>							
Working Expenses ..	..	..	3,081,480	..	..	535,458	3,616,938
Depreciation ..	..	..	..	..	..	..	..
Debt Charges ..	..	..	397,914	..	..	101,078	498,992
Other (including Transfers to General Revenue and Construction) ..	..	..	169,496	..	..	91,229	260,725
<i>Total</i>	<i>..</i>	<i>..</i>	<i>3,648,890</i>	<i>..</i>	<i>..</i>	<i>727,765</i>	<i>4,376,655</i>
<i>Other—</i>							
Working Expenses ..	(<i>b</i>) 2,236,278	(<i>c</i>) 357,835	(<i>d</i>) 51,996	(<i>e</i>) 23,398	(<i>f</i>) 42,158	(<i>g</i>) 34,263	2,745,928
Depreciation ..	7,659	9,588	..	..	..	..	17,247
Debt Charges ..	50,745	36,731	3,015	..	298	8,893	99,682
Other (including Transfers to General Revenue and Construction) ..	..	28,468	3,757	..	..	10,018	42,243
<i>Total</i>	<i>2,294,682</i>	<i>432,622</i>	<i>58,768</i>	<i>23,398</i>	<i>42,456</i>	<i>53,174</i>	<i>2,905,100</i>
<i>Grand Total</i>	<i>38,426,060</i>	<i>7,971,187</i>	<i>13,366,814</i>	<i>474,163</i>	<i>519,346</i>	<i>1,309,895</i>	<i>62,067,465</i>

(a) Includes Government grant, £574,158, 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 table. 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 1949-50 to 1953-54.

LOCAL GOVERNMENT AUTHORITIES : BUSINESS UNDERTAKINGS—REVENUE AND EXPENDITURE.

(£.)

Year ended 30th June.	N.S.W.(a)	Victoria.(b)	Q'land.	S. Aust.	W. Aust.(c)	Tas.	Total.
REVENUE (EXCLUDING LOAN RECEIPTS).							
1939 ..	6,405,010	1,813,796	3,373,966	113,132	962,470	528,461	13,196,835
1950 ..	16,337,869	4,520,756	6,608,609	272,369	523,654	795,929	29,059,186
1951 ..	20,773,694	5,094,127	7,923,664	328,840	550,538	927,257	35,598,120
1952 ..	26,803,005	6,309,342	10,435,609	379,576	436,151	1,088,285	45,451,968
1953 ..	35,653,575	7,655,688	12,798,252	462,477	468,860	1,212,219	58,251,071
1954 ..	41,367,158	8,188,456	13,108,232	503,696	516,098	1,366,297	65,049,937
EXPENDITURE (EXCLUDING LOAN EXPENDITURE).							
1939 ..	5,556,123	1,802,972	3,256,263	123,356	935,052	513,666	12,187,432
1950 ..	16,659,960	4,494,128	6,655,637	292,237	535,287	797,887	29,435,136
1951 ..	20,556,981	5,219,961	7,917,049	339,556	585,938	926,336	35,543,821
1952 ..	27,381,428	6,248,151	10,734,811	394,516	453,963	1,070,473	46,283,342
1953 ..	34,051,109	7,623,099	12,851,076	448,760	468,985	1,243,145	56,686,174
1954 ..	38,426,060	7,971,187	13,366,814	474,163	519,346	1,309,895	62,067,465

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

(iv) *Loan Expenditure.* The table below shows particulars for 1953-54 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, 1953-54.

(£.)

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
ORDINARY SERVICES.							
Roads, Bridges, Streets, Footpaths, Drainage and Sewerage	1,981,525	875,692	2,434,537	728,145	428,690	} 237,009	10,698,470
Council Properties	1,269,473	672,305	} 478,553	43,710	342,880		
Parks, Gardens and Recreational Reserves	405,573	172,763		} 55,460	..			35,683
Other	(a)464,795	26,354	13,531		31,792		
Total	4,121,366	1,747,114	2,968,550	785,386	839,045	237,009	10,698,470
BUSINESS UNDERTAKINGS.							
Water Supply	1,802,708	41,682	1,572,849	..	..	} 641,808	17,546,351
Sewerage	440,626	..	..	..	..
Electricity and Gas	8,015,079	1,265,412	3,127,551	61,973	70,559		
Railways, Tramways and Omnibuses .. ..	..	..	153,500	..	..
Abattoirs	177,883	101,256	..	..	..
Other .. ..	..	..	65,797	..	7,668		
Total	10,436,296	1,408,350	4,919,697	61,973	78,227	641,808	17,546,351
Grand Total	14,557,662	3,155,464	7,888,247	847,359	917,272	878,817	28,244,821

(a) Includes advances for homes, £28,774.

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 1949–50 to 1953–54 :—

LOCAL GOVERNMENT AUTHORITIES : LOAN EXPENDITURE ON WORKS.

(£.)

Year ended 30th June.	N.S.W.(a)	Victoria.(b)	Q'land.	S. Aust.	W. Aust.(c)	Tas.	Total.
ORDINARY SERVICES.							
1939 ..	1,757,704	662,986	1,316,651	43,479	117,172	39,481	3,937,473
1950 ..	2,769,996	924,630	2,737,791	331,047	500,905	315,439	7,579,808
1951 ..	3,242,674	1,194,723	3,546,437	280,704	586,386	347,347	9,198,271
1952 ..	4,255,591	1,700,714	4,412,322	512,166	692,908	467,938	12,041,639
1953 ..	4,659,765	1,797,220	2,897,953	410,015	715,260	350,754	10,830,967
1954 ..	4,121,366	1,747,114	2,968,550	785,386	839,045	237,009	10,698,470
BUSINESS UNDERTAKINGS.							
1939 ..	1,481,484	452,374	941,911	9,542	76,280	232,687	3,194,278
1950 ..	6,356,107	680,481	2,811,709	8,044	71,005	396,297	10,323,643
1951 ..	8,950,059	1,185,122	3,311,223	74,864	64,087	449,703	14,035,058
1952 ..	12,077,623	1,841,068	5,432,804	100,873	46,884	811,166	20,310,418
1953 ..	10,496,444	1,772,410	5,436,649	115,004	43,948	732,011	18,596,466
1954 ..	10,436,296	1,408,350	4,919,697	61,973	78,227	641,808	17,546,351

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

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

1. **General.**—Statistics of local and semi-governmental debt for the years 1938–39 and 1951–52 to 1954–55 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, Roads and Bridges, 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, and Housing.

A detailed list of the authorities included is shown in *Finance Bulletin No. 46, 1954–55.*

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 years ended 30th June, 1954 and 1955. For greater detail *See Finance Bulletin No. 46, 1954–55.*

LOCAL AND SEMI-GOVERNMENTAL AUTHORITIES : NEW MONEY LOAN RAISINGS, REDEMPTION, DEBT AND INTEREST PAYABLE 1953-54 AND 1954-55. (£'000.)

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
LOCAL GOVERNMENT AUTHORITIES.							
1953-54.							
<i>New Money Loan Raisings—</i>							
From Government ..	308	56	1,997	586	18	35	3,001
From Public ..	10,058	3,341	7,553	433	1,285	1,174	23,843
Total ..	10,366	3,397	9,550	1,019	1,303	1,209	26,844
<i>Funds Provided for Redemption—</i>							
Government Loans ..	58	13	996	256	1	8	1,332
Loans due to Public ..	2,952	1,118	2,099	98	340	321	6,928
Total ..	3,010	1,131	3,095	354	341	329	8,260
Accumulated Sinking Fund Balance ..	5,198	2,029	2,743	1	199	269	10,439
<i>Debt—</i>							
Due to Government ..	1,687	336	12,062	1,036	42	127	15,290
Due to Banks (Net Overdraft) ..	146	543	27	55	4	20	795
Due to Public Creditor(a) ..	55,148	21,468	52,638	1,509	4,397	6,673	141,833
Total(a) ..	56,981	22,347	64,727	2,600	4,443	6,820	157,918
Maturing Overseas(a)(b) ..	1,812	..	2,102	..	..	..	3,914
Annual Interest Payable(a) ..	(c)	894	2,530	73	181	267	(c)

LOCAL GOVERNMENT AUTHORITIES.
1954-55.

<i>New Money Loan Raisings—</i>							
From Government ..	140	99	2,724	446	4	..	3,413
From Public ..	10,590	3,824	6,616	587	1,431	1,375	24,423
Total ..	10,730	3,923	9,340	1,033	1,435	1,375	27,836
<i>Funds Provided for Redemption—</i>							
Government Loans ..	77	37	1,037	310	7	9	1,477
Loans due to Public ..	3,509	1,748	1,993	130	477	345	8,202
Total ..	3,586	1,785	3,030	440	484	354	9,679
Accumulated Sinking Fund Balance ..	5,305	2,242	3,602	38	146	226	11,559
<i>Debt—</i>							
Due to Government ..	1,750	401	13,759	1,172	65	118	17,265
Due to Banks (Net Overdraft) ..	139	159	..	63	1	..	362
Due to Public Creditor(a) ..	62,007	24,178	58,166	1,984	5,339	7,661	159,335
Total(a) ..	63,896	24,738	71,925	3,219	5,405	7,779	176,962
Maturing Overseas(a)(b) ..	1,812	..	2,687	..	..	..	4,499
Annual Interest Payable(a) ..	(c)	1,032	2,892	100	231	318	(c)

SEMI-GOVERNMENTAL AND OTHER PUBLIC AUTHORITIES.
1953-54.

<i>New Money Loan Raisings—</i>							
From Government ..	20,040	20,977	1,349	12,601	1,873	9,523	66,363
From Public ..	14,231	34,485	8,631	2,565	2,784	2,024	64,720
Total ..	34,271	55,462	9,980	15,166	4,657	11,547	131,083
<i>Funds Provided for Redemption—</i>							
Government Loans ..	573	800	211	424	370	360	2,738
Loans due to Public ..	2,527	4,650	1,271	2,312	82	113	10,955
Total ..	3,100	5,450	1,482	2,735	452	473	13,693
Accumulated Sinking Fund Balance ..	12,168	6,487	188	562	54	58	19,517
<i>Debt—</i>							
Due to Government ..	97,363	121,172	4,766	60,988	23,441	44,796	352,526
Due to Banks (Net Overdraft) ..	337	190	711	18	8	..	1,264
Due to Public Creditor(a) ..	151,268	220,823	34,492	17,746	6,059	7,964	438,352
Total(a) ..	248,968	342,185	39,969	78,752	29,508	52,760	792,142
Maturing Overseas(a)(b) ..	8,520	3,889	..	767	..	..	13,176
Annual Interest Payable(a) ..	(c)	12,510	1,646	2,916	1,145	1,792	(c)

NOTE.—See next page for footnotes.

LOCAL AND SEMI-GOVERNMENTAL AUTHORITIES : NEW MONEY LOAN RAISINGS, REDEMPTION, DEBT AND INTEREST PAYABLE 1953-54 AND 1954-55—continued.

(£'000.)

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
SEMI-GOVERNMENTAL AND OTHER PUBLIC AUTHORITIES. 1954-55.							
<i>New Money Loan Raisings—</i>							
From Government	12,552	14,722	1,584	10,921	2,112	9,343	51,234
From Public	12,343	39,697	7,092	786	2,992	1,574	64,484
<i>Total</i>	<i>24,895</i>	<i>54,419</i>	<i>8,676</i>	<i>11,707</i>	<i>5,104</i>	<i>10,917</i>	<i>115,718</i>
<i>Funds Provided for Redemption—</i>							
Government Loans	614	988	385	485	411	445	3,328
Loans due to Public	2,790	1,697	1,083	120	107	136	5,933
<i>Total</i>	<i>3,404</i>	<i>2,685</i>	<i>1,468</i>	<i>605</i>	<i>518</i>	<i>581</i>	<i>9,261</i>
Accumulated Sinking Fund Balance	13,520	7,208	599	683	115	115	22,240
<i>Debt—</i>							
Due to Government	109,484	134,691	6,523	71,545	25,142	53,695	401,080
Due to Banks (Net Overdraft)	1,105	80	986	18	6	..	2,195
Due to Public Creditor(a)	162,558	259,546	43,550	18,411	9,005	9,460	502,530
<i>Total(a)</i>	<i>273,147</i>	<i>394,317</i>	<i>51,059</i>	<i>89,974</i>	<i>34,153</i>	<i>63,155</i>	<i>905,805</i>
Maturing Overseas(a)(b)	8,492	4,357	..	767	..	..	13,616
Annual Interest Payable(a)	(c)	14,560	2,180	3,380	1,359	2,258	(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 1951-52 to 1954-55.

**LOCAL AND SEMI-GOVERNMENTAL AUTHORITIES, AUSTRALIA : NEW MONEY
LOAN RAISINGS, REDEMPTION AND DEBT.**

(£'000.)

Particulars.	1938-39.	1951-52.	1952-53.	1953-54.	1954-55.
LOCAL GOVERNMENT AUTHORITIES.					
<i>New Money Loan Raisings—</i>					
From Government	371	3,175	1,648	3,001	3,413
From Public	7,060	18,381	21,522	23,843	24,423
<i>Total</i>	<u>7,431</u>	<u>21,556</u>	<u>23,170</u>	<u>26,844</u>	<u>27,836</u>
<i>Funds provided for Redemption—</i>					
Government Loans	2,141	942	1,267	1,332	1,477
Loans due to Public	2,995	5,351	6,475	6,928	8,202
<i>Total</i>	<u>5,136</u>	<u>6,293</u>	<u>7,742</u>	<u>8,260</u>	<u>9,679</u>
Accumulated Sinking Fund Balance	(a)	9,542	9,947	10,439	11,559
<i>Debt—</i>					
Due to Government	13,207	13,374	13,642	15,290	17,265
Due to Banks (Net Overdraft)	1,544	2,567	1,990	795	362
Due to Public Creditor(b)	76,582	109,609	125,051	141,833	159,335
<i>Total(b)</i>	<u>91,333</u>	<u>125,550</u>	<u>140,683</u>	<u>157,918</u>	<u>176,962</u>
Maturing Overseas(b)(c)	17,893	4,229	4,025	3,914	4,499

SEMI-GOVERNMENTAL AND OTHER PUBLIC AUTHORITIES.

<i>New Money Loan Raisings—</i>					
From Government	1,524	69,130	57,885	66,363	51,234
From Public	7,038	56,173	68,831	64,720	64,484
<i>Total</i>	<u>8,562</u>	<u>125,303</u>	<u>126,716</u>	<u>131,083</u>	<u>115,718</u>
<i>Funds provided for Redemption—</i>					
Government Loans	699	1,864	2,316	2,738	3,328
Loans due to Public	1,146	3,962	5,196	10,955	5,933
<i>Total</i>	<u>1,845</u>	<u>5,826</u>	<u>7,512</u>	<u>13,693</u>	<u>9,261</u>
Accumulated Sinking Fund Balance	(a)	16,119	17,487	19,517	22,240
<i>Debt—</i>					
Due to Government	(d)44,817	218,210	296,661	352,526	401,080
Due to Banks (Net Overdraft)	2,006	9,141	5,490	1,264	2,195
Due to Public Creditor(b)	118,506	307,240	376,390	438,352	502,530
<i>Total(b)</i>	<u>d165,329</u>	<u>534,591</u>	<u>678,541</u>	<u>792,142</u>	<u>905,805</u>
Maturing Overseas(b)(c)	12,088	13,267	13,207	13,176	13,616

(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 1949-50 to 1954-55, 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 1949-50 to 1954-55. 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
1950 ..	2,472	1,526	1,683	965	1,683	438	600	9,367
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

(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 was created by legislation in 1925 for the purpose of providing improved and uniform standards of construction, reconstruction and maintenance of the principal roads, and to administer Governmental subsidies for work on those roads. This authority, known as the Department of Main Roads, exercises control over Government activities in connexion with road works. Its activities embrace works on main and developmental roads throughout the State, all roads in the unincorporated portion of the Western Division, and proclaimed national works (principally bridges and vehicular ferries) constructed from Government funds. The department co-operates with the municipal and shire councils in the work of constructing and maintaining a well-organized system of main highways.

In the metropolitan district, the whole cost of the construction and maintenance of main roads is paid from the funds of the Main Roads Department, while in the country districts assistance in respect of road works may be granted for any area through which a main road passes. The cost of constructing developmental roads and works is borne in full by the Main Roads Department, but local councils are required to maintain them in satisfactory condition. For other roads, the cost of both construction and maintenance work is generally chargeable to the revenue of local authorities, although Governmental assistance is not infrequently granted for works of construction and re-construction. In the Western Division, the full cost of all roads and bridges is met by the Department of Main Roads.

The general system of road communication throughout the State is made up of main roads classified into State highways, trunk roads and ordinary main roads. There are also secondary roads (metropolitan area) and developmental roads.

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 representations made by councils concerned, availability of funds for construction and maintenance purposes, and the value as connecting links between centres of population or business.

(ii) *Length of Roads.* (a) *Proclaimed Roads.* The following table shows lengths of proclaimed roads at 30th June, 1955, according to class of road:—

PROCLAIMED ROADS, NEW SOUTH WALES : LENGTHS, 30th JUNE, 1955.
(Miles.)

Division.	Main Roads.				Secondary Roads.	Developmental Roads.	Total.
	State Highways.	Trunk Roads.	Ordinary Main Roads.	Total.			
Eastern and Central ..	5,198	2,874	9,703	17,775	(a) 76	2,934	20,785
Western	1,326	1,353	2,859	5,538	..	..	5,538
Total ..	6,524	4,227	12,562	23,313	76	2,934	26,323

(a) Metropolitan area.

During 1954-55, 156 miles of new developmental roads were proclaimed and 156 miles were removed from the list of proclaimed roads. There were 10 miles of main roads proclaimed during the year.

The length of main and secondary roads maintained by the Department of Main Roads at 30th June, 1955 (excluding the Western Division) was 2,823 miles (16 per cent.), while the length maintained by councils was 15,028 miles (84 per cent.). The proportions of the several classes of main roads maintained by the Department and councils respectively were:—State highways, 42 per cent., 58 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 55 per cent. of the roads (504 miles).

(b) *Composition of Roads.* In 1955, 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 1954-55, 46 new bridges were completed on main roads by the Department and councils. Major bridge works under construction include steel and concrete bridges, over Middle Harbour at the Spit, Sydney (length 745 feet), over George's River at Liverpool (length 912 feet), over the Clyde River at Bateman's Bay (length 1,008 feet), over the Tuross River at Bodalla (length 630 feet), over the Cockfighters Creek at Warkworth (length 637 feet) and over the Hunter River at Denman (length 683 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 1951-52 to 1954-55 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)	1951-52.	1952-53.	1953-54.	1954-55.
RECEIPTS.					
Motor Vehicle Taxation, and Registration and Licence Fees ..	2,018,556	5,046,392	6,381,289	6,693,215	7,279,705
Commonwealth Aid Roads and Works Acts	1,176,039	2,869,566	2,900,562	3,236,940	4,132,187
Councils' Contributions	250,679	396,766	486,352	559,780	707,230
Consolidated Revenue (State) .. ..	..	300,000	100,000	850,000	..
Loans from State Government	302,643	225,000	150,000	..	200,000
Grants and Contributions from State Government and Departments, etc.	13,549	58,545	74,063	89,266	115,983
Commonwealth Funds for Special Works .. .. .	..	204,122	381,769	358,206	261,554
Other	54,782	128,339	127,378	98,935	48,350
Total	3,816,248	9,228,730	10,601,413	11,886,342	12,745,009

NOTE.—See next page for footnotes.

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

Item.	1938-39. (a)	1951-52.	1952-53.	1953-54.	1954-55.
PAYMENTS.					
Roads and Bridges—					
Construction	1,736,898	3,617,048	4,279,212	6,314,770	6,896,403
Maintenance	1,519,929	4,921,212	4,554,159	5,146,618	5,546,974
Other Works .. .. .	..	..	28,178	27,156	2,546
Debt Charges—					
Interest, Exchange, etc.	152,469	123,297	122,651	136,450	140,233
Debt Redemption	200,591	27,776	(b) 129,472	31,442	33,735
Purchase of Assets(c) .. .. .	..	102,453	210,856	308,580	81,584
Suspense Accounts(d) .. .. .	..	680,959	110,069	107,327	-326,317
Administration, etc.	100,583	347,575	386,120	410,547	458,428
Other	914	119,978	109,598	73,275	33,950
Total	3,711,384	9,940,298	9,930,315	12,556,165	12,867,536

(a) Income and expenditure. (b) Includes £100,000 repayment to Treasury of funds specially provided by the State Government in earlier years from Consolidated Revenue. (c) Excludes plant and motor vehicles. (d) Includes purchase and operation of Departments' 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 1950-51 to 1954-55 was, respectively, £8,891,000, £14,822,000, £19,960,000, £22,560,000, £26,829,000, and £29,498,000. 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, 1955, 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, 1956, showed a surplus of £23,278, after the transfer of sums totalling £1,775,000 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 £950,000 in 1955-56, expenditure over the same period has remained relatively stable, varying between £424,000 and £560,000. In 1955-56, income included road tolls £764,716, railway passenger tolls £146,577, and tram and omnibus passenger tolls £25,965. Expenditure amounted to £560,656, including interest, exchange, etc., £251,933, sinking fund, £59,832 and maintenance and improvement £163,461. During 1955-56, 25,785,000 rail travellers, 23,680,000 tram and omnibus travellers, and 35,201,000 road travellers in 20,535,000 road vehicles crossed the bridge, contributing respectively, 16 per cent., 3 per cent., and 81 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, 1954, the latest date for which details are available, was 14,430 miles, classified as follows:—State highways, 3,849 miles; main roads, 9,791 miles; tourist roads, 414 miles; forest roads, 376 miles. The total length of the surface treated (black) or higher type of pavements included in the foregoing totals was 7,630 miles or 52.8 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 1954–55, 1,267 miles of declared roads under the Board's control were treated with bitumen. In addition, 186 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 189 miles. The total length of bitumen treatment carried out in 1954–55 was 1,642 miles. Of the work on the roads under the Board's control, 519 miles related to State highways.

During 1954–55, 196 bridge projects with a total value of £1,502,347 were initiated. Of these new projects, 48 with a total value of £1,112,347 were supervised by the Board and 148 with a total value of £390,000, 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 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, 1955, loan receipts and payments each amounted to £1,102,309, and expenditure included £146,309 for restoration of flood and bush fire damage. The total loan expenditure to 30th June, 1955, was £11,494,545. This figure does not include loan expenditure from the Developmental Roads Loan Account, which fund 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 1951–52 to 1954–55 are shown below:—

COUNTRY ROADS BOARD, VICTORIA : RECEIPTS AND PAYMENTS

(£.)

Item.	1938–39. (a)	1951–52.	1952–53.	1953–54.	1954–55.
RECEIPTS.					
Motor Vehicle Registration Fees ..	1,690,962	3,694,012	3,702,131	3,791,643	4,647,372
Drivers' Licence Fees(b) .. ..	..	159,950	159,402	178,885	181,728
Municipalities' Payments	318,878	283,391	344,320	331,605	387,561
Commonwealth Aid Roads Acts(c) ..	716,019	2,501,150	2,446,029	2,741,608	3,802,369
Loans from State Government	57,972	1,046,621	1,191,509	1,512,741	1,102,309
Surplus Transport Regulation Fund ..	..	..	..	..	387,992
Stores and Materials	233,104	..	..	..	..
Hire of Plant	53,724	..	..	..	..
Other	117,341	4,222	2,092	1,841	1,309
Total	3,188,000	7,689,346	7,845,483	8,558,323	10,510,640

NOTE.—See next page for footnotes.

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

Item.	1938-39. (a)	1951-52.	1952-53.	1953-54.	1954-55.
PAYMENTS.					
Construction and Maintenance of Roads and Bridges—					
State Highways	453,708	2,158,205	2,250,803	2,503,912	3,033,653
Main Roads	1,027,210	2,626,675	2,492,855	2,843,251	3,566,478
Tourist Roads	77,694	196,512	232,778	217,804	294,590
Forest Roads .. .. .	.. .. .	69,150	113,895	108,504	139,119
Unclassified Roads	468,122	773,384	918,946	995,787	1,445,032
Roads adjoining Commonwealth Properties	13,321	1,099	.. .. .	.. .. .	.. .. .
Other	(d) 58,729	10,775	13,843	17,032	30,181
Relief to Municipalities	240,170	.. .. .	.. .. .	.. .. .	.. .. .
Plant, Stores and Materials	310,332	701,760	840,258	670,389	584,826
Interest, Debt Redemption, etc.	427,445	537,870	570,001	611,154	676,012
Administration Expenditure .. .. .	.. .. .	.. .. .	.. .. .	.. .. .	.. .. .
Other	230,125	{ 450,351	{ 449,030	551,046	621,478
		{ 289,471			
Total	3,306,856	7,815,252	7,882,409	8,518,879	10,391,369

(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 to improve approaches to level crossings and (c) generally, to reduce 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 1954-55, the Fund received £226,469 from collections in respect of additional registration fees and £250,000 from Surplus Revenue. Expenditure from the Fund amounted to £60,995 comprising £20,863 incurred by the Railways Department and £40,132 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, 1955, was 21,039 miles, comprising State highways, 7,778 miles; main roads, 11,186 miles; developmental roads, 241 miles; secondary roads, 648 miles; mining access roads, 574 miles; farmers' roads, 312 miles; tourist roads, 298 miles; tourist tracks, 2 miles. The length of roads improved in Queensland from the date of commencement of work under the Main Roads Acts 1920-1952 to 30th June, 1955, was 12,655 miles (60 per cent.). At that date also, 1,118 miles of new road construction and 695 miles of stage construction work were proceeding.

(b) *Composition of Roads.* The total length of roads and streets in Queensland at 30th June, 1955, was:—Concrete, 102 miles; bitumen, 6,142 miles; macadam, 14,461 miles; other formed, 41,517 miles; unconstructed, 61,949 miles; total, 124,171 miles.

(iii) *Department of Main Roads. (a) General.* During 1954-55, the Department completed 1,020 miles of roads including new construction and stage construction. Bridges of all types to a length of 4,763 linear feet were constructed, bringing the total constructed by the Department at 30th June, 1955, to 177,461 feet. In addition, at 30th June, 1955, 7,383 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 1951-52 to 1954-55 are shown below :—

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

Item.	1938-39.	1951-52.	1952-53.	1953-54.	1954-55.
RECEIPTS.					
Motor Vehicle Registration, Transport Acts Collections, Fees, etc. . .	938,227	2,573,971	3,523,958	3,766,460	4,075,193
Loans from State Government . .	392,225	1,313,000	825,000	100,000	..
Grants, Advances, Refunds, etc. from State Government . .	579,775	305,013	103,855	349,315	..
Commonwealth Aid Roads and Works Acts	806,218	3,141,560	3,135,034	3,454,665	4,414,226
Maintenance Repayments—Local Authorities	98,154	317,437	308,178	311,212	368,711
Hire, Rent, Sales of Plant, etc. . .	288,330	108,276	107,468	91,875	615,080
Other		68,572	386,210	400,676	329,549
Total	3,102,929	7,827,829	8,389,703	8,474,203	9,802,759
PAYMENTS.					
Permanent Road Works and Surveys	2,045,900	5,226,719	4,113,945	3,930,659	6,091,811
Maintenance of Roads	331,734	1,421,304	1,180,788	1,603,418	2,077,429
Plant, Machinery, Buildings, etc. (including Plant Maintenance) . .	73,632	1,133,565	966,963	837,504	1,390,728
Loans—Interest	38,861	221,271	265,074	264,619	265,079
Redemption	78,153	218,053	239,066	250,156	250,817
Payments to State Consolidated Revenue	340,244	..	..	..	..
Payments to Local Authorities . .	27,418	1,625	1,625	1,625	1,625
Other Works and Services . . . . .	..	94,188	..	..	..
Administration, etc.	151,700	634,733	682,729	699,428	803,671
Total	3,087,642	8,951,458	7,450,190	7,587,409	10,881,160

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, 1956, there were 8,188 miles of proclaimed Main Roads and 44,743 miles of District Roads, totalling 52,931 miles. Of these, 24,969 miles are unformed and carry little or no traffic and a further 8,859 miles, which have been formed only are open to traffic during most of the year. Of the remainder, there are 13,598 miles of road constructed with gravel or crushed rock and 5,505 miles of a higher standard constructed with either bitumen or concrete.

(iv) *State Highways and Local Government Department.* (a) *General.* The Department's metropolitan road widening scheme has been in operation for approximately nine years. During the year ended 30th June, 1956, an additional 24,300 lineal feet of frontages were purchased and the total length acquired to that date is equivalent to 40.6 miles of road frontages. In rural areas, increases in the volume of traffic have necessitated widening of roads and improving alignments.

(b) *Receipts and Payments.* The following table shows particulars of receipts and payments, during the years 1938-39 and 1951-52 to 1954-55, of funds controlled by the Highways and Local Government Department.

**HIGHWAYS AND LOCAL GOVERNMENT DEPARTMENT, SOUTH AUSTRALIA :
RECEIPTS AND PAYMENTS.**
(£.)

Item.	1938-39. (a)	1951-52.	1952-53.	1953-54.	1954-55.
RECEIPTS.					
Motor Vehicle Registration, Licences, Fees, Fines, etc. ..	690,849	1,409,510	1,497,227	2,230,045	2,997,668
Commonwealth Aid Roads and Works Acts	479,922	1,650,993	1,682,961	1,873,227	2,555,471
Loans from State Government ..	200,000	450,000	360,000	..	200,000
Recoups—Local and Semi-governmental Authorities	1,531	26,018	38,267	10,443	9,978
Other		211,483	864,480	263,456	348,467
Total	1,372,302	3,748,004	4,442,935	4,377,171	6,111,584
PAYMENTS.					
Construction and Reconstruction of Roads and Bridges ..	c 1,150,082	1,475,602	1,786,777	2,142,728	2,877,748
Maintenance		538,634	666,239	918,582	825,371
Recoups to Consolidated Revenue Fund—Interest, Debt Redemption and Exchange	d 178,273	139,811	148,651	157,749	168,297
Grants and Advances to Local and Semi-governmental Authorities Administration	(e)	1,033,519	670,460	1,343,381	1,209,958
Stores, Plant, Machinery, Suspense Accounts, etc.	45,753	199,915	231,542	267,042	310,971
Other		531,060	252,135	161,562	722,539
		19,578	48,506	36,644	31,949
Total	1,374,108	3,938,119	3,804,310	5,027,688	6,146,833

(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 1951-52 to 1954-55 was, respectively, £1,966,000, £4,596,000, £4,667,000, £6,131,000 and £7,539,000.

6. *Western Australia.*—(i) *General.* Under the Main Roads Act 1930-39, 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 those 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, 1955, and in road districts at 30th June, 1955, were as follows :—Bituminous, 5,316 miles ; gravel water-bound, 14,287 miles ; other constructed surfaces, 1,211 miles ; formed only, 36,098 miles ; unprepared, 27,992 miles (incomplete) ; total, 84,904 miles.

The lengths of declared roads at 30th June, 1955, were :—Main roads, 3,178 miles ; important secondary roads, 7,232 miles ; developmental roads, 12,051 miles ; total, 22,461 miles.

(iii) *Main Roads Department.* During the year 1954–55, the activities of the Department included :—clearing, 1,437 miles ; forming, 1,557 miles ; gravelling, 1,027 miles ; reconditioning, 3,881 miles ; stabilizing, 225 miles ; side drains, 70 miles. In addition, lengths of tar and bitumen work performed aggregated 810 miles. Bridges constructed numbered 17. Two major bridges, one of timber over the Murray River at Pinjarra and the other of concrete over the Canning River at Riverton, and the Perth Causeway project were completed during the year. Detailed surveys were made for the projected bridge across the Swan River at the Narrows, Perth, as well as a comprehensive set of borings to determine the nature of the foundations at the site. Preliminary reclamation of the adjacent area by dredging was undertaken. Construction of the Wyndham-Ord River-Nicholson Road was continued during 1954–55. The first installation of traffic control lights within the Perth city block was made during the year.

(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 1952 to 1955.

ROAD FUNDS, WESTERN AUSTRALIA : RECEIPTS AND PAYMENTS.

(£.)

Item.	1938–39. (a)	1951–52.	1952–53.	1953–54.	1954–55.
RECEIPTS.					
Motor Vehicle Registration, Licences, Fees, Fines, etc. . .	218,962	427,432	472,477	523,495	584,454
Commonwealth Aid Roads and Works Acts	823,162	2,861,389	2,886,672	3,212,454	4,411,656
Recoups from Local Authorities, etc.	1,958	209,352	210,777	199,591	273,886
Other . . . . .						22,572	43,129	116,373	96,174
Total	1,044,082	3,520,745	3,613,055	4,051,913	5,366,170
PAYMENTS.					
Construction and Reconstruction of Roads and Bridges	922,756	2,527,612	3,079,210	2,492,320	2,947,597
Maintenance . . . . .						245,558	258,289	214,217	255,181
Grants to Local Authorities, etc. . .	143,544	260,492	273,796	295,713	323,410
Transfer to State Consolidated Revenue . . . . .	..	70,272	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	44,682	68,703	47,583	69,947
Plant, Machinery, etc. . . . .	..	277,660	502,444	276,686	545,833
Other	19,181	415,359	640,478	540,945	463,969
Total	1,145,273	3,849,031	4,900,316	3,944,860	4,683,333

(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, licensing fees for drivers and public transport and other moneys made available by the 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 1954–55 on the construction of roads, tracks and bridges amounted to £2,697,855 of which £1,784,265 was charged to road funds, £38,939 to revenue, £722,672 to loan and £151,979 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, 1955 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, 582 miles (49 per cent.); main roads, 216 miles (33 per cent.); secondary and other roads, 18 miles (10 per cent.); total, 816 miles (37 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, 1955, was as follows:—Bituminous, 1,128 miles; concrete, 10 miles; granite, limestone, etc., water-bound, 8,596 miles; surfaces of lower grade, 2,940 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 1951–52 to 1954–55:—

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

Item.	1939–40. (a)	1951–52.	1952–53.	1953–54.	1954–55.
RECEIPTS.					
Motor Vehicle Taxation and Registration, Licences, Fees, Fines, etc.	193,165	305,352	432,738	450,962	523,138
Commonwealth Aid Roads and Works Acts	220,241	739,989	745,985	830,922	1,125,259
Recoups from Local Authorities, etc. .. .. .	..	9,249	11,539	10,076	8,339
State Loan Fund .. .. .	..	577,931	494,125	825,502	860,862
Hire of Plant .. .. .	..	551,202	553,678	741,383	807,525
Other	719	98,071	152,556	115,064	167,414
Total	414,125	2,281,794	2,390,621	2,973,909	3,492,537
PAYMENTS.					
Construction and Reconstruction of Roads and Bridges	130,924	689,370	716,223	1,070,414	1,562,003
Maintenance	113,199	627,785	768,395	977,403	1,041,981
Jetties, etc.	22,467	..	..	..	..
Other works connected with Transport	5,748	21,870	15,566	9,823	10,480
Grants to Local Authorities, etc. .. .. .	..	2,256	2,762	3,671	5,018
Administration	15,053	51,979	58,736	56,807	39,315
Purchase, Hire and Maintenance of Plant	(b)	600,344	586,409	809,546	848,738
Other	31,894	156,358	120,925	22,558	93,332
Total	319,285	2,149,962	2,269,016	2,905,106	3,600,867

(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, 1955. 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, 1955.
(Miles.)

Class of Road.	N.S.W.	Vic. (a)	Q'land.	S. Aust. (b)	W. Aust.	Tas.	Total.
State highways	6,524	3,849	7,778	} 8,188	3,178 {	1,161 {	} 69,095
Trunk roads	4,227	} 9,791	11,186				
Ordinary main roads	12,562						
<i>Total Main Roads</i>	23,313	13,640	18,964	8,188	3,178	1,812	69,095
Secondary roads	76	..	648	..	7,232	186	8,142
Developmental roads	2,934	..	241	..	12,051	50	15,276
Tourist roads .. .. .	..	414	298	..	..	45	757
Other roads .. .. .	..	(c) 376	(d) 888	..	..	(e) 92	1,356
<i>Total Other Roads</i>	3,010	790	2,075	..	19,283	373	25,531
Grand Total	26,323	14,430	21,039	8,188	22,461	2,185	94,626

(a) As at 30th June, 1954. (b) As at 30th June, 1956. (c) Forest roads. (d) Includes mining access roads, 574 miles; farmers' roads, 312 miles; tourist tracks, 2 miles. (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 data 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 ; metallated (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.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N. Terr.	A.C.T.	Total.
	30th June, 1955.	30th Sept., 1954.	30th June, 1955.	30th June, 1953.	1955. (a)	30th June, 1955.	30th June, 1955.	30th June, 1955.	
1. Wood or stone ..		61		6					67
2. Concrete ..	604	368	102	605		10		3	1,692
3. Bituminous	10,124	12,197	6,142	2,914	5,316	1,128	1,287	166	39,274
4. Macadam and other	41,344	31,766	14,461	16,829	15,498	8,596	164	173	128,831
5. Formed only	27,281	25,040	41,517	12,956	36,098		9,599	223	
6. Cleared, or natural surface, only	45,687	30,531	61,949	22,270	27,992	2,940	1,193		345,276
Total ..	125,040	99,963	124,171	55,580	84,904	12,674	12,243	565	515,140

(a) Municipalities, 31st October and 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, 7.62 ; group 4, 25.01 ; groups 5 and 6, 67.03. The percentage of constructed lengths to total length in each State is as follows :—New South Wales, 42 ; Victoria, 44 ; Queensland, 17 ; South Australia, 37 ; Western Australia, 25 ; 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 pp. 660 and 663).

(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 1950–51 to 1954–55, 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	11,315
1951.. ..	6,416	6,184	4,908	2,334	2,746	1,442	24,030
1952.. ..	9,006	6,576	7,379	3,267	3,564	1,550	31,342
1953.. ..	9,357	6,472	5,979	3,404	4,390	1,683	31,285
1954.. ..	11,972	7,237	6,235	4,708	3,661	2,096	35,909
1955.. ..	12,938	9,131	8,975	5,256	4,130	2,752	43,182

(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 1954-55 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, 1955, amounted to the following approximate sums :—New South Wales, £22,000,000 ; Victoria, £19,000,000 ; Queensland, £11,000,000 ; South Australia, £5,000,000 ; Western Australia, £3,000,000 ; Tasmania, £9,000,000 ; total, £69,000,000.

§ 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, 1955.* (a) *Metropolitan.* The storage reservoirs of the metropolitan system, with a combined available capacity of 124,959 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, 1955, there were 110 service reservoirs in use with a

combined capacity of 546.5 million gallons. Rating for water for 1954-55 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 1954-55 was 1s. 8d. in the £1 on assessed annual value for occupied properties and 1s. 5d. 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 1950-51 to 1954-55 :—

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.		
1938-39 ..	350,161	1,466,000	Mill. gals. 106.3	Mill. gals. 38,790	Gallons. 304	Gallons. 72.5	Miles. 4,539	126,754
1950-51 ..	442,913	1,908,000	138.9	50,689	314	72.8	5,114	208,712
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

(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.	
1938-39 ..	48,370	193,480	Mill. gals. 11.9	Mill. gals. 4,331	Gallons. 245	Gallons. 61.3	Miles. 936
1950-51 ..	65,445	261,780	22.3	8,131	340	85.1	1,234
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

(iii) *Sewerage and Drainage—to 30th June, 1955.* (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, 1955 were 175 miles long. Sewerage rating for 1954-55 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 1954-55 were 1s. 3d. in the £1 of assessed annual value of occupied lands and 1s. 0d. in the £1 for unoccupied lands and drainage rates (on certain areas served) 2d. 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 1951 to 1955.

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
1951	..	..	..	303,508	1,248,000	2,951	173
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

(a) Includes part of South Coast.

At 30th June, 1955, 49,093 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 640 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 1954-55 and for the three services combined during the years 1938-39 and 1953-54.

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)							
1954-55—							
Water	63,370,744	5,415,142	2,843,299	2,118,968	435,160	5,397,427	+ 17,715
Sewerage	26,823,067	2,933,887	1,779,155	951,194	198,209	2,928,558	+ 5,329
Drainage	1,240,460	158,635	110,171	39,585	7,795	157,551	+ 1,084
Total 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
1950-51	64,350,326	5,410,687	2,740,286	2,190,333	475,552	5,406,171	+ 4,516
1938-39	43,769,741	2,926,694	957,422	1,727,708	241,564	2,926,694	..
NEWCASTLE.							
1954-55—							
Water	8,611,163	1,046,322	667,397	272,536	52,061	991,994	+ 54,328
Sewerage	3,044,252	386,202	257,128	103,884	19,847	380,859	+ 5,343
Drainage	186,850	33,131	18,857	6,243	1,422	26,522	+ 6,609
Total 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
1950-51	8,139,512	765,790	442,239	275,875	52,479	770,593	- 4,803
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—£2,199,223 at 30th June, 1955.

(v) *Country Water Supply and Sewerage Systems.* At 31st December, 1953, country water supply services were conducted or under construction by 63 municipalities, 61 shires and 4 county councils, and country sewerage services by 57 municipalities and 19 shires. The capital indebtedness of these schemes was £15,119,792 at 31st December 1953, namely, £10,752,997 for water and £4,366,795 for sewerage. Debt of the municipalities amounted to £8,550,016, shires to £3,383,377 and county councils to £3,186,399. Government advances amounting to £443,497 are included in these figures. Aggregate income and expenditure amounted to £2,606,184 and £2,003,011, respectively, in 1953.

(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, 1954 was £2,914,417. In 1954, income (excluding subsidies, State Government £106,946 and Mining Companies £315,546) amounted to £172,201 and expenditure (excluding debt redemption £125,242) amounted to £463,835.

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 £3,575,074 at 31st December, 1955.

There are also the Mulwala Water Supply and Sewerage Service constructed as an urgent war-time work for the Commonwealth, and the Bethungra Water Supply System 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; 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 are under construction. One is an 18 mile conduit to carry water from the Silvan Reservoir to the existing Mt. Waverley service reservoir and to a new service reservoir which is to be built south of Glen Waverley and which when completed will be capable of supplying an additional 110 million gallons a day. The other project, which was approved by the Board in 1946, consists of a dam, 293 feet high, which will impound 45,800 million gallons of water, on the River Yarra, immediately upstream from the confluence of the Yarra and Doctors Creek, and work on the project is proceeding. This work is estimated to cost £12,628,000.

The water rate levied by the Board in 1954–55 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 1950–51 to 1954–55.

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
1950-51 ..	354,415	1,333,000	102.0	37,225	288	76.5	3,966	236,883
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

(c) *Sewerage and Drainage.* Particulars of sewerage and drainage services for 1938-39 and 1950-51 to 1954-55 are shown below. The rate levied in 1954-55 in respect of sewerage was 1s. 1d. in the £1 on the net annual value of the property served. The drainage rate was 1d. 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
1950-51 ..	321,548	1,209,000	67.1	24,491	208.7	55.5	2,927	128
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

The metropolitan sewerage system consists of the Main system (serving an area of 70,382 acres) and three subsidiary systems—the Sunshine system (serving an area of 1,022 acres), the Kew system (serving an area of 186 acres) and the South-eastern system (serving an area of 2,523 acres in Cheltenham, Parkdale, Mentone and Mordialloc). The Metropolitan Sewage Farm, 26,855 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, 1955 was £2,812,749. Revenue during 1954-55 amounted to £106,873, cost of sewage disposal to £163,672, trading expenses to £101,758, interest to £111,365, and net cost of sewerage purification to £269,922. These financial particulars are included in the sewerage items of the summary below.

(d) *Finances.* The following table provides a summary, for the year 1954-55 of the financial operations of the three services conducted by the Melbourne and Metropolitan Board of Works.

MELBOURNE AND METROPOLITAN BOARD OF WORKS : FINANCES, 1954-55.
(£.)

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	29,045,752	2,434,200	972,935	1,089,105	..	2,062,040	+ 372,160
Sewerage	22,384,574	2,460,249	1,035,527	887,508	..	1,923,035	+ 537,214
Drainage	4,257,840	196,659	113,747	134,979	..	248,726	- 52,067
General (b)	2,059,629	..	622,346	100,000	123,977	846,323	- 846,323
Total	57,747,795	5,091,108	2,744,555	2,211,592	123,977	5,080,124	+ 10,984

(a) Total loan indebtedness—1954-55, £49,590,850.

(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 1950-51 to 1954-55 :—

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
1950-51	40,398,350	3,278,641	1,782,356	1,422,196	81,607	3,286,159	- 7,518
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

(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, £1,250,000 for sewerage undertakings, and £270,000 for sewerage installation to properties under the deferred payment system. The population supplied is estimated by the Trust at 82,000. This and other general information relates to 30th June, 1955.

(b) *Water Supply.* The catchment area is about 32,000 acres. There are five storage reservoirs and nine service basins whose total storage capacity is 4,386 million gallons. The length of water mains and reticulation is 412 miles. In addition, the State Rivers and Water Supply Commission has made available a supplementary supply of a minimum quantity of 545 million gallons of water per annum from the Bellarine Peninsula System. The total expenditure on water supply to 30th June, 1955 was £1,682,830. Expenditure for 1954-55 comprised £91,631 for working expenses and £83,332 for interest, redemption and reserves, while revenue amounted to £180,631. The sinking fund appropriations at June, 1955, amounted to £151,224. The replacement and contingencies reserve amounted to £226,459. There is a water rate of 1s. 5d. in the £1 (with minima of 5s. 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 16,620; of which 16,602 have been connected. The total expenditure to 30th June, 1955, was £1,063,353 on sewerage works and £261,947, of which £2,631 was outstanding, on the cost of sewerage installation under deferred payment conditions. The revenue in 1954-55 amounted to £115,913 and the expenditure comprised £44,055 on working expenses and £59,757 on interest, redemption and reserves. Sinking fund appropriations at June,

1955, were £129,116. Replacement and contingencies reserve amounted to £215,768. 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 Ballaarat 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, 1955.

(b) *Water Supply.* The Water Supply District embraces an area of about 65 square miles, containing a population of about 50,000. The total storage capacity of the seven reservoirs is 5,563 million gallons and the catchment area is 18,695 acres.

The capital cost of construction of the waterworks was £2,087,565 to 31st December, 1955. The liabilities amounted to £1,132,147 at 31st December, 1955 including loans due to the Government totalling £1,082,608. The revenue for the year 1955 was £119,709. Working expenses during 1955 amounted to £57,660 and interest and other charges to £57,917. 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 Ballaarat and parts of the Shires of Ballarat and Bungaree and the Borough of Sebastopol. Work was commenced in 1922 and up to 31st December, 1955 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, 1955 was £704,852. The method of sewage disposal is by sedimentation, oxidation and sludge digestion. One hundred and forty-six sewered areas had been declared as at 31st December, 1955. Assessments in the sewerage district numbered 15,372, while those in sewered areas numbered 12,278. There were 10,371 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, 1955, amounted to £569,547; redemption payments at that date totalled £217,027. An expenditure of £157,122 was incurred for house connexions, the whole of which has been redeemed. Revenue during 1955 amounted to £71,853 and expenditure, which included £33,629 on interest and redemption, was £72,103.

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 and the Geelong Waterworks and Sewerage Trust, and systems were in operation in 30 districts (including five partly operating) serving a population of 268,800 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, 1955, included 38 large reservoirs and 240 subsidiary reservoirs and service basins with a total storage capacity of 1,309,237 million gallons (4,808,950 acre feet). Length of channels was 15,117 miles (irrigation, 4,949 miles, domestic and stock 8,064 miles, drainage and flood protection, 2,104 miles) and of pipe lines 1,242 miles. The quantity of water delivered to water users during 1954-55 was 1,070,433 acre feet. The Commission administered 65 rural districts during 1954-55 (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, 194,530, 356,470 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 1950-51 to 1954-55.

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
1950-51 ..	41,318,382	1,592,333	1,810,264	37,950	97,425	1,383	1,947,022
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

(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, 1955, was £9,767,389, making a grand total of £83,223,977 when added to the figure for works under the control of the Commission. The net loan capital after redemption payments of £2,305,836 was £80,918,141.

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 1954-55 was £3,002,178.

3. Queensland.—(i) *Brisbane City Council—to 30th June, 1955.* (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 fifteen 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, 1955 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 £3 10s. and £2 6s. 8d. 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 1950-51 to 1954-55:—

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)
1950-51 ..	117,904	464,000	27.9	10,193	237	60.8	1,642	52,691
1951-52 ..	124,992	483,000	32.4	11,860	259	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

(a) Includes Ipswich and Redcliffe.

(b) Not available.

(c) *Sewerage.* The sewage treatment works are 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, 1955 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 £3 15s. and £3 5s. respectively. The following table is a summary of operations of the Brisbane sewerage scheme for the years 1938-39 and 1950-51 to 1954-55 :—

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
1950-51	..	..	..	..	44,700	176,000	5,351	608
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

(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 1950-51 to 1954-55 :—

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
1950-51 ..	8,116,654	926,954	383,700	333,210	805,903	+ 121,051
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
Sewerage—						
1938-39 ..	5,992,936	240,963	52,792	403,386	485,974	- 245,011
1950-51 ..	8,821,671	483,854	105,928	313,308	472,745	+ 11,109
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

(ii) *Country Towns.* (a) *Water Supply.* In addition to the City of Brisbane, there were, at 30th June, 1954, 118 cities and towns in Queensland provided with water supply systems controlled by municipal and shire councils.

(b) *Sewerage Systems.* At 30th June, 1954, 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 1954-55, 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 1951-52 to 1955-56 :—

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.				
1938-39.. ..	185,625	£ 6,302,445	Acres. 11,857,968	Mill. gals. 23,814	Miles. 6,384	97,074
1951-52.. ..	227,082	12,202,222	11,974,297	23,984	7,368	114,222
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

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

(b) *Finances.* Figures for 1938-39 and 1951-52 to 1955-56 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
1951-52.. ..	25,718,681	1,301,075	1,279,742	747,386	2,027,128	726,053
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

(iii) *Adelaide Waterworks.* At 30th June, 1956, the Adelaide waterworks supplied a district of 144,711 acres. The capacity of its five reservoirs was 14,469 million gallons and there were 1,920 miles of mains.

The Mannum-Adelaide pipeline conveys water from the River Murray to Angas Creek and supplements the Metropolitan and Warren system areas and serves 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 1951-52 to 1955-56 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
1951-52	10,101,923	860,492	507,444	260,752	768,196	+ 92,296
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

(iv) *Adelaide Metropolitan Sewerage.* The Adelaide metropolitan sewerage system, comprising the Adelaide, Glenelg and Port Adelaide areas, with drainage areas of 104 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 5,903 million gallons during 1955-56. Other particulars for 1938-39 and 1951-52 to 1955-56 are shown hereunder :—

ADELAIDE METROPOLITAN SEWERAGE : SUMMARY.

Year.	Length of Sewers.	Number of Con-nexions.	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
1951-52	1,163	113,432	5,372,988	515,303	358,002	161,780	519,782	- 4,479
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

(v) *Country Water Supply.* Water district systems outside Adelaide at 30th June, 1956 comprised an area of 11,962,084 acres, and the capacity of the reservoirs was 9,545 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 1955-56, nine bores were in operation and 372 million gallons were pumped from the basin to meet the needs of Port Lincoln. At 30th June, 1956, £5,099,202 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 1951-52 to 1955-56 :—

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
1951-52..	13,123,855	339,155	727,174	405,334	1,132,508	793,353
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

(a) Excludes Morgan-Whyalla system.

(vi) *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, 1956, being £2,585,869. Particulars of this scheme, where applicable, are included in the tables of the combined waterworks in (ii) above. During 1955-56, the water used from the system between Hanson and Whyalla amounted to 1,553 million gallons. Revenue for the year 1955-56 was £182,398, working expenses, etc., £178,248, interest charges, £83,734 and deficit, £79,584. Corresponding figures for 1954-55 were respectively, £173,880, £155,195, £82,200 and £63,515.

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, covering Perth, Fremantle, Claremont, Guildford, Midland Junction and Armadale District ; (b) Country Areas (previously Goldfields) Water Supply ; (c) Water Supply of other towns, etc. ; (d) Agricultural Water Supply ; and (e) Artesian and sub-artesian waters.

(ii) *Metropolitan Water Supply, Sewerage and Drainage.* (a) *General.* The sources of the metropolitan water supply are the Canning Dam, Churchman's Brook, Wongong Brook, Victoria Reservoir, Armadale Pipe Head Dam and Well, and certain 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 to which it is linked by a pipeline.

The sewage treatment works of Perth and suburbs consist of primary sedimentation with separate sludge digestion and discharge of all effluent direct to the ocean. Fremantle treatment works consist 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 1950-51 to 1954-55.

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
1950-51 ..	84,926	303,422	28.4	10,354	334	93.5	1,271	52,277
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	353	105.7	1,597	78,194

Water rating for 1954-55 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 1950-51 to 1954-55 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
1950-51 ..	50,480	212,016	3,809	605	34
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

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

Sewerage rating for 1954-55 was 1s. 10d. in the £1 on annual valuation, while storm-water drainage rating was 5d.

(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 1950-51 to 1954-55:—

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
1950-51 ..	6,771,509	488,396	228,442	243,807	472,249	+ 16,147
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
Sewerage and Drainage—						
1938-39 ..	3,497,938	174,950	30,630	149,714	180,344	- 5,394
1950-51 ..	4,884,224	288,598	119,125	206,701	325,826	- 37,228
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

(iii) *Country Areas Water Supply (Previously Goldfields Water Supply)*. The source of supply for Kalgoorlie, Coolgardie and adjacent goldfields, as well as for the towns and districts on or near the pipeline, is the Mundaring Reservoir, whose capacity is 15,100 million gallons. This scheme is linked by pipeline with the Canning Dam.

Work is also proceeding on the comprehensively reticulated water scheme at a revised estimated cost of approximately £10,000,000 to serve an area of about 4,500,000 acres of farm lands and some 23 agricultural towns, including the principal towns on the Great Southern Railway. The supply to the Eastern Goldfields will be increased to permit expansion of the gold-mining industry, the already increased capacity of the Mundaring Reservoir being part of this scheme. It is also planned to increase the storage capacity of the Wellington Dam to 38,000 million gallons. The maximum amount of financial assistance to be provided by the Commonwealth Government is £4,000,000. Expenditure on this work to 30th June, 1955 totalled £3,216,951.

The following table shows details of the Country Areas Water Supply for 1938–39 and 1950–51 to 1954–55 :—

COUNTRY AREAS WATER SUPPLY(a), WESTERN AUSTRALIA : SUMMARY.

Year.	Number of Services.	Total Con-	Length of	Number of Meters.	Capital Cost.	Revenue.	Expendi- ture.(b)	Surplus
		sumption.	Water Mains.					(+) or Deficit (-).
		Mill. gals.	Miles.		£	£	£	£
1938-39 ..	13,670	1,735	1,720	10,872	5,527,890	331,457	298,531	+ 32,926
1950-51 ..	16,229	2,162	1,793	14,180	7,464,331	359,468	673,318	- 313,850
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	1,818	15,500	8,770,042	432,502	1,071,597	- 639,095
1954-55 ..	18,034	2,536	1,850	16,045	9,417,014	445,650	1,000,756	- 555,106

(a) Previously Goldfields Water Supply.

(b) Includes interest and debt redemption.

(iv) *Water Supply of Other Towns, etc.* (a) *Controlled by Public Works Department*. During 1954–55, water supplied to other towns and districts, excluding minor water supplies amounted to 906 million gallons, including service to adjacent mines, 21 million gallons, and railways, 100 million gallons. There were in all 17,118 services connected.

(b) *Controlled by Commonwealth and State Government Railways*. Consumption for the year ended 30th June, 1955 was 261 million gallons. In addition, 370 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 1954–55, approximately 435 million gallons of water were supplied to an estimated population of 18,152.

(v) *Agricultural Water Supply*. From 1st July, 1904 to 30th June, 1955, 585 tanks were built, 1,159 wells sunk, and 5,617 bores (including artesian) put down. Of the bores put down, 1,594 yield fresh or stock water.

(vi) *Artesian and Sub-artesian Waters*. Up to 30th June, 1955 the total number of bores put down in search of artesian or sub-artesian water (inclusive of operations by Defence Services) was 341, ranging in depth from 21 to 4,006 feet. Water (fresh or stock) was struck in 291 bores, 175 of which were artesian and 116 sub-artesian.

6. *Tasmania*.—(i) *Waterworks*. At the end of 1955–56, there were 64 municipal waterworks in Tasmania. The capacity of the reservoirs was 887 million gallons, the estimated population served was 227,000, the number of tenements served was 56,880. In addition, two regional schemes operated by the State Government were serving an estimated population of 18,000 in 4,428 tenements.

(ii) *Sewerage*. At the end of 1955–56, there were 11 municipal sewerage schemes in operation in Tasmania. They served an estimated population of 147,000 and the number of tenements served was 36,673.

§ 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 1954–55 and 1955–56 are shown in Chapter XI.—Transport and Communication, A. §5. Shipping at Principal Ports. Particulars of oversea and interstate cargo discharged and shipped during 1955–56 are shown in 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 tides) 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 1950–51 to 1954–55 :—

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
1950–51	11,779,317	1,032,685	333,902	1,955,073	1,155,004	528,928	1,683,932	+ 271,141
1951–52	12,194,585	1,107,933	334,530	2,354,154	1,455,711	533,401	2,289,112	+ 65,042
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

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

Capital expenditure for each of the years 1938–39 and 1950–51 to 1954–55 was £28,576, £384,911, £495,443, £465,764, £468,010 and £583,558 respectively. Expenditure on renewals and replacements from the Renewals Fund Reserve Account was : 1950–51, £196,102 ; 1951–52, £291,454 ; 1952–53, £299,286 ; 1953–54, £317,493 and 1954–55, £306,542.

(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 wharfrage 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 regard to 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. Wharfrage 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 a number of 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 eight 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 wharfrage 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 wharfrage 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 $1\frac{1}{2}$ 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 Federal 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 £4,339,154 in 1954-55. These figures include the Port of Sydney revenue (*see table above*) and State navigation service collections (£1,245,839 in 1954-55). Commonwealth Government revenue from light dues and navigation receipts, for the whole of Australia, amounted to £249,775 in 1954-55.

2. Victoria.—(i) *Melbourne Harbour 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, 1955, the sheds available for wharfage accommodation had a length of 21,766 feet, covering an area of 1,569,016 square feet. The area of water in the bay and 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 62,703 feet, giving an area of over 58 acres of wharfage, and 58,161 feet of effective berthing space. During 1955, 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 1951 to 1955.

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
1951 ..	5,883,857	1,493,423	2,129,432	1,036,842	235,881	175,263	1,768,105	+ 361,327
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

(a) Includes statutory payments to Consolidated Revenue and Geelong Harbor Trust :—1939, £155,234 ; 1951, £320,119 ; 1952, £270,690 ; 1953, £303,263 ; 1954, £379,162 ; 1955, £452,219. Excludes capital expenditure :—1939, £128,567 ; 1951, £2,058,921 ; 1952, £2,246,097 ; 1953, £1,255,613 ; 1954, £1,255,625 ; 1955, £1,509,665.

(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. The port dredging programme was nearing completion at the end of 1955 and will provide a minimum depth of water throughout approaches and at all berths of 32 feet (mean low water spring tides).

Revenue for the year 1955 was £746,600, and revenue expenditure was £423,648. The value of the Trust's fixed assets less depreciation was £3,629,184 and £4,270,378 at 31st December, 1954 and 1955 respectively. Loans outstanding at the end of 1955 amounted to £2,993,097.

(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 1950-51 to 1954-55 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
1950-51	1,572	221	253	237	329
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	685	853	456	693

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. After 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, 1955 are shown below, together with a summary for the years 1939 and 1950 to 1952 and for the period of eighteen months ended 30th June, 1954.

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).	
Bowen	351,228	51,395	58,610	14,088	42,952	+ 15,658
Bundaberg	43,159	3,700	7,556	4,741	6,462	+ 1,094
Cairns	230,779	195,179	300,908	232,149	285,477	+ 15,431
Gladstone	451,330	31,020	164,605	8,272	116,276	+ 48,329
Mackay	764,001	186,950	202,438	32,620	204,674	- 2,236
Rockhampton	530,332	62,303	83,618	55,299	90,286	- 6,668
Townsville	436,698	235,957	290,878	183,372	250,477	+ 40,401
Total, 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
.. 1950	1,611,241	378,949	510,719	284,896	408,561	+ 102,158
.. 1939	1,548,144	249,510	401,439	139,752	343,083	+ 58,356

(a) Years 1939 and 1950 to 1952, 31st December.

(b) Eighteen months ended 30th June, 1954.

4. *South Australia.—The South Australian Harbors Board.* All South Australian harbours are controlled by the South Australian Harbors Board, which consists of three Commissioners appointed by the Governor for a period of five years and eligible for re-appointment. The Board is responsible to the Minister of Marine for the discharge of its duties and functions. The most important ports are the five deep sea ports of Port Adelaide, Port Pirie, Wallaroo, Port Lincoln and Thevenard. At several 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) and Ardrossan where the Broken Hill Pty. Co. Ltd. has installed a bulk loading plant for handling dolomite, grain and salt. Stenhouse Bay, Port Augusta and Rapid Bay comprise the other private ports with interstate or oversea trade. 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 1951–52 to 1955–56:—

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
1951–52 ..	9,581,786	1,336,504	1,039,801	280,872	..	1,320,673	+ 15,831
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

(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 Governor-in-Council. Maximum depth of water (low water ordinary spring tide) at the entrance to the harbour is 36 feet, and at the wharves 33 feet. The length of wharf berth accommodation is 10,495 feet.

In January, 1955, the channels, which were dredged through Success and *Parmelia* Banks in the southern portion of the Fremantle Outer Harbour, were officially opened and berthage facilities became available to the oil refinery and steel rolling mill at Kwinana.

Gross earnings for the years 1954–55 and 1955–56 amounted to £2,214,454 and £2,056,141 respectively, working expenses to £1,772,386 and £1,838,650, interest £164,544 and £174,280, debt redemption £48,167 and £51,723 and renewals fund £2,000 in each year. There were also special loan repayments from revenue amounting to £236,708 and £155,848. The total amount debited to loan capital account at 30th June, 1955 was £4,357,010 and at 30th June, 1956, £4,655,975.

(ii) *Bunbury Harbour Board.* The Bunbury Harbour Board consists of five members appointed by the Government. The depth of water at the entrance to the harbour and at the wharf is 27 feet (low water ordinary spring tide). Berthage accommodation is 3,700 feet. Gross earnings in 1954–55 and 1955–56 were £28,722 and £33,955, respectively, working expenses £73,747 and £45,978, and interest was £29,084 in each year. The total amounts debited to loan capital account at 30th June, 1955 and 1956 were £1,402,320 and £1,458,788 respectively.

(iii) *Other Ports.* Only the ports of Fremantle, Bunbury and Albany in Western Australia are under the control of trusts, the remainder are Government operated. Of these, Yampi, Carnarvon, Geraldton and Onslow have the largest amount of shipping movement.

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 1954–55 were £929,321,

and expenditures £822,221 including loan charges £137,460. The total receipts of the Hobart Marine Board during 1954–55 were £397,809, loan charges amounted to £32,869 and total expenditure to £406,724. Launceston Marine Board receipts during 1954–55 amounted to £243,141, loan charges to £22,716 and total expenditure to £187,881. Loan indebtedness of all marine boards and trusts at 30th June, 1955 was £2,391,112, of which £767,068 was in respect of Hobart and £267,351 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 oversea 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.*—(i) *General.* 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 1955. 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, the expenditure 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 rateable 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 rateable land in the area of the council not being land within a fire district constituted under the Fire Brigades Act 1909–1956.

(ii) *Board of Fire Commissioners of New South Wales.* At 31st December, 1955, the authorized strength of the Fire Brigade throughout the fire districts of New South Wales was 360 officers and 868 permanent and 2,320 volunteer firemen. Corresponding figures for the Sydney Fire District were 299, 822 and 343. The revenue for the year 1955 was £1,850,599, made up as follows:—From the Government, £228,099, municipalities and shires, £228,099; fire insurance companies and firms, £1,368,594; and from other sources, £25,807. The disbursements for the year were £1,889,966.

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, 1955, the Board had under its control 44 stations, 684 permanent staff, 65 special service and clerical, etc., staff, and 15 part-time firemen. The total receipts for 1954–55 were £1,076,731 comprising contributions, £865,857, receipts for services, £113,709, and interest and sundries, £97,165. The expenditure was £1,060,540.

(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, 1955, the Act applied to 155 insurance companies, 198 urban and 1,010 rural fire brigades. The effective registered strength of the brigades was 93,788 members.

The receipts for the year 1954-55 amounted to £362,718. Total expenditure other than loan amounted to £356,741.

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 Brigades Boards.* At 30th June, 1954, the latest year for which figures are available, there were 71 Fire Brigades Boards. The total number of stations was 121, and full-time staff numbered 466, including 15 administrative, 83 officers and 368 firemen. Workshop staff numbered 17. Part-time staff numbered 605, including 70 administrative, 99 officers and 436 firemen. Volunteers numbered 392. The total revenue for the year 1953-54 was £584,508 received mainly from the following sources—Government £156,114, local authorities £155,560, insurance companies £234,244 and loans (Government and other) £94,672. The total expenditure for the year was £555,439 the chief items being salaries and wages £406,161 and interest and redemption of loans £27,244.

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, 1955, there were altogether 35 fire brigade stations, of which 12 were metropolitan and 23 country.

The authorized strength of the permanent staff was 371, including 264 officers and men and 85 country auxiliary firemen. The total revenue for the year 1954-55 was £298,188 made up as follows:—insurance companies £179,627, Treasury £46,710, and municipalities £71,851. The Treasury contribution includes an additional grant of £34,704.

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 31 fire districts at 30th September, 1955. 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 55 and 134 respectively. The brigades throughout the State controlled by the Western Australian Fire Brigades Board at 30th September, 1955 numbered 49, with a staff of 1,393 including 239 permanent officers and firemen and 1,125 volunteer brigade officers and firemen. The revenue for the year ended 30th September, 1955, was £306,350 and the expenditure £308,090.

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 1,160 at 30th June, 1955 and the establishment of bush fire brigades, the number of which was 610 at 30th June, 1955.

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 1954–55 amounted to £99,487. There were at 30th June, 1955, 23 brigades controlling 31 stations and their aggregate staffs numbered 422, including 77 permanent officers and 335 part-time firemen, including officers.