CHAPTER IV.

LOCAL GOVERNMENT.

§ 1. Introduction.

1. General.—The construction and maintenance of roads, bridges and ferries are generally part of the functions of local authorities, but in New South Wales and South Australia, more especially in the large unincorporated areas, these duties are undertaken directly by the Government. In some States, moreover, a certain proportion of the roads and bridges is constructed and maintained by the Government, which, in addition, advances money for main roads to be expended by municipalities under the supervision of special Boards. Although roads, bridges and ferries constructed and maintained directly by Government do not properly come under the heading of "Local Government," they have been included in this chapter for the sake of convenience.

2. Municipalities, Shires, etc.—A description of the various systems of municipal government in the different States, and their development from the earliest date, was published in 1919 by the Commonwealth Bureau of Census and Statistics in a separate work entitled "Local Government in Australia." Limits of space preclude the incorporation of the information contained therein in the Official Year Book.

3. Water Supply and Sewerage.—In the cities of Sydney, Melbourne and Brisbane 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.

4. Harbours.—The majority of the harbours in Australia are managed by Boards, the members of which are either elected by persons interested or appointed by the Government. In a few instances, however, they are directly controlled by the Government. Only those which are controlled by Boards are dealt with in the following pages.

5. Fire Brigades.—In all the States, the management of fire brigades is undertaken by Boards. The members of these Boards are usually elected by the councils of municipalities and insurance companies within the districts placed under their jurisdiction, together with one or more appointed by the Government. Occasionally volunteer or country fire brigades are represented.

§ 2. Government Roads, Bridges, Etc.

1. New South Wales.—(i) General. The control of all roads, bridges and ferries with the exception of those proclaimed as "National" and of those in the unincorporated areas of the Western Division, which still remain under its jurisdiction, was transferred, in 1920, from the Public Works Department to local authorities. The Government has also adopted the policy of assisting municipal and shire councils to recondition certain main roads by doing the work in the first instance, and recovering in instalments from the councils concerned one-half of the cost. (ii) Roads, Bridges and Ferries. At the 30th June, 1927, the "National" works consisted of 58 miles of roads, 288 bridges with a total length of 108,295 feet, and 18 ferries, while in the unincorporated areas of the Western Division there were 5,688 miles of roads (of which 177 miles were metalled or ballasted, 220 formed only, and 2,932 cleared only), 96 bridges of a total length of 13,495 feet, 489 culverts, and 6 hand punts under the control of the Public Works Department.

(iii) Expenditure on Roads, Bridges and Ferries. The following table shows the expenditure by the Government on roads, bridges, punts, ferries, etc., during each of the years 1923-24 to 1927-28 :---

Year.		Expenditure from Votes of Public Works Department.	Expenditure from Funds of Main Roads Board.	Endowments and Grants to Councils from Votes of Local Government Department.	Total Expenditure.	
			£	£	£	£
1923-24	••	••	479,372		397,010	876,382
1924 - 25	••	••	254,121		577,031	831,152
1925-26	••	• •	321,785	1,385,888	265,119	1,972,792
1926-27	• •		343,013	2,498,802	191,549	3,033,364
1927-28			361.023	3,090,074	263,914	3,715,011

ROADS, ETC .- EXPENDITURE BY GOVERNMENT, 1923-24 TO 1927-28.

The Government expenditure in connexion with the Sydney Harbour Bridge, which amounted to £3,348,908 to the 30th June, 1928, is not included in the figures shown in the table above. Of the total sum expended to date, £2,566,468 was provided by General Loan Account and the balance from proceeds of municipal and shire rates.

2. Victoria.—(i) General. A small sum is expended annually by the State Government on roads and bridges, and a considerable amount of loan money is advanced in each year to the Country Roads Board for the purpose of constructing and maintaining main and developmental roads, the amount so expended during the year ending 30th June, 1927, being £1,042,441, and in 1927-28, £882,896. An annual payment of £50,000 is also made out of Consolidated Revenue to the Board for maintenance works.

(ii) Direct Expenditure by Government. The following table shows the amounts of money expended directly by the Government on roads and bridges during the years 1922-23 to 1927-28 :--

ROADS AND BRIDGES—GOVERNMENT EXPENDITURE, VICTORIA, 1922-23 TO 1927-28.

Year.	1922-23.	1923–24.	1924-25.	1925-26.	1926-27.	1927-28.
Expenditure	£	£	£	£	£	£
	65,459	46,761	68,939	81,205	193,291	170,575

(iii) Country Roads Board. The duties of this Board were given in some detail in Year Book No. 15, p. 526.

Loans to the amount of £4,822,000 have been authorized from time to time for permanent works under the Country Roads Acts. One half of the amount expended on permanent works and one-third of the amount expended on maintenance must be refunded by the municipalities affected, 6 per cent. of the amount due in respect of permanent works being payable annually, and the cost of maintenance allocated to each municipality must be paid before the 1st of July in each year. A special rate, not exceeding 6d. in the pound, may be levied in any ward or riding of a municipality for the purpose of such repayment.

All registration fees, licence fees and fines under the Motor Car Act, all licence fees for unused roads and water frontages, and all registration fees and fines for tractionengines are credited to the Country Roads Board Fund. The total loan expenditure for permanent works to the 30th June, 1927, was £3,863,463. The following table gives the revenue and expenditure on permanent and maintenance works for the five years 1922-23 to 1926-27 :--

				Expenditure.					
Yearended 30th June.		Motor Regis- tration	Unused Roads	Contribu Municij		Total.	Permanent	Main-	
		and Licence Fees.	etc., Licence Fees.	Permanent Works.	Main- tenance.	Total.	Works.	tenance.	
•		£	£	£	£	£	£	£	
1923		158,249	19,933	68,608	123,819	514,469	266,046	288.129	
1924	••	222,251	20,110	76,355	134,349	585,742	201,615	343,233	
1925	••	402,971	19,801	82,931	154,557	660,260	228,872	468,182	
1926	••	632,087	19,958	88,148	178,902	918,285	302,844	788,332	
1927	••	796,912	19,543	95,195	144,393	1,056,043	398,859	938,657	

COUNTRY ROADS BOARD, VICTORIA—REVENUE AND EXPENDITURE, 1922-23 TO 1926-27.

(iv) Developmental Roads. For the purpose of constructing and maintaining subsidiary or developmental roads, the Government has been authorized to borrow sums aggregating £6,475,000. The work is carried out under the supervision of the Country Roads Board, and the State provides the whole of the money and makes provision out of State funds for liquidating the liability; the municipalities, however, are required to bear a proportion of the interest on the outlay during the period of the loan and to maintain the roads when constructed. The amount expended during the year ended 30th June, 1927, was £576,710, and the total expenditure to that date was £4,352,329.

3. Queensland .--- Under " The Main Roads Act of 1920," a Main Roads Board was constituted, consisting of three members appointed by the Governor in Council. Subsequently, by "The Main Roads Acts Amendment Act of 1925," the Board was abolished, and its powers conferred upon a single commissioner. The duties of the Commissioner are to make the necessary surveys and investigations in order to determine what roads should be main roads, and, under certain circumstances, to undertake the construction and maintenance of such roads. Before any road can be proclaimed a main road, the shire councils through whose areas such road passes have the right to lodge objections thereto, and the Commissioner must consider such objections and may vary his decision. The whole of the money necessary for the construction and maintenance of main roads is provided from the Main Roads Fund at the Treasury, and the councils concerned must repay up to one-half the cost thereof over a period of 30 years, with interest. This fund is formed from (a) moneys appropriated by Parliament therefor, (b) fees on motor vehicles and traction engines, (c) fees and rents for unused roads, (d) moneys received from the sale of timber, sand, etc., on any main road and (e) all other moneys received or recovered by the Commissioner. Wherever possible, the Commissioner arranges with local authorities to undertake the survey and construction of works, but in most cases, owing to the dearth of trained engineers in the employ of councils, the Commissioner has had to undertake most of the survey work and preparation of plans and a considerable portion of the construction. During the year ended 30th June, 1928, the receipts of the Commission amounted to £1,034,049, including £257,886 from the Treasury Loan Fund, £377,222 from motor fees, and £320,939 from the Commonwealth for works under the Federal Aid Scheme; and the disbursements to £946,461, including £99,070 expenditure on permanent works, £542,180 on works under the Federal Aid Road Scheme and £132,394 on maintenance of main roads. At that date, 5,575 miles of roads had been gazetted as main roads, and 437 miles had been surveyed during the year. In addition, 362 miles of roads had been gazetted as developmental roads up to 30th June, 1928, and 75 miles surveyed during the year.

The money made available to the State under the "Federal Aid Road Act" is allocated and expended under the direction of the Commissioner of Main Roads.

The developmental roads sections of "The Main Roads Acts 1920 to 1928" provide that on such roads the Commissioner will be responsible for the total cost of construction, but that the local authorities concerned shall repay half the interest over a period of twenty years, and that the local authorities shall be responsible for maintenance. The 1928 amendment of the Act makes provision for the declaration and construction of tourist roads. It also prescribes in certain cases more liberal terms in connexion with interest repayments and maintenance of main and developmental roads.

4. South Australia.—The Highways Act 1926 created a Commissioner of Highways and provided for a Main Roads Fund. The Commissioner is virtually empowered to determine upon which roads he will spend the moneys available, in doing which he has to take into account (a) the moneys voted, or likely to be voted, by Parliament for main roads; (b) whether the road is or will be the main trunk route: (i) connecting any large producing area, or any area capable of becoming in the near future a large producing area, with its market or nearest port or railway station; (ii) connecting two or more large producing areas, or areas capable of becoming in the near future large producing areas, or between two or more large centres of population; (iii) between the capital and any large producing area or any large centre of population; (iv) between the capitals of this State and any other State; and (c) whether the area through which the road passes is, or in the near future will be, sufficiently served by a railway or railways.

The Main Roads Fund is to be credited with (a) licence fees and registration fees under the Motor Vehicles Acts 1921 to 1927; (b) licence fees under the Vehicles (Licensing) Act 1925; (c) motor vehicles tax under the Motor Vehicles Tax Acts 1915 to 1927; (d) fines, penalties, and forfeitures in respect of convictions for offences against the Motor Vehicles Acts, of the Motor Vehicles Tax Acts (exclusive of any sum received for costs), or the Width of Tires Acts; (e) fees for hawkers' licences issued by the Treasurer; (f) contributions from Councils; (g) all sums appropriated by Parliament for main roads; (h) all loans raised and appropriated for main roads.

Moneys standing to the credit of the Fund are to be used by the Commissioner for (a) payment of the expenses incurred in connexion with carrying out the provisions of the Act; (b) defraying the cost of the operations undertaken by the Commissioner in connexion with main roads and works; (c) payment to each council of the amount of its annual grant for main roads; (d) defraying the cost of any work required to be executed by the State pursuant to any agreement with the Commonwealth relating to the construction, reconstruction and maintenance of roads, etc.; (e) refunding to the Treasurer any moneys paid or set aside out of General Revenue pursuant to the Main Roads Fund Act 1922; or for the purpose of payment of the interest on any loan raised after the 1st July, 1926, and appropriated to main roads; and (f) paying during each financial year to the Public Debt Commissioners for the purposes of the reduction and redemption of any loan raised after the 1st July, 1926, and appropriated to main roads, in addition to any other sum required by law to be so paid for such purposes, at least such a sum as will amount to one and one-quarter per centum of the principal for the time being of such loan.

The Commissioner determines the amount of the Annual Main Road Grant to each Council for construction and maintenance of main roads and also the amount of money to be expended by each Council out of its revenue for the same purpose provided that such contribution shall not exceed one-half of the grant. In the case of main roads maintained departmentally the Commissioner may recover from the Council in respect of maintenance and interest charges, etc., up to one-third of the annual outlay or an

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amount calculated at £150 per mile per annum, whichever amount is the smaller. The Commissioner also allocates to Councils funds voted by Parliament for roads in newlysettled areas and supervises the expenditure of funds provided under the Federal Aid Roads Scheme. The Commissioner has power to deal with cases in which any main road is being neglected by a Council or in which any work towards which a grant of assistance has been made is not being satisfactorily carried out.

The expenditure from the Main Roads Fund for the year ended 30th June, 1928, was £956,646; grants in aid of rates collected paid to Councils amounted to £136,807. In the sparsely-settled districts outside the incorporated areas, the roads and bridges are constructed and maintained by the Public Works Department which expended during the same period £31,051.

5. Western Australia.—In Western Australia the construction, maintenance, and management of roads and bridges throughout the State are under the control of municipalities and district road boards which are subsidized by the Government.

6. Tasmania.—(i) Construction. In Tasmania the cost of construction of roads and bridges is borne almost entirely by the State Government.

			Expenditure.		New-road Mileage.			
Period.			Loans. Land		Cleared.	Metalled.	New Bridges.	
			£	£	Miles.	Miles.	No.	
			56,752	5.537	53	48	15	
			130,872	5,342	139	119	16	
• •	••		192,469	5,465	136	108	14	
••		••	144,327	4,888	81	81	29	
••	••	• •	176,118	5,464	111	145	18	
		· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	Period. 	Period. Loans. Crown Lands Fund. £ £ 56,752 5,537 130,872 5,342 192,469 5,465 144,327 4,888	Period. Loans. Crown Lands Fund. Cleared. 56,752 5,537 53 130,872 5,342 139 192,469 5,465 136 144,327 4,888 81	Period. £ Crown Lands Fund. Cleared. Metalled. · £ £ Miles. Miles. · · · 56,752 5,537 53 48 · · · · 130,872 5,342 139 119 · · · · 192,469 5,465 136 108 · · · · 144,327 4,888 81 81	

ROADS AND BRIDGES, TASMANIA—GOVERNMENT EXPENDITURE ON CONSTRUCTION, 1924 TO 1928.

In addition, in 1927-28, the sum of £87,372 provided by the Commonwealth Government was expended on roads; the conditional expenditure by the State Government is included in the above figures.

(ii) Maintenance. The maintenance of roads and bridges is undertaken by the municipalities with some assistance from the State Government, chiefly by way of subsidy. Under the Aid to Road Rates Act, a sum of £11,000 is distributed annually among the municipalities, in proportion as the cost of maintenance falls on their resources. Under the Main Roads Maintenance Act 1918 a further sum of £5,000 was provided out of Consolidated Revenue, which, with the addition of the motor tax, less

5 per cent., and a contribution from municipalities, is expended on the upkeep of main roads. In 1928-29 the amount available for 1,018 miles of main road was £55,969. The work is carried out in most cases by municipalities, under the general direction of an Advisory Board, on which the Government, the municipalities, and the motorists are all represented. Further, the Repairs to Roads Act 1920 provides for loans for 15 years to municipalities for the purpose of re-making roads—half the loan is repaid in instalments by the local body and the remainder by the State Government. The Government also provides for the repair of the more important bridges, and for emergency work.

The above provision for maintenance has, however, in recent years been found insufficient to cope with the heavier motor traffic, and to meet the demand for a better road surface further legislation is in contemplation.

7. Summary of Loan Expenditure on Roads and Bridges.—Figures showing the total expenditure on roads and bridges in the States are not available. The subjoined statement, however, gives the amounts of loan expenditure by the State Governments up to the 30th June, 1928 :--

ROADS AND BRIDGES.—GOVERNMENT LOAN EXPENDITURE TO THE 30th JUNE, 1928.

Expenditure.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	All States.
Total to 30/6/28	£	£	£	£	£	£	£
	8,600,520	9,864,032	2,741,986	3,223,016	1,275,786	4,547,621	30,252,961

The following table shows the annual expenditure from loans on roads and bridges by the central Governments in each State during the years 1923-24 to 1927-28 :---

Year Ended 30th June.		N.S.W.	Victoria.	Q'land. (a)	S. Aust.	W. Aust.	Tasmania.	All States.
		£	£	£	£	£	£	£
1924	••	185,578	627,078	496,000	165,940	77,744	56,752	1,609,092
1925	••	742,266	1,177,826	200,000	132,268	92,606	130,872	2,475,838
1926	••	972,793	1,155,087	356,517	246,908	96,835	192,469	3,020,609
1927	••	1,726,420	1,104,345	313,121	475,601	184,911	144.327	3.948.725
1928		2,554,785	917,540	262,203	144,866	364,223	176,118	4,419,735

ROADS AND BRIDGES.—LOAN EXPENDITURE BY STATES, 1924 TO 1928.

(a) Includes expenditure on main roads through local authorities.

The two tables given above show only a small proportion of the actual expenditure upon roads and bridges in the different States, for the reason that (a) there have been large expenditures from revenue both by the central Governments and by local authorities, and (b) the State Governments have in many cases voted grants and subsidies on the amount of rates collected, and have issued loans to local authorities either for the express purpose of the construction of roads and bridges or for the general purpose of public works construction.

§ 3. Municipalities, Shires, Etc.

1. New South Wales.—(i) General. Practically the whole of the State, with the exception of the Western Division, has been divided into municipalities and shires, the total area incorporated at the end of 1927 being 184,110 square miles, of which 2,504 square miles are included in the former and 181,606 in the latter. The areas incorporated comprise the whole of the Eastern and Central Divisions of the State, with the exception of Lord Howe Island, the islands in Port Jackson, and the quarantine station at Port Jackson.

(ii) Municipalities.—(a) Summary. The following table gives the number, area and population of municipalities, together with the length of roads and the number of bridges and ferries therein for the years 1923 to 1927 :—

47 .	No. of Year. Municipali-	Sydney as	nd Suburbs.	Cour	ntry.	Length	Bridges.	Ferries
rear.	ties.	Area.	Population.	Area.	Population.	of Roads.	Bridges.	Tennes.
1923 1924 1925 1926 1927	184 181 180 181 181	Acres. 95,259 95,259 96,010 96,010 96,010	No. 959,772 989,390 1,015,870 1,046,100 1,075,900	Acres. 1,720,275 1,593,075 1,516,883 1,521,683 1,506,344	No. 545,850 552,930 564,430 591,500 606,820	Miles. (a) 10,007 (a) (a) 10,229	No. (a) 673 (a) (a) 645	No. (a) 24 (a) (a) 38

MUNICIPALITIES, NEW SOUTH WALES .- SUMMARY, 1923 TO 1927.

(a) Not available-collected triennially.

Of the 10,229 miles of roads, 5,026 were blocked, metalled, ballasted or gravelled, 2,006 formed only, and 1,846 cleared only, while 1,351 miles were natural surface.

(b) Unimproved and Improved Values. The table hereunder gives a comparison of the unimproved and improved values for the years 1923 to 1927 inclusive :---

MUNICIPALITIES, NEW SOUTH WALES .- CAPITAL VALUES, 1923 TO 1927.

	Year.		Sydney.	Suburbs.	Total Metropolis.	Country.	Grand Total.
			· τ	UNIMPROVED V	ALUE.	· · · · · ·	<u>. </u>
			£	£	£	£	£
1923	••	•••	36,918,354	60,984,924	97,903,278	34,238,069	132,141,347
1924	••	••	45,593,929	65,559,272	111,153,201	36,068,427	147,221,628
1925	••	••	45,656,053	70,391,344	116,047,397	37,931,396	153,978,793
1926	••	••	45,675,896	74,746,427	120,422,323	40,224,070	160,646,393
1927	••	••	62,491,115	79,917,408	142,408,523	43,971,292	186,379,815
				IMPROVED VA	LUE.		
1923			107,239,980	174.364.307	281,604,287	99,739,138	381,343,425
1924	••	••	141,629,260	191,921,240	333,550,500	106,363,410	439,913,910
1925	••	••	151,367,380	207,838,392	359,205,772	112,733,389	471,939,161
1926	••	• •	151,528,760	222,560,966	374,089,726	121,329,258	495,418,984
1927	••	••	185,394,260	238,902,863	424,297,123	132,105,262	556,402,384

(c) Revenue and Expenditure. Particulars of the revenue and expenditure of municipalities for the year ending 31st December, 1927, under various headings, are given below:---

Particulars.	Sydney.	Suburbs.	Country.	Total.
	Revenue.			
General fund Trading accounts Special and local funds	$\left. \begin{array}{c} \pounds \\ \\ \\ \end{array} \right\} 4,193,797 (a)$	$\begin{cases} \pounds \\ \{2,398,349 \\ 56,903 \\ 61,725 \end{cases}$	£ 1,496,932 974,339 406,633	£ 3,895,281 (b) 1,031,242 (b) 468,358 (b)
Gross revenue	4,193,797	2,516,977	2,877,904	9,588,678

MUNICIPALITIES, NEW SOUTH WALES .- REVENUE AND EXPENDITURE, 1927.

EXPENDITURE.

General fund Trading accounts Special and local funds	 	$\left.\right\}$ 4,246,020 (a)	$\begin{cases} 3,037,543 \\ 48,676 \\ 61,418 \end{cases}$	1,614,817 807,706 353,701	4,652,360 (b) 856,382 (b) 415,119 (b)
Gross expenditure	••	4,246,020	3,147,637	2,776,224	10,169,881

(a) Items of revenue and expenditure for the city of Sydney cannot be allocated to the different headings shown for municipalities.
 (b) Exclusive of Sydney.

The next table shows the gross revenue and expenditure of all municipalities for the five years 1923 to 1927 :---

MUNICIPALITIES, NEW SOUTH WALES.—REVENUE AND EXPENDITURE, 1923 TO 1927.

Municipalities.			1923.	1924.	1925.	1926.	1927.
			GROSS]	REVENUE.	·	·	
			£	£	£	£	£
Sydney		• •	2,568,357	2,855,443	2,975,740	3,460,970	4,193,797
Suburban	••	••	1,709,262	1,869,399	2,197,524	2,319,009	2,516,977
Country	••	••	1,836,654	2,024.252	2,242,840	2,520,717	2,877,904
Total	••	••	6,114,273	6,749,094	7,416,104	8,300,696	9,588,678
			GROSS I	Expenditur	Е.	·	·
Sydney			2,371,043	2,666,616	3.086.313	3,587,126	4,246,020
Suburban			1,790,120	2,064,142	2,331,723	2,633,866	3,147,637
Country	•••	••	1,711,734	1,883,926	2,135,667	2,394,116	2,776,224
Total		••	5,872,897	6,614,684	7,553,703	8,615,108	10,169,881

(d) Assets and Liabilities. The financial position of the municipalities as at the **31st December**, 1927, is shown by the following statement of assets and liabilities.

Particulars.	Sydney.	Suburbs.	Country.	Total.
	Assets.	·		,
Outstanding rates Sundry debtors Stores and materials Land, buildings, furniture, et	$\begin{array}{c c} & \\ \vdots \\$) $\left\{ \begin{array}{c} \pounds \\ 447,521 \\ 128,448 \\ 169,928 \\ 57,220 \\ 1,301,680 \\ 159,475 \end{array} \right.$	£ 616,302 219,356 309,055 122,194 6,184,895 145,472	£ 1,063,823 (b 347,804[b 478,983 (b 179,414 (b 7,486,575 (b) 304,947_(b)
	. 26,544,103	2,264,272	7,597,274	36,405,649

MUNICIPALITIES, NEW SOUTH WALES .- ASSETS AND LIABILITIES, 1927.

LIABILITIES.

Loans, outstandin and sundry credit Debts due to Gover	ors		3,595,099	2,789,087	6,384,186 (b)
interest thereon . Bank overdrafts	•• ••	25,860,663 (a)		2,629,419	2,717,285(b)
Other	·· ··		288,639 68,307	326,530 79,209	615,169 (b) 147,516 (b)
Total .	••••	25,860,663	4,039,911	5,824,245	35,724,819

(a) Particulars for the city of Sydney cannot be allocated to the different headings shown for municipalities.
 (b) Exclusive of Sydney.

(iii) Shires.—(a) Summary. The following table gives the number, area, population, and unimproved capital value of shires, together with the length of the roads, and the number of bridges and ferries therein. It is not possible to give the improved capital value or the assessed annual value, as shires are not compelled to make these valuations.

SHIRES.	NEW	SOUTH	WALES SUMMARY,	1923	тo	1927.
~	*******	000	contraction of the second seco	-/		

Year.		No. of Shires.	Area.	Population.	Unimproved Capital Value.	Length of Roads.	Bridges.	Ferries
		No.	an milan	No.	£	miles.	No.	No.
1923		136	sq. miles. 181.140	691,000	140.392,104	(<i>a</i>)	(a)	(a)
1924		136	181,339	686,770	144,710,409	88,704	3,861	172
1925		136	181,590	692,280	148,251,227	(a)	(a)	(a)
1926		136	181,582	684,400	154,614,441	(a)	(a)	(a)
1927	••	136	181,606	692,150	158,991,208	93,482	3,943	173

(a) Not available-collected triennially.

Of the 93,482 miles of roads, 19,693 were metalled or ballasted, 14,937 formed only, and 29,992 cleared only, the balance being natural surface.

CHAPTER IV.-LOCAL GOVERNMENT.

(b) Revenue and Expenditure. The revenue and expenditure of shires for the years 1923 to 1927 are shown in the following table. Included in the receipts for 1927 are Government grants amounting to $\pounds 1,202,160:$ ---

Particulars.	1923.	1924.	1925.	1926.	1927.
	R	EVENUE.			
General Fund—	£	£	£	£	£
General rates (including					
interest)	1,064,842	1,129,863	1,178,501	1,275,540	1,346,734
Government endowment	150,296	146,705	149,345	147,525	153,410
Public works	204,129	323,357	679,322	1,038,343	1,169,697
Health administration	98,532	103,500	106,125	118,188	122,664
Public services	15,712	15,885	19,106	17,651	17,146
Shire property	8,124	11,741	14,460	19,534	30,606
Miscellaneous	16,977	15,364	20,920	32,858	27,401
Special and Local Funds	157,547	190,271	249,745	293,155	368,934
. Total revenue	1,716,159	1,936,686	2,417,524	2,942,794	3,236,592
	Exp	ENDITURE.	<u> </u>	, "	÷
General Fund—			1		[
Administrative expenses	158,362	159,719	181.713	185,986	199.344
Public works	1,268,550	1,467,867	1,948,301	2,437,726	2,551,747
Health administration	104,437	107,894	116,133	125,599	135,428
Public services	31,526	31,432	38,945	41,792	39,935
Shire property	7,041	8,524	10,438	15,224	15,269
Miscellaneous (a)	20,327	24,236	51,791	87,074	112,044
Special, Local, and Loan	,				
Funds	131,715	173,070	205,885	259,042	360,370
Total expenditure	1,721,958	1,972,742	2,553,206	3,152,443	3,414,137

SHIRES, NEW SOUTH WALES .- REVENUE AND EXPENDITURE, 1923 TO 1927.

(a) Includes interest on loans and overdraft—£13,185 in 1923, £19,934 in 1924, £29,083 in 1925, £54,271 in 1926, and £73,530 in 1927.

(c) Assets and Liabilities. The finances of the shires at the end of the year 1927 showed an excess of liabilities of £132,682. The following table gives particulars of assets and liabilities as at the 31st December, 1927 :---

SHIRES, NEW SOUTH WALES.—ASSETS AND LIABILITIES, 1927.

Assets.	Amount.	Liabilities.	Amount.
	£		£
Bank balances and cash	381,109	Loans outstanding, interest and	
Outstanding rates	215,667	sundry creditors	1,401,488
Sundry debtors	106,062	Bank overdrafts	459,180
Stores and materials	63.320	Other	146,510
Land, buildings, furniture, plant,		Debts due to the Government	
machinery, etc	1,523,962	and interest thereon	464,651
Other	49,027		
Total	2,339,147	Total	2,471,829

2. Victoria.—(i) General. Local Government is established throughout the State, the various divisions being termed cities, towns, boroughs, or shires. Melbourne and Geelong were incorporated under special statutes prior to the establishment of a general system of local government, and except in a few details are not subject to the provisions of the Local Government Act.

In addition to the endowment of £50,000, the municipalities received from the Government during the financial year 1927-28 a sum of £61,796 out of the Licensing Fund as the equivalent for (a) fees for licences, (b) fees for the registration of brewers and spirit merchants, and (c) fines, penalties, and forfeitures incurred under the Licensing Act 1915.

The financial years of the cities of Melbourne and Geelong end on the 31st December and the 31st August respectively; those of all other municipalities on the 30th September.

(ii) Municipalities. (a) Summary. The following table shows the number of cities, towns, boroughs, and shires, with estimated population, number of ratepayers and dwellings, and value of rateable property for the years 1924 to 1928 inclusive :---

Year ending 30th		Number	Estimated	Number of Ratepayers	Estimated Number		Estimated Value of Rateable Property.		
Septe	ember. Municipal- Population. Ratepayers		of Dwellings.	Total.	Annual.				
			CITIES, TO	WNS, AND	BOROUCHS.	···· · · · · · · · · · · · · · · · · ·			
		No.	No.	No.	No.	£	£		
1924	••	53	998,950	279,292	229,066	264,693,364	14,964,345		
1925	••	53	1,031,670	291,910	237,352	288,230,793	16,388,842		
1926	••	55	1,072,510	314,386	247,756	314,333,446	17,778,661		
1927	••	55	1,106,010	319,568	256,245	339,221,826	19,020,312		
1928	••	56	1,144,380	326,412	264,371	362,432,238	20,220,172		
				SHIRES.					
1924		139	627,420	213.317	147.830	235,274,597	11.816.074		
1925		139	635,340	221,345	151,721	250,480,405	12,588,177		
1926		139	632,550	246,161	151,353	257,350,043	12,933,459		
1927	••	139	643,950	254,403	154,411	267,100,576	13,426,424		
1928		139	647,860	265,265	156,202	274,314,322	13,780,690		

MUNICIPALITIES, VICTORIA.-SUMMARY, 1924 TO 1928.

(b) Revenue and Expenditure. The table hereunder shows the revenue from various sources, and the expenditure under various heads of municipalities during the years 1923 to 1927 :---

MUNICIPALITIES, VICTORIA .-- REVENUE AND EXPENDITURE, 1923 TO 1927.

Items.	1923.	1924.	1925.	1926.	1927.
	RE	VENUE.	······································	·	
	£	£	£	£	£
(Rates	2,559,847	2,847,282	3,152,570	3,380,749	3,615,998
Licences	152,437	155,009	162,430	161,682	162,863
Taxation \ Dog fees	24,832	26,211	27,836	28,131	29,332
Market and weigh-	-			,	
bridge dues	99,337	97,794	111,548	114,773	125,845
Government endowments and					
grants	60,607	87.783	88,335	147,014	163,384
Contributions for streets, etc.	141.484	180,502	264,996	320,582	352,733
Sanitary charges	162,129	175,520	185,091	202.360	206.351
Rents	108,502	125,544	133,623	137,941	138,977
Electric light and gas works	794,544	913,471	986,101	1.057.596	1,163,851
Other sources	385,204	391,637	466,550	561,718	622,937
Total Revenue	4,488,923	5,000,753	5,579,080	6,112,546	6,582,271
Loans	885,303	1,281,423	1,535,960	1,404,566	1,791,555
Total Receipts	5,374,226	6,282,176	7,115,040	7,517,112	8,373,826

	1927	-continued.		<u> </u>								
Items.	1923.	1924.	1925.	1926.	1927.							
Exp	ENDITURE F	ROM REVEN	UE.		· · · · · · · · · · · · · · · · · · ·							
	£££££											
Salaries, etc	340,319	359,493	381,815	407,009	437,921							
Sanitary work, street cleaning,												
etc	396,524	433,220	457,885	454,107	474,125							
Lighting	131,342	134,025	144,064	153,292	160,118							
Fire brigades' contributions	49,225	55,412	58,250	64,508	69,058							
Public Works Construction	294,711	404,661	479,690	454,247	488,881							
(maintenance	1,366,202	1,845,278	2,104,402	2,195,045	2,169,302							
Electric Light and Gas Works	582,380	680,568	715,498	757,456	808,630							
Formation of private streets,												
_ etc	163,660	343,978	426,689	446,961	548,131							
Redemption of loans	165,675	180,987	211,152	229,913	262,110							
Interest on loans	343,164	386,946	457,669	513,222	589,101							
Charities	26,288	28,550	30,187	35,469	34,096							
Other expenditure	356,199	393,545	433,154	581,493	724,142							
Total from Revenue	4,215,689	5,246,663	5,900,455	6,292,722	6,765,615							
E	XPENDITURE	FROM LOA	NS.	I	r							
	£	£	£	£	£							
Roads and Bridges	269,620	515,337	619.424	664.555	894,144							
Water and Irrigation	3,225	5,216	1,855	335	22,225							
Sewerage and Drainage	54,650	64,838	47,294	42,093	30,514							
Electric Light and Gas	191,655	239,406	226,400	205,780	289,649							
Public Buildings	53,995	119,277	114,472	101.271	226,381							
Other purposes	312,158	337,349	526,515	304,153	236,694							
Total from Loan	885,303	1,281,423	1,535,960	1,318,187	1,699,607							
Grand Total	5,100,992	6,528,086	7,436,415	7,610,909	8,465,222							

MUNICIPALITIES, VICTORIA.—REVENUE AND EXPENDITURE, 1923 TO 1927—continued.

(c) Assets and Liabilities. The assets of municipalities may be classified under three heads (a) the municipal fund, (b) the loan fund and (c) property; the liabilities under two heads—(a) the municipal fund, and (b) the loan fund. The following table shows the amount of municipal assets and liabilities for the years 1923 to 1927 :—

MUNICIPALITIES, VICTORIA.—ASSETS AND LIABILITIES, 1923 TO 1927.

Items.	1923.	1924.	1925.	1926.	1927.
	A	SSETS.	,		
MUNICIPAL FUND	£	£	£	£	£
Uncollected rates	202,251	231,623	282,495	286,338	333,086
Other assets	730,603	1,098,843	1.390.966	1.049,190	1,292,763
LOAN FUND-			,,		
(a) Sinking funds—	j.				
Amount at credit	455,766	500,214	496,522	545,712	610,002
Arrears due	670	127	724	210	209
(b) Unexpended balances	526,622	501,858	495,980	587,609	635.771
PROPERTY					
Buildings, markets, etc	3,470,951	3,956,760	4,254,220	4,782,140	5.311.830
Waterworks	255,737	264,630	258,890	340,920	360,180
Gasworks	145,874	174,660	176,330	185,690	193,540
Electric Light Works	1,699,120	1,816,760	1,966,810	2,060,140	2,232,760
Total	7,487,594	8,545,475	9,322,937	9,837,949	10,970,141

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Items.	1923.	1924.	1925.	1926.	1927.
	LIA	BILITIES.			
MUNICIPAL FUND-	£	£	£	£	£
Arrears due sinking funds	670	127	724	210	209
Overdue interest	8.054	7,445	8.440	9,475	22,477
Bank overdrafts	665,866	892,893	1.106.264	902,820	1.144.516
Other liabilities	440.031	767.691	990,177	819,356	819.651
LOAN FUND-]		,
Loans outstanding	6.601.731	7,574,523	8.146.750	9.076.787	10.096.696
Due on loan contracts	380.839	237,695	256,794	359,496	252.331
Due on current contracts	155,233	161,031	144,677	145,051	106,048
Total	8,252,424	9,641,405	10,653,826	11,313,195	12,441,928

MUNICIPALITIES, VICTORIA .- ASSETS AND LIABILITIES, 1923 TO 1927-continued.

3. Queensland.-(i) General. The whole of the State (except a few islands in Moreton Bay) is incorporated into cities, towns, and shires under the Local Authorities Act of 1902 and its amendments.

(ii) Municipalities. (a) Summary. The following table gives particulars of the area, population, number of inhabited dwellings, and assets and liabilities of cities and towns and of shires for the years 1923 to 1927 :---

MUNICIPALITIES, QUEENSLAND .- SUMMARY, 1923 TO 1927.

			Popula-	Number	Rateable		Liabi	lities.
Year.	No.	Area.	tion.	of Inhabited Dwellings.	Kateable Value.	Assets.	Govern- ment Loans.	Total.

CITIES AND TOWNS. (a)

1923 1924 1925(a)	•••	36 35 28	sq. miles. 537 506 845	No. 354,187 364,754 (b)	No. 73,874 75,846 77,895	£ 20,606,516 21,222,982 21,880,425	4,566,242	1,500,037	4,409,566
1926(c) 1927(c)	•••	28 28	· 843 843	483,094 (d)	102,630 106,277	29,952,796 30,730,769	8,216,424	2,159,277	9,516,460

SHIBES. (a)

1923		134	669,627	446.943	98,608	51,041,891	1 600 868	048 988	1 940 759
1924 .		135	669,388	460,240	101,494	51,858,728	1,835,457	1,091,384	1,529,015
1925(a) . 1926(c) .	- 1	$\frac{124}{124}$	669,049 669,051	(b) 396,325	103,984 86,659	52,059,980 48,473,508			
1927(c) .	•	124	669,051	(d)	88,171	48,974,308	1,657,085	1,445,086	2,111,467

(a) From 1st October, 1925, Greater Brisbane was constituted, absorbing the areas of 2 cities, 6 towns, 10 shires, and part of 2 other shires:
(b) Total population of cities, towns, and shires, 839,634.
(c) Figures relating to assets and liabilities include waterworks, electric light works, and railways and tramways controlled by local authorities.
(d) Estimated population of Queensland, 899,176 persons.

(b) Revenue and Expenditure. The revenue and expenditure (including loan moneys) of cities and towns, and of shires for each year from 1923 to 1927, are given hereunder:---

C.4711.-5

			Revenue.			Expen	diture.	
Year.		Rates.	Govern- ment Loans and Subsidies. (a)	Total.	Public Works and Services. (b)	Govern- ment Loan Redemp- tion.	Office Expenses and Salaries.	Total.
				CITIES AND	Towns.			
		£	£	£	£	£	£	£
1923		917,827	215,221	1,918,986	1,228,434	48,097	112,978	1,771,091
1924		950,890	296,384	2,265,220	1,841,001	46,514	123,574	2,453,753
1925		1,012,243	297,026	2,560,252	2,112,443	50,568	160,514	2,944,333
1926	••	1,361,278	113,974	4,297,760	3,036,262	49,735	199,259	4,793,973
1927	••	1,477,950	180,553	5,180,349	3,535,114	61,591	215,597	5,406,099
				SHIRI	ES.			
1923		749,474	328,462	1,317,104	980,630	36,747	146,887	1,314.514
1924		828,790	311,576	1,409,704	1,041,912	39,872	159,402	1,429,385
1925		941,742	407,688	1,659,136	1,246,692	42,407	147,597	1,676,824
1926	• •	833,478	412,056	1,526,121	1,196,885	44,804	120,569	1,591,427
1927		898,004	352,975	1,585,813	1,167,493	48,120	133,463	1,635,372
	(a) In	cludes Main	Road Receip	ts. (b)	Includes Exp	enditure or	Main Road	s.

MUNICIPALITIES, QUEENSLAND.—REVENUE AND EXPENDITURE, 1923 TO 1927.

The figures in the foregoing tables cover all the activities of the local authorities throughout Queensland such as :--Road repairs, street lighting, etc.; waterworks, electric light, and railways and tramways controlled by local bodies.

During the period covered by the table some changes have been made by the absorption of Shires into the Metropolitan Area (see note (a) previous table). Since 1st December, 1928, the Brisbane City Council has assumed control of the Metropolitan Water Supply and Sewerage Works.

4. South Australia.—(i) General. A large proportion of South Australia is unincorporated, the balance being under municipal corporations in the larger cities and towns, and district councils in outside areas. These bodies are subsidized by Government, and special grants allocated on the recommendation of the Commissioner of Highways are given for the maintenance and construction of main roads.

(ii) Local Authorities. (a) Summary. During the past five years the number of corporations and district councils has increased by 10, the total being 196, of which 11 corporations and 13 district councils are in the metropolitan area, and 28 corporations and 144 district councils in outside areas. According to the latest available information there are about 1,079 miles of roads in use for general traffic under the control of corporations, and about 44,563 miles under the control of district councils, and of these totals, 14 $\frac{3}{4}$ miles are wood-blocked, 128 $\frac{1}{2}$ miles are bitumen and concrete, and 13,243 $\frac{3}{4}$ miles are tar-paved, metalled or gravelled. The following table gives the area, population, number of occupied dwellings, capital and assessment values and outstanding loans for corporations and district councils separately for the years 1923 to 1927 :---

Year.		Area.	Estimated Population.	Occupied Dwellings.	Capital Value.	Assessment Value.	Outstanding Loans.
			MUNICIPAL	CORPORAT	TIONS.	<u> </u>	<u> </u>
		Acres.	No.	No.	£	£	£
1923		59,279	223,875	49,260	54,983,943	2,759,282	443,893
1924		62,699	232,044	51,441	60,792,222	3,095,439	481,060
1925		64,080	238,009	52,856	65,550,732	3,300,048	525,518
1926		64,560	245,389	54,697	73,228,273	3,550,895	508,604
1927	••	65,510	247,343	55,851	74,933,076	3,736,096	605,262
		•	DISTRIC	T COUNÇII	Ls.		
1923		30,177,455	282,266	62,223	74,949,756	3,747,623	(a) 157,546
1924		30,535,351	285,759	63,572	81,665,583	4,083,357	(a) 175,061
1925		31,023,175	294,749	66,585	85,608,532	4,280,375	(a) 188,145
1926		33,390,987	307,998	70,096	94,432,691	4,668,397	(a) 221,831
1927	•••	33,427,925	315,325	71,883	101,099,384	5,102,146	(a) 276,765

LOCAL AUTHORITIES, SOUTH AUSTRALIA.—SUMMARY, 1923 TO 1927.

(a) Includes advances through District Councils to settlers for vermin-proof fencing, etc., amounting to £180,872 for 1927.

MUNICIPALITIES, SHIRES, ETC.

(b) Revenue and Expenditure. The next table gives the revenue and expenditure of corporations and district councils for the years 1923 to 1927, showing in separate columns the receipts and expenditure on main roads. The financial year of municipal corporations ends on the 30th November and that of district councils on the 30th June.

LOCAL AUTHORITIES,	SOUTH	AUSTRALIA.—REVENUE	AND	EXPENDITURE,
		1923 TO 1927.		

	Local Government (exclusive of Government Grants Account							Grants	rnment Account Roads).
			Revenue.		1	Expenditur			
Ye	ar.	Rates. Subsidies. Total. Roads. Works Total. and Services. MUNICIPAL COBPORATIONS.	Revenue.	Expen- diture.					
]	MUNICIPA	L CORPOR	ATIONS.			
		£	£	£	£	£	£	£	£
1923	••	346,844	34,576	511,078	248,270	204,314	584,005	25,637	22,541
1924	••	382,008	38,538	567,344	240,902	201,698	609,446	28,010	27,486
1925	••	412,933	38,258	713,764		211,322	727,834	23,111	23,886
1926	••	450,996	48,601	755,472		226,389	800,735	38,873	41,590
1927	••	492,472	45,735	792,093	406,500	279,666	914,808	26,044	28,342
		<u> </u>		Distri	CT COUNC	ILS.	•		
1923		277,563	56,281	407,980	222,574	59,380	403,194	217,267	213,615
1924	••	317,583	64,966	464.414	262,114	54,289	445,463	241,544	235,246
1925		335,690	74,797	506.889	308,068	66.215	511,725	278,065	278,086
1926		369,133	81,259	561.063	321,717	91,931	579,062	344,768	336,865
1927		409,456	87,978	630.601	374,554	141.395	699,860	346,339	353,892
					1		,		

5. Western Australia.—(i) General. In this State there are three forms of local authorities, namely :—(a) municipalities, (b) district road boards, and (c) local boards of health, the two former covering the whole of the State. Local boards of health are of three descriptions, (a) municipal, the members being the same as those of the municipal council of the municipality in which each is situated, (b) those under the control of road boards, and (c) those not under the control of road boards or municipalities. Several of the latter two are inactive. The financial year of municipalities and municipal boards of health terminates on the 31st October, and that of road boards and other local boards of health on the 30th June.

(ii) Municipalities. (a) Summary. The following table gives various particulars regarding municipalities for the years 1924 to 1928.

MUNICIPALITIES,	WESTERN	AUSTRALIA.—SUMMARY, 1924 TO 1928.

Year	Muni-			Dwelling	Valuation o Prop	Length of Roads and Streets.	
ended 31st Oct.—	cipalities.	Агеа.	Population. Houses.		Capital Value.		
1924 1925 1926 1927 1928	No. 21 21 21 21 21 21 21	Acres. 58,981 58,981 58,981 58,981 58,981 59,028	No. 172,427 172,866 177,591 182,417 182,052	No. 35,498 35,550 35,832 36,598 37,142	£ 32,881,961 35,315,316 36,882,613 39,111,843 40,922,358	£ 1,910,798 1,982,967 2,099,513 2,173,203 2,297,095	Miles. 994 997 1,003 (a) 717 (a) 737

(a) Exclusive of cleared roads, which are included in previous years.

(b) Revenue and Expenditure. Revenue and expenditure of municipalities during the years 1924 to 1928 are given hereunder :--

MUNICIPALITIES, WESTERN AUSTRALIA.—REVENUE AND EXPENDITURE, 1924 TO 1928.

Year ended 31st October—		Re	venue.		Expenditure.				
	From Rates.	From Govt. Grants.	From other Sources.	Total.	Works and Improve- ments.	Interest and other Charges on Loans.	Other Expenses.	Total.	
	£	£	£	£	£	£	£	£	
1924	287,863	4,372	738,040	1,030,275	236,050	191,618	599,952	1,027,620	
1925	297,143	200	860,140	1,157,483	300,799	214,226	561,578	1,076,603	
1926	310,230	84	729,344	1,039,658	226,822	229,335	630,828	1,086,985	
1927	324,696	167	879,316	1,204,179	312,309	224,850	638,484	1,175,643	
1928	337,200	39,245	1,000,675	1,377,120	419,497	242,066	693,721	1,355,284	

(c) Assets and Liabilities. The table below shows the assets and liabilities of municipalities at the 31st October in each financial year 1924 to 1928 :---

MUNICIPALITIES, WESTERN AUSTRALIA.—ASSETS AND LIABILITIES, 1924 TO 1928.

				Ass	Liabilities.			
Year ended 31st October—		Balance in Hand.	Value of Property.	Accrued Sinking Funds.	Total.	Outstanding Debentures and Bonds.	Total.	
			£	£	£	£	£	£
1924	••		51,460	1,570,010	449,007	2,193,487	1,864,993	1,961,763
1925			136,917	1,580,435	487,670	2,329,990	2,135,132	2,253,841
1926		••	92,088	1,625,556	503,428	2,361,770	2,183,885	2,323,370
1927	••		114,934	1,706,737	550,192	2,608,814	2,329,191	2,465,136
1928	••		124,456	2,334,147	576,764	3,601,366	2,507,429	2,748,593

(iii) District Road Boards. (a) Summary. In the next table the unimproved value is given, but in some instances the annual value is also given, and those portions of districts rated under the annual value are not included in the area rated under the unimproved capital value. The population at the date of the census of 4th April, 1921, was 160,970, and the number of dwellings 41,662.

On the 30th June, 1928, the population was estimated at 221,150, and the number of dwelling-houses at 53,301. Nine districts, however, only give figures at time of the 1921 census.

DISTRICT ROAD BOARDS,	WESTERN AUSTRALIA.—SUMMARY,	1924 TO 1928.
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Year ended 30th June-		Area.	Unimproved Capital Value (Approxi- mate).	Length of Roads in Existence.	Assets.	Liabilities.	Out- standing Loans.
<u> </u>	_					•	
	No.	sq. miles.	£	miles.	£	£	£
1924 .	. 122	975,828	17.310.105a	39,863	418,060	348,690	242,043
1925 .	. 123	975,828	18,444,720a	41,666	448,318	388,403	280,089
1926 .	. 124	975,828	20,080,137a	44,280	504,599	447,515	314,869
1927 .	. 125	975,828	21,119,659a	15,070b	571,668	545,700	409,002
1928 .	. 126	975,828	23,994,418a	16,515b	668,615	616,415	474,446

(a) Exclusive of one Board which rates under the annual value only.(b) Exclusive of cleared roads which are included in previous years.

(b) Revenue and Expenditure. The revenue and expenditure of district road boards are shown in the following table for the years 1924 to 1928 :---

Year		Reve	enue.		Expenditure.				
ended 30th June—	Rates.	Govern- ment Grants.	Other.	Total.	Adminis- tration.	Works.	Other.	Total.	
	£	£	£	£	£	£	£	£	
1924	213,848	74.184	146.743	434,775	44,233	288,014	113.604	445,851	
1925	233,770	66,516	186,452	486,738	46,166	299,204	140.092	485,462	
1926	241,243	98,123	231,174	570,540	47,416	378,334	146,891	572.641	
1927	270,464	85,427	321,369	677,260	55,685	447,178	184.471	687,334	
1928	296,338	103,686	352,496	752,520	66,217	459,294	239,138	764,649	

DISTRICT ROAD BOARDS, WESTERN AUSTRALIA.—REVENUE AND EXPENDITURE, 1924 TO 1928.

(iv) Local Boards of Health. (a) General. On the 31st October, 1928, there were 21 local boards of health within municipalities, and on the 30th June, 1928, 86 under control of road boards, and 22 extra-municipal boards. Of the extra-municipal boards 7 were inactive during the year.

(b) Finances. The appended table shows the number of boards, their revenue and expenditure, and the assets and liabilities of such as were active from 1924 to 1928. The financial year of municipal boards ends on the 31st October, and that of other boards on the 30th June.

LOCAL BOARDS OF HEALTH, WESTERN AUSTRALIA.-FINANCES, 1924 TO 1928.

			Revenue.		Expen	diture.		
Year.	Number.	Rates.	Sanitary Charges and Rubbish Fees.	Total.	Sanitary and Rubbish Service.	Total.	Assets.	Liabilities;
		£	£	£	£	£	£	£
1924	122	60,255	66,378	137,047	92,324	136,099	89,311	16,549
1925	123	55,907	68,738	145,844	92,236	148,265	84,526	16,348
1926	124	58,640	66,658	141,624	96,770	145,478	85,503	19,651
1927	127	64,275	73,539	152,675	101,594	148,654	92,992	24,362
1928	129	70,614	68,317	154,070	105,727	156,414	95,328	27,945

6. Tasmania.—(i) General. The whole State, with the exception of the cities of Hobart and Launceston, which were incorporated under separate Acts, is divided into municipal districts.

(ii) Municipalities. (a) Summary. The following table gives the number of municipalities, valuations, outstanding loans and length of roads for the years 1923 to 1927-28. The latest available figure for inhabited dwellings is for the year 1921, when the number was 45,950.

MUNICIPALITIES, TASMANIA.-SUMMARY, 1923 TO 1927-28.

		Number of		Valuations.			Length
Year.		Municipali- ties.	Annual Value.	Unimproved Value.	Total Capital Value.	Outstanding Loans.	of Roads.
			HOBART	AND LAUNCE	STON.		
		No.	£	£	£	£	Miles.
1923		2	887,583	6,388,152	15,140,686	2,017,691	187
1924	••	2	984,592	6,711,549	16,521,819	2,062,609	195
1925		2 2 2 2	1,088,541	6,789,728	17,056,147	2,390,189	196
1926	••	2	1,122,945	6,914,733	17,565,443	2,481,320	197
1927-28	••	2	1,158,594	6,953,033	17,865,570	2,584,413	197
		· · -	COUNTRY N	UNICIPALITI	ES.		
1923		47	1,423,174	15,168,896	30,318,877	417,535	11,72
1924		47	1,472,749	15,535,414	31,180,993	464,286	11,692
1925	••	47	1,533,372	15,944,225	32,244,369	536,339	11,871
1926	••.	47	1,544,598	15,867,915	32,130,186	561,089	12,014
1927-28		47	1,562,553	15,914,157	32,242,383	614,271	12,108

CHAPTER IV,-LOCAL GOVERNMENT.

(b) Revenue and Expenditure. The next table gives the revenue and expenditure of all municipalities for the years 1923 to 1927-28 :---

			Revenue.			Expens	liture.	
Year		Rates.	Government Grants.	Total.	Adminis- tration.	Works and Services.	Interest and Sinking Fund.	Total.
1		·	Hone	RT AND L	TNORMON			<u>-</u>
					AUNCESTOR	•		
1923 1924 1925 1926 1927–28	 	£ 234,313 244,006 257,328 279,259 275,628	£ 1,263 450 885 3,738 1,551	£ 641,0705 670,7436 576,450c 652,119c 605,072c		£ 336,9615 265,6436 383,363c 278,167c 351,727c	132,449 145,407 157,880	£ 613,380b 633,012b 577,423c 563,259c 570,819c
			Coun	TRY MUNI	CIPALITIES.			
1923 1924 1925 1926 1927–28	••• •• ••	167,616 179,297 189,759 200,014 212,220	26,026 31,745 38,646 47,984 58,634	267,674b 284,769b 366,282c 283,577c 384,699c		181,087b 201,181b 225,927c 226,816c 282,503c	28,438 28,421 30,225 37,675 38,477	264,395 <i>b</i> 291,397 <i>b</i> 357,207 <i>c</i> 325,240 <i>c</i> 374,609 <i>c</i>
(a) Hoba	rt only	y (Launcest	on figures no	t available).	(b) Includ	ing Loans.	(c) Excludi	ng Loans.

MUNICIPALITIES, TASMANIA.—REVENUE AND EXPENDITURE, 1923 TO 1927-28.

7. Northern Territory.—(i) *Municipality of Darwin*. The following particulars relate to the year 1925-26:—Area, 2,024 acres, population 924, number of occupied dwellings 231, of unoccupied dwellings 3, and of other buildings 132. Revenue from general rates £1,602, from Government grants £801, other sources £443, total £2,846; expenditure £3,332.

(ii) Bagot Roads District. During the year 1925-26 the receipts amounted to £141 and the expenditure to £4, leaving (with a balance of £185 brought forward from the previous year) a balance in hand of £322.

8. Basis for Municipal Rating and Limits for Rates.—These matters were dealt with at some length in Official Year Book, No. 17, pp. 124–25, but limitations of space preclude their repetition in the present issue.

§ 4. Summary of Municipal Finance.

1. General.—In the preceding parts of this chapter certain particulars have been given regarding local authorities in each individual State. In this paragraph, comparative figures are given for each State regarding the financial operations of the local governing bodies referred to in § 3. The particulars in the next two tables refer to financial years as follows:—New South Wales: calendar year 1927. Victoria: 30th September, 1927, except Melbourne, 31st December, and Geclong, 31st August, 1927. Queensland: calendar year 1927. South Australia: Corporations, 30th November, and district councils, 30th June, 1927. Western Australia; Municipalities, 31st October, 1927, district road boards, 30th June, 1927. Tasmania: 30th June, 1928. 2. Number, Revenue, Expenditure, and Valuation of Municipalities.—The subjoined table shows the number, revenue, and expenditure, including loan money, and valuation of local authorities in each State and in Australia during the years indicated above. It should be noted that, excepting in Tasmania, the metropolitan water supply systems are not under municipal control; the particulars given of revenue and expenditure for the five States other than Tasmania do not, therefore, include revenue and expenditure on account of these systems.

							761.
Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Total.
No. of local authorities	317	195	152	196	273(d)	49	1,182
	-		Recen	PTS.			
Rates— General Other Government grants, etc Loans and other	£ } } 12,825,270	163,384	428,871 293,204	\$ 901,928 469,793	85,594	323,630 60,185	£ 33,208,238
sources Total	J (g)12,825,270	4,099,3 85 8,373,826		· · · ·			33,208,233
			Expende	TURE.	1	1	
Works, services, etc Interest on loans and overdrafts Redemptions, sinking funds, etc Administration Other	} 13,584,018	$\begin{cases} 5,593,542\\ 589,101\\ 262,110\\ 437,921\\ 1,582,548 \end{cases}$	565,021 385,636 349,060	53,204 66,805 166,112	1,964,571	$\left\{\begin{array}{c}1,007,021\\163,027\\45,774\\88,351\\14,046\end{array}\right.$	34,405,095
Total	(g)13,584,018	8,465,222	7,041,471	2,031,594	1,964,571	1,318,219	34,405,095
•		1	VALUATION	rs.			
Capital value of property Annual value of property	a345,371,023 (b)	636,746,560 34,000,862	f79,7 0 5,077 (b)	176,032,460 8,838,242	c60,231,502 (b)	50,107,953 2,721,147	1,348,194,575 (b)

MUNICIPALITIES IN EACH STATE .-- FINANCIAL SUMMARY, 1927.

(a) Unimproved capital value of all rateable property. (b) Not available. (c) The valuation of road districts is the unimproved capital value. (d) Including 127 Boards of Health, some of which are within municipalities and others within road districts. (e) Sanitary charges, licences, fees, etc. (f) Rateable value. (g) Portion only of loan money included.

3. Local Government Loans, 1927.—The following table shows the amount of loans raised by local authorities during the year 1927, of loans current at the end of that year, and the liability on account of interest and sinking fund, and of loans redeemed during 1927 :—

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.		Tasmania.	Total.
	£	£	£	£	£	£	£
Loans raised during year			2,077,645		317,608	260,905	7,215,784
Loans current at end of year Annual liability on account of	22,176,600	10,096,696	11,637,116	882,027	2,738,193	3,198,684	50,729,316
interest Total sinking fund at end of	1,151,195	(a)	597,911	48,810	145,376	165,141	(a) _
year Amount of loans redeemed	2,159,820	610,211	341,923	31,309	· 505,535	480,640	4,129,438
during year	(a)	(a)	(a)	59,278	78,753	20,821	(a) .,

LOCAL AUTHORITIES.—LOANS, 1927.

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§ 5. Water Supply, Sewerage, and Drainage.

1. New South Wales.—(i) General. In Sydney and its suburbs the water supply and sewerage systems are controlled by the Metropolitan Water, Sewerage and Drainage Board, and in Newcastle and its suburbs by the Hunter District Water Supply and Sewerage Board. In country districts, both waterworks and sewerage works are constructed by the Public Works Department, and, when completed, handed over to the municipalities affected, by which the cost must be repaid.

(ii) Metropolitan Waterworks. (a) General. During the year ended 30th June, 1928, progress was made with the pressure tunnel 10 miles long and 10 feet in diameter which is being constructed to convey water to the city. Service reservoirs of 36 million gallons and 19 million gallons respectively are being constructed at Killara and Waverley-Vaucluse and amplification of pumping plant and mains is proceeding. The maximum day's consumption in the metropolitan area was 104,459,000 gallons. The mileage of mains now totals 3,872 miles.

(b) Water Supplied, etc. The following table gives the number of houses and estimated population supplied, and other details for the years 1924 to 1928 :---

						Average I	Daily Supply.	
Year e 30th Ju		Number of Houses Supplied.	Estimated Population Supplied.	Average Daily Supply.	Total Supply for the Year.	Per House.	Per Head of Estimated Population.	Mains Laid.
		No.	No.	1,000 Gallons.	1,000 Gallons.	Gallons.	Gallons.	Miles.
1924		250,804	1,254,020	58,628	21,458,036	234	46.78	126
1925		259,799	1,298,995	57,355	20,934,784	221	44.15	150
1926	••	268,558	1,342,790	67,142	24,506,739	250	50.00	175
1927	• •	280,157	1,400,785	70,344	25,675,530	251	50.22	211
1928		290,926	1,454,630	74,650	27,321,939	257	51.32	227

WATERWORKS, SYDNEY .-- WATER SUPPLIED, 1924 TO 1928.

(c) Finances.—The following statement shows the revenue and expenditure on account of the services of waterworks, sewerage and drainage during the year 1927–28, and is followed by a statement giving similar figures for the combined services for a period of five years.

WATERWORKS, SEWERAGE, AND DRAINAGE, SYDNEY, 1927-28.

Item.	Revenue.	Working Expenses, Sinking Fund Contribution, and Renewals.	Capital Indebtedness.	Percentage of Working Expenses and Sinking Fund Con- tribution on Revenue.	Percent- age of Revenue on Capital Cost.	Interest.	Surplus or Deficit.
Water Sewerage Drainage	£ 1,480,748 941,870 45,383	£ a693,414 b320,100 c 19,882	£ 19,318,558 11,692,727 520,354	% 39.66 33.34 43.05	% 7.66 8.06 8.72	£ 816,323 510,310 20,315	f - 28,989 +111,460 + 5,186

(a) Includes payment of £74,071 to State Debt Commissioners in reduction of Capital Indebtedness, and £106,172 on Renewals.
 (b) Includes payment of £46,668 to State Debt Commissioners in reduction of Capital Indebtedness,

and £6,049 on Renewals. (c) Includes payment of £2,274 to State Debt Commissioners in reduction of Capital Indebtedness, and £345 on Renewals.

	ended June—	Revenue.	Working Expenses.	Capital Cost, exclusive of Items on which Interest is not charged.	Percentage of Working Expenses on Revenue.	Percentage of Revenue on Capital Cost.	Interest Payable on Capital Cost.	Profit after Payment of Working Expenses and Interest.
1924 1925 1926 1927		£ 1,861,637 1,860,306 2,131,471 2,266,909	£ 624,887 687,275 908,401 946,505	£ 21,239,237 23,196,472 26,875,871 29,213,313	$\begin{array}{r} 9'_{0}\\ 33.56\\ 36.94\\ 42.62\\ 41.75\end{array}$	% 8.77 8.02 7.93 7.76	£ 1,057,732 1,102,922 1,316,784 1,433,539	£ 179,018 70,109 - 93,714 - 113,135
1928		2,468,001	1,033,396	31,531,639	41.87	7.83	1,346,948	87,657

WATERWORKS, SEWERAGE, AND DRAINAGE SYSTEMS, SYDNEY.—FINANCES, 1924 TO 1928.

(iii) Metropolitan Sewerage and Drainage Systems. (a) General. In addition to the usual progress made in connecting additional houses, 76 miles of new sewers were laid, the total length now being 1,578 miles. The quantity of sewage pumped was 4,831 million gallons.

(b) Houses Drained, Population Served, Length of Sewers, etc. Particulars for the years 1924 to 1928 are given hereunder :---

SEWERAGE AND DRAINAGE SYSTEMS, SYDNEY.—PARTICULARS OF SERVICES, 1924 TO 1928.

Year	ended 30th J	une—	Number of Houses Drained.	Estimated Population Served.	Total Length of Sewers.	Total Length of Storm- water Drains.	Ventilating Shafts Erected.	Sewers Ventilated.
			No.	No.	Miles.	Miles.	Feet.	Miles.
1924	••		165,215	826,075	1,313.90	65.96	543,306	1,208
1925	••	••	170,774	853,870	1,358.19	66.37	556,032	1.246
1926			176,388	881,940	1,415.57	68.85	568,506	1.283
1927			179,580	897,990	1,491.37	74.67	578,932	1,312
1928	••		185,058	925,290	1,577.88	71.41	594,714	1,348

(iv) Newcastle Water Supply. (a) General. The recent policy of increasing the local water storage was continued, and reservoirs at Tenambit (capacity 1,398,500 gallons) and Pelton (capacity 1,205,750 gallons) were completed and made available during 1927-28. Reservoirs at Raymond Terrace (capacity 306,000 gallons) and at Cardiff, Heights (capacity 707,043 gallons) were also completed during the year, and work was in progress on the following reservoirs, viz., Buttai extension, Cessnock No. 2, Dudley, and Waratah, the additional storage to be provided by the latter works amounting to 19,120,000 gallons. The water supply was extended to various outlying districts during the year, to Miller's Forest and Raymond Terrace in the north, the Aellalong Valley, Bellbird and the coal-mining districts in the west, and to Fassifern and Dudley in the south and Lake District.

The net addition to lengths of water-mains laid was 65 miles, bringing the total length of mains to 737 miles.

(b) Particulars of Services. The following table supplies details for the years 1924 to 1928 :—

				1		Average 1	Daily Supply.	
Year 30th J		Number of Houses Supplied.	Estimated Population Supplied.	Average Daily Supply.	Total Quantity Supplied for the Year.	Per House.	Per Head of Estimated Population.	Mains Laid.
		No.	No.	1,000 gallons.	1.000 gallons.	Gallons.	Gallons.	Miles.
1924	••	29,568	147,840	5,756	2,106,614	195	38.92	21
1925		31,405	157,025	6.334	2.312.045	201	40.34	22
1926		33,997	169,985	7,310	2,668,214	215	43.00	47
1927		36.600	183,000	8,139	2,970,781	222	44.47	75
1928	••	39,262	196,000	8,182	2,994,610	208	41.60	68

NEWCASTLE WATER SUPPLY.-SUMMARY, 1924 TO 1928.

(c) Finances. The next table gives the revenue, working expenses, capital debt, and net profit for the years 1924 to 1928 :---

Year e 30th J		Revenue.	Manage- ment and Working Expenses.	Capital Debt.	Percentage of Working Expenses on Revenue.	Percentage of Revenue on Capital Debt.	Interest on Capital Debt.	Surplus.
,		£	£	£	%	%	£	£
1924		143,138	63,883	3.010.615	44.63	% 4.75	46,286	32,969
1925		153,045	53,318	3,424,853	34.84	4.47	48,316	51,411
1926		163,807	65,329	3,733,126	39.88	· 4.39	55,819	42,659
1927	• •	170,601	78,397	4,078,397	45.95	4.18	65,938	26,266
1928	••	214,669	89,769	4,396,114	41.82	4.88	76,957	47,943

NEWCASTLE WATI	R SUPPLY.	-FINANCES.	1924	TO	1928.
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(v) Newcastle Sewerage Works. (a) General. The sewerage works for Newcastle and suburbs as originally designed have been completed by the Department of Public Works and vested in the Board.

The amplification, extension, and improvement of such sewerage works have been reported upon favourably by the Parliamentary Standing Committee on Public Works, and an Act, "The Newcastle and Suburbs Sewerage Amplification Act 1928" was passed on the 21st May, 1928, authorizing the construction of the necessary works at an estimated cost of £660,000.

An Engineering Experts Committee is inquiring into the question of the amplification, extension and improvement of the stormwater drainage works of the Newcastle district. The works comprised in the Cottage Creek storm water area have been authorized and are under construction, and the Throsby Creek catchment area scheme is now being prepared.

(b) Sewerage Connexions and Length of Sewers. During the year ended 30th June, 1928, the number of properties connected with sewers was 824, making a total of 20,043. New sewers of a total length of 4 miles were constructed by the Board, bringing the total length of sewers under the Board's control to 187 miles.

(c) Finances. Particulars in regard to chief items for the years 1924 to 1928 are given hereunder :---

Year ended 80th June—		Revenue.	Manage- ment and Working Expenses.		Percentage of Working Expenses on Revenue.	Percentage of Revenue on Capital Debt.	Interest on Capital Debt.	Surplus.	
		£	£	£	%	0/ ·0	£	£	
1924		56,210	21,914	646.552	38.99	8.69	30,939	3,357	
1925	••	63,707	21,910	672,526	34.39	9.47	31,033	10,764	
1926	••	68,412	22,625	719,549	33.07 .	9.51	31,932	13,855	
1927	÷	75,175	25,578	781,452	34.02	9.62	32,968	16,629	
1928		79,636	24,206	923,740	30.40	8.62	33,777	21,653	

NEWCASTLE SEWERAGE.—FINANCES, 1924 TO 1928.

(vi) Water Supply and Sewerage in Country Towns^{*}. (a) General. Under the Local Government Act 1919, the Public Works Department may, upon application by any municipal or shire council, construct, out of moneys voted therefor by Parliament, waterworks or sewerage works, and when completed transfer the control thereof to the council. In each case the cost, with interest, is repayable by instalments spread over a period corresponding to the probable life of the work.

(b) Waterworks. Up to the 30th June, 1928, waterworks in 74 towns had been completed and handed over to the respective local authorities. The capital cost of these works was £2,921,673; the outstanding capital indebtedness as at the date mentioned was £2,265,907, and the annual repayment instalments totalled £119,098. The Broken Hill and Junee water supplies are administered by the Public Works Department under special Acts; these services entailed capital expenditures of £481,795 and £104,633 respectively.

(c) Severage and Stormwater Drainage Works. Up to the 30th June, 1928, sewerage works in twelve towns, and stormwater drainage works in sixteen towns had been completed. Capital expenditure thereon totalled $\pounds756,785$, and the outstanding capital indebtedness $\pounds713,758$. The repayment instalments total $\pounds36,225$ per annum.

2. Victoria.—(i) A. The Melbourne and Metropolitan Board of Works. (a) General. All land within 13 miles of the General Post Office is included within the metropolitan area for water supply and sewerage purposes. This area covers 434 square miles of land area, and in 1928 embraced 24 cities, and part of another city, together with parts of 13 shires, or a total of 38 municipalities or portions thereof. The whole of the city of Mordialloc and of the shire of Moorabbin are included in the metropolis for water supply purposes, and the Board is also empowered to supply water to certain municipalities outside the 13-mile radius, to the Metropolitan Farm at Werribee, the outfall-sewer area, and elsewhere. Various other shires also arrange for bulk supplies of water. The liability on the 30th June, 1928, for loans raised by the Board, was $\pounds 19,902,020$. The Board is still empowered to borrow $\pounds 2,237,914$ before reaching the limit of its borrowing powers.

(b) Revenue and Expenditure. The following table shows the actual receipts and expenditure, and the loan receipts and expenditure of the Board from 1923-24 to 1927-28:--

Particulars.		1923–24.	19 24 <i>–</i> 25.	1925-26.	1926-27.	1927-28.
	01	rdinary R	ECEIPTS.			
Sewerage, etc. Live stock-Metropolitan farm Interest {Water supply Sewerage	•••	£ 545,835 472,074 85,059 12,427 11,190 	£ 587,765 521,205 77,763 10,178 16,503 	£ 656,116 577,186 109,474 3,276 14,089 3,215	£ 710,273 620,154 82,410 3,525 18,306 9,268	£ 826,482, 589,614 110,811 1,183 18,807 9,410
Total	••	1,126,585	1,213,414	1,363,356	1,443,936	1,556,307

WATER SUPPLY AND SEWERAGE, MELBOURNE.—REVENUE AND EXPENDITURE, 1923–24 TO 1927–28.

* Excluding the area of operations of the Hunter District Water Supply and Sewerage Board.

Particulars.	1923-24.	1924-25.	1925-26.	1926-27.	1927-28
C	RDINARY E	(PENDITUR	Е.		
	£	£	£	£	£
General management	. 68,803	73,739	74,536	77,150	85,26
Live stock, etc Metropolitan fai		86,546	103,485	89,702	141,23
	. 81,991	80.557	84,468	99,968	120,44
Maintenance Sewerage	. 74,459	76,877	83,342	96,894	100,16
Water supply .	000 000	283,145	305,182	340,663	388,11
Interest {Water supply	1 13 808	475,680	506,985	549,190	582,80
Patriotic, Relief Funds, etc			500	2,319	15
Superannuation, Pensions, an					1 -
Compensation Allowances .	1	9,061	6,113	12,546	13,78
Contribution Government Loa			-,		
Redemption	· · ·		761	179	18
River Snagging			5,422	5,428	
Contributions to Municipalities .					3,85
contributions to municipatities (·				
Total	. 1,012,265	1,085,605	1,170,794	1,274,039	1,436,00
	Loan Re	CEIPTS.			
	£	£	£	£	£
Water supply	10 700	19,015	21,327	31,282	34,617
Sowerage	0.000	58,348	77,654	94,535	99,629
Proceeds of loans	12 000 - 20	1,783,293	1,775,000	800,000	3,290,71
Miscellaneous		28,557	65,974	31,744	47,53
Alterations to water mains .	1 1	5,426	9,757	10,979	17,078
Alterations to sewers		3,785	1,758	606	5,298
	•				
Total	. 1,363,171	1,898,424	1,951,470	969,146	3,494,87
·····	LOAN EXPE	NDITURE.			
					1 0
•	£	£	£	£	£
•	A 10 100		£ 706,162		
Water supply construction .	. 348,483	540,938			1,005,636
Water supply construction . Sewerage construction	. 348,483 . 425,653		706,162 823,163	660,387 648,449	1,005,636 738,758
Water supply construction .	. 348,483 425,653 . 1,654	540,938 546,356	706,162	660,387	1,005,636
Water supply construction . Sewerage construction Renewals, main outfall Cleaning rising main .	. 348,483 . 425,653 . 1,654 . 1,156	540,938 546,356 874 2,409	706,162 823,163	660,387 648,449 	1,005,636 738,758
Water supply construction . Sewerage construction Renewals, main outfall . Cleaning rising main Alterations to water mains .	. 348,483 . 425,653 . 1,654 . 1,156 	540,938 546,356 874 2,409 11,341	706,162 823,163 12,361	660,387 648,449 20,774	1,005,636 738,758 20,099
Water supply construction . Sewerage construction . Renewals, main outfall . Cleaning rising main . Alterations to water mains . Alterations to sewers .	. 348,483 . 425,653 . 1,654 . 1,156 	540,938 546,356 874 2,409	706,162 823,163	660,387 648,449 	1,005,636 738,758 20,099
Water supply construction Sewerage construction Renewals, main outfall Cleaning rising main . Alterations to water mains Alterations to sewers . Expenses in floating and redemp	. 348,483 . 425,653 . 1,654 . 1,156 	540,938 546,356 874 2,409 11,341 869	706,162 823,163 12,361 1,126	660,387 648,449 20,774 5,063	1,005,636 738,758 20,099 1,998
Water supply construction Sewerage construction Renewals, main outfall Cleaning rising main . Alterations to water mains Alterations to sewers . Expenses in floating and redemp tion of loans	. 348,483 . 425,653 . 1,654 . 1,156 	540,938 546,356 874 2,409 11,341 869 707,785	706,162 823,163 12,361 1,126 332,142	660,387 648,449 20,774 5,063 4,671	1,005,636 738,758 20,099 1,998
Water supply construction . Sewerage construction Renewals, main outfall . Cleaning rising main . Alterations to water mains Alterations to severs . Expenses in floating and redemp tion of loans . Miscellaneous .	. 348,483 425,653 1,654 1,156 	540,938 546,356 874 2,409 11,341 869 707,785 102,500	706,162 823,163 12,361 1,126	660,387 648,449 20,774 5,063 4,671 125,622	1,005,636 738,758 20,099 1,998 1,278,561 131,103
Water supply construction Sewerage construction Renewals, main outfall Cleaning rising main Alterations to sewers Expenses in floating and redemp tion of loans Miscellaneous River improvements	. 348,483 425,653 1,654 1,156 	540,938 546,356 874 2,409 11,341 869 707,785 102,500	706,162 823,163 12,361 1,126 332,142	660,387 648,449 20,774 5,063 4,671 125,622 4,249	1,005,636 738,758 20,099 1,998 1,278,561 131,103 49,490
Water supply construction . Sewerage construction Renewals, main outfall . Cleaning rising main . Alterations to water mains Alterations to severs . Expenses in floating and redemp tion of loans . Miscellaneous .	. 348,483 425,653 1,654 1,156 	540,938 546,356 874 2,409 11,341 869 707,785 102,500 	706,162 823,163 12,361 1,126 332,142 99,527 	660,387 648,449 20,774 5,063 4,671 125,622	1,005,636 738,758 20,099 1,998 1,278,561 131,103 49,490 163,883

WATER SUPPLY AND SEWERAGE, MELBOURNE.—REVENUE AND EXPENDITURE, 1923-24 TO 1927-28—continued.

B. Melbourne Water Supply. (a) Progress of Work. The principal works completed or in hand during the year ended 30th June, 1928, were:—Construction of Maroondah Dam (upper portion and outlet tower). Duplication of Maroondah Syphons and inlet to Preston Reservoir, 30,273 lineal feet. Raising lining of Maroondah Aqueduct, 400 lineal feet. Construction of O'Shannassy Dam. Construction of outlet and diversion works, Silvan Reservoir. Construction of service reservoir at North Essendon and erection of concrete valve houses. Construction of Coranderrk Aqueducts Nos. 1 and 2. Construction of 18-inch scour main from North Essendon Reservoir to Moonee Ponds Creek, 2,787 lineal feet. Construction of Notting Hill Reservoir No. 2. Laying 6-inch scour main, Notting Hill Reservoir No. 2, 831 feet of 6-inch concrete pipes. Construction of Mount Waverley Reservoir No. 1. Construction of 18-inch scour main, Mount Waverley Reservoir No. 1, 1,903 lineal feet. Erection of mild steel girders, trusses, etc., at Maribyrnong Bridge. During the year 6 miles 40 chains of aqueducts were constructed, and (allowing for water mains lifted) there was a net increase in large mains laid of 36 miles $29\frac{3}{4}$ chains and of 81 miles 23 chains in pipes under 12 inches diameter, in various parts of the metropolis.

The total length of aqueducts, mains, and reticulation amounted to 2,438 miles.

(b) Quantity of Water, Number of Houses, and Population Supplied. The following table gives various particulars for the years 1924 to 1928. The rate levied over the period has remained at sixpence in the pound.

WATER SUPPLY, MELBOURNE.-PARTICULARS OF SERVICES, 1924 TO 1928.

		Number	Estimated	Average	Total	A verage Consum	Length of Mains.		
Year 30th J		of Houses Supplied.	Population Supplied.	Daily Consump- tion.	Water Consumption for the Year.	Per House.	Per Head of Estimated Population.	Reticu- lation, etc.	
·							·		
	2	No	No.	1,000 Gallons.	1,000 Gallons.	Gallons.	Gallons.	Miles.	
1924		207,333	918,485	47,642	17,436,949	236.4	53.4	2,011	
1925		215,476	954,558	52,563	19,185,605	248.6	56.1	2,102	
1926		223,603	990,561	54,696	19,964,016	249.1	56.2	2,216	
1927	••	232,276	1,028,983	57,023	20,813,537	250.2	56.5	2,313	
1928		239,351	1,060,325	54,209	19,840,516	226.5	51.1	2,438	

(c) Capital Cost, Revenue, Expenditure and Surplus. The total cost of construction, revenue, working expenses (exclusive of renewals and special war expenditure), interest and surplus for the five years ending 30th June, 1928, together with the total amounts to that date are given below :--

Year e	Year ended 30th June.		Capital Cost.	Revenue.	Working Expenses.	Percentage of Working Expenses on Revenue.	Interest.	Surplus.
			£	£	£	%	£	£.
1924			314,521	524,165	a 86,853	16.57	0 247,883	189,429
1925			513,523	579,502	a 97,992	16.91	b 294,845	186,665
1926	••	••	680,889	664,926	a 105,597	15.88	b 326,476	232,853
1927	••	•••	614,223	720,124	a 113,706	15.79	b 367,363	239,055
1928	••	••	936,305	744,977	a 133,815	17.96	b 414,570	196,592
Tota	al to date	•••	8,735,733	14,481,325	2,474,905	17.09	b 6,515,386	5,491,034

... WATER SUPPLY, MELBOURNE.-FINANCES, 1924 TO 1928.

(a) Exclusive of Renewals.

(b) Includes Interest on Renewals and Sinking Funds.

C. Melbourne Sewerage. (a) Progress of Work. One section of main sewer and four sections of branch sewers were completed; 51 reticulation areas and one minor reticulation extension were also completed. The deviation of the North Yarra main at Stony Creek and one section of main sewer, two sections of branch sewers, also rising mains at Preston, together with seventeen reticulation areas were in progress. By day labour one section of branch sewer and four reticulation areas, 258 minor reticulation extensions, 2,571 branches and short pieces of reticulation and eleven alterations were completed. Portion of the main outfall sewer from 7 miles 42 chains to 8 miles 29 chains, a distance of 67 chains, has been arched over and ventilation tubes installed at regular intervals. At 30th June, 1928, there were 42 separate contracts and day labour jobs in progress, ranging in cost from £100 to £36,767.

The operation of the pumping station at Spotswood has been entirely satisfactory for the year, and no stoppages of any kind have occurred. The total volume of sewage pumped during the year 1928 was 13,746,968,000 gallons, or an average of 37,560,000 gallons per day. The increase over the total for the preceding year was 1,197,388,000 gallons and the unit cost of raising 1,000 gallons 100 feet was reduced from .477d. to .465d. Any further increase in the daily flow should result in a still greater reduction in the unit cost of pumping. The work of duplicating the straining wells was completed during the year and the old wells are being given a thorough overhaul as opportunity offers.

(b) Number of Houses Connected, etc. Particulars of services for the years 1924 to 1928 are given below :---

Year ended 30th June—		Number of	Estimated			Average Pump	Length	
		Houses for which Sewers are Provided.	Population for which Sewers are Provided.	Average Daily Pumping.	Total Sewage Pumped for the Year.	Per House.	Per Head of Estimated Population.	
		No.	No.	1,000 Gallons.	1,000 Gallons.	Gallons.	Gallons.	Miles.
1924	••	182,987	810,632	35,750	13,084,370	199.5	45.0	1,861
1925	••	191,318	847,538	36,847	13,449,080	196.9	44.4	1,925
1926	••	199,918	885,637	35,478	12,949,420	181.4	40.9	2,001
1927	••	208,003	921,453	34,382	12,549,580	168.6	38,1	2,091
1928		216,785	960,358	37,560	13,746,968	173.2	39.1	2,172

SEWERAGE, MELBOURNE.-PARTICULARS OF SERVICES, 1924 TO 1928.

(c) Disposal of Night-soil from Unsewered Premises. The agreements entered into with 29 councils for the collection and delivery by them of night-soil from unsewered premises within their respective municipal districts have continued in operation during the year. The total number of pans cleaned was 1,323,101, and the night-soil was disposed of by burial by the Board at its various depots at Brooklyn, Campbellfield, Burwood, and Moorabbin, though operations at Burwood ceased on 30th November, 1927.

Though the Board suggested that a Bill should be introduced into Parliament to enable the Board to compel the installation of septic tanks or other approved treatment, and thus abolish the pan system and the hateful fly problem, no legislation has yet been passed to bring about the desired improvement.

(d) Main Drains. A number of necessary amendments to the Metropolitan Drainage and Rivers Act 1923 was passed in December, 1926, and though all the amendments desired by the Board were not included, it was decided that construction work should be proceeded with immediately. Contracts amounting to £337,559 have been let to 30th June, 1928, of which works to the value of £194,447 have been actually completed.

Most of the principal drainage areas in Melbourne and suburbs have been defined, and preliminary schemes have been prepared for dealing with the storm waters from a number of these areas. (e) Finances. The capital cost, revenue, working expenses (exclusive of renewals), percentage of working expenses on revenue, interest and deficiency for the years 1924 to 1928 are given below:—

	r ended June—	Capital Cost.	Revenue.	Working Expenses.	Percentage of Working Expenses on Revenue.	Interest.	Deficiency.
		£	£	£	£	£	£
1924 1925 1926 1927 1928	 	337,740 441,275 665,133 463,363 590,984	480,748 537,657 600,445 633,165 625,690	a 119,571 a 129,050 a 133,988 a 148,814 a 157,323	$\begin{array}{c} 24.87 \\ 24.00 \\ 22.31 \\ 23.50 \\ 25.14 \end{array}$	b 451,168 b 485,027 b 520,508 b 560,539 b 598,962	89,991 76,420 54,051 76,188 130,595
Tota	l to date	11,084,335	9,790,699	a2,305,126	23.54	b10,069,059	2,583,486

SEWERAGE, MELBOURNE .- FINANCES, 1924 TO 1928.

(a) Exclusive of Renewals. (b) Includes interest on Renewals and Sinking Funds.

(f) Metropolitan Sewage Farm. On 30th June, 1928, the total area of the farm was 22,634 acres. The following table gives details in connexion therewith for the years 1924 to 1928:--

Year	ended 30th	June	Capital Cost.	Revenue.	Working Expenses.	Interest.	Net Cost of Sewage Purification.	Trading Profit.
1924 1925	••	•••	£ 36,081 19,136	£ 28,903 30,298	£ a 26,786 a 26,413	£ 31,995 34.471	£ 29,878 30,586	£ 19,968 21,688
1926 1927			220,847 27,566	42,391 35,097	a 25,703 a 31,376	41,578 48,650	24,890 44,929	33,945 24,505
1928	••••	••	63,225	55,763	a 33,546	51,733	29,516	44,289
	Total to	date	1,007,365	691,557	a 406,998	741,309	422,836	417,667
			(-)	Deceloration -	(Demonster			

METROPOLITAN SEWAGE FARM .- FINANCES, 1924 TO 1928.

(a) Exclusive of Renewals.

D. River Improvement. During the year ended 30th June, 1928, improvement works have been carried out on the River Yarra, Maribyrnong River and Merri Creek, consisting chiefly of river snagging, grading and beaching of banks, widening of the waterway and dredging operations. The Board also commenced an important section of the River Yarra improvements work, viz., the cut through the quarries above the Church Street Bridge.

(ii) Geelong Waterworks and Sewerage Trust. (a) General. The Geelong Waterworks and Sewerage Trust, constituted in 1908, consists of five commissioners, two of whom represent the city of Geelong, one the town of Geelong West, one the town of Newtown and Chilwell, and one the shires of Bellarine, Corio and South Barwon jointly. The amount of loan money which may be raised is limited to $\pm 725,000$ for water supply undertaking, $\pm 710,000$ for sewerage undertaking, and $\pm 220,000$ for sewerage installation to properties under the deferred payment system. The population supplied is about 44,869.

(b) Water Supply. The catchment area is about 16,000 acres. The works comprise the Korweinguboora Reservoir and the Bolwarra Weir on Eastern Moorabool River, together with the necessary channels, mains and reservoirs. The storage capacity of all the reservoirs is 2,738,119,808 gallons, and there are 245 miles of reticulation mains within the city of Geelong and its suburbs. The total expenditure on waterworks to the 30th June, 1928, was £634,078, and the revenue for the year 1927-28 was £50,428.

(c) Sewerage Works. The sewerage scheme consists of a main outfall sewer to the ocean at Black Rock, about 9 miles from Geelong, and 130 miles of reticulation mains have already been laid. The drainage area is 9,489 acres, and the number of buildings within the drainage area is 11,000, and within the sewered areas 10,550, while 10,300 buildings have been connected with the sewers. Up to 30th June, 1928, the total expenditure on sewerage works was £587,494 and on the cost of sewerage installations under deferred payment conditions £220,000, of which £69,103 is outstanding. The revenue amounted to £44,997.

(iii) Bendigo Sewerage. Authority. The members of the Bendigo City Council constitute this Authority. The sewerage district comprises the whole area of the city of Bendigo. The works when completed are estimated to cost £450,000, and comprise treatment works consisting of (a) non-septic sedimentation and liquefying tanks and oxidizing chambers without filters, but with land disposal of effluent by irrigating permanent pastures; (b) main outfall sewer, main, sub-main, branch, and reticulation sewers, of which over 62 miles had been constructed by the end of February, 1929, at which date 3,681 premises had been connected to sewers. An unique feature of the scheme is the entire omission of the "boundary trap" from house sewers with resulting omission of "induct vent" to house sewers and the omission of all ventilation on street sewers, the main and reticulation sewers all being amply ventilated by the house sewer ventilation, while the consequent all round saving both of first cost and maintenance is considerable. Results are still completely satisfactory after six years in operation without boundary traps. The method of sewage disposal has produced continuously an effluent well within the required standards of purity, and in addition returns more than £1,000 per annum from fat sheep, lambs and wool. Expenditure to end of February, 1929, was £251,812 for sewerage scheme and £106,062 for house connexions.

(iv) Water Supply in Country Towns and Districts. Most of the country waterworks are controlled by the State Rivers and Water Supply Commission, but a number of other waterworks is controlled by Waterworks Trusts or by municipal corporations.

The following table gives particulars regarding waterworks under the control of trusts and municipal corporations for the years 1924 to 1923 :---

		Under Water	rworks Trust	3.	Under Municipal Corporations.				
Yea	 Number of Trusts.	Capital Cost.	Capital Indebted- ness.	Current Interest Out- standing.	Number of Cor- porations.	Capital Cost.	Capital Indebted- ness.	Current Interest Out- standing.	
	No.	£	£	£	No.	£	£	£	
1924	 99	1,322,315	983.663	13,712	29	785,602	503.890	9,811	
1925	 102	1,383,538	1.036.516	14,545	29	785,788	500,595	3,329	
1926	 105	1,457,155	1,098,512	17,787	29	786,388	498,195	3.656	
1927	 102	1,541,086	1,176,434	14,150	29	807,433	515,631	2,141	
1928	 102	1,637,071	1,255,037	13,482	29	820,084	525,687	3,651	
	} †			1				1	

COUNTRY WATERWORKS, VICTORIA.-FINANCES, 1924 TO 1928.

3. Queensland.—(i) The Metropolitan Water Supply and Sewerage Board, Brisbane. (a) General. The whole of the water supply in the metropolitan area, including bulk supply to the city of Ipswich, is filtered. Filtration works are situated at Holt's Hill, Mount Crosby, and consist of eleven slow sand type of filters, capable of treating 16,500,000 gallons of water per 24 hours; the supply from Enoggera Reservoir is also filtered. The total capacity of the service reservoirs, on Bartley's Hill, Highgate Hill, Wickham Terrace, Tarragindi Hill, Roberts' Lookout (elevated tank), and Roles Hill Manly, is about 22,900,000 gallons. The 42-in. and 36-in. trunk mains laid from Mount Crosby in 1925 are in constant use. The three new units of pumping plant lately installed at Mount Crosby Pumping Station continue to provide efficient service. The new weir and overbridge, completed in 1926, is in good order and functions beneficially.

With the exception of short trial runs for testing purposes, there has not been any necessity to run the electrical pumping station for supplying water to Lake Manchester throughout the past year. A pipe line and tunnel between Gold Creek Reservoir and Enoggera Reservoir was completed in the early part of the year, but so far has not been put into regular commission. The new 24-in. trunk main from River-road to Eildon Hill has been in constant operation with good results. A subsidiary 16-in. distributing main from Constitution Road to Gympie Road was completed towards the end of the year. The reinforced concrete elevated water tower at Paddington Heights, holding 100,000 gallons of water, is in constant service with beneficial results. A service reservoir on Roles Hill, Manly, holding 1,800,000 gallons of water, commenced in 1927, was completed during the latter part of the year. This reservoir serves inhabitants on the surrounding heights and provides ample pressure.

During the year 1928 nearly 45 miles of mains were laid, and new services installed numbered about 2,739.

(b) Brisbane Waterworks. Summary. The following table gives a summary of operations for the last five years :---

Year.	Length of Reticulation Mains.	Number of Tenements Connected.	Estimated Population Supplied.	Quantity Supplied.	Average Daily Supply.	Average Daily Supply per Head of Estimated Population.
1924 1925 1926 1927 1928	Miles.	No.	No.	1,000 Gallons	Gallons.	Gallons.
	6453	(a) 50,152	246,300	4,378,486	11,963,078	44.68
	675	(a) 53,119	258,175	4,703,044	12,885,052	45.80
	714	(a) 56,887	275,015	5,392,671	14,774,442	48.88
	7443	(a) 57,485	288,494	4,642,277	12,718,570	44.10
	7775	(a) 60,224	301,368	4,833,818	13,207,156	43.82

WATERWORKS,	BRISBANE	-SUMMARY.	1924	TO	1928.

(a) Metropolitan area.

The total length of the trunk mains is 189 miles.

(c) Brisbane Sewerage Scheme. Reticulation work in Brisbane and South Brisbane is being proceeded with and premises within the reticulated areas are being connected to the sewers. Twenty-two and a half miles of main sewers and $95\frac{1}{2}$ miles of reticulation sewers and house connexion branches have been constructed and 9,450 premises have been connected.

(d) Brisbane Waterworks and Severage Works Finances. The subjoined table gives particulars regarding finance during the years 1924 to 1928 :---

WATER AND SEWERAGE WORKS, BRISBANE.-FINANCE, 1924 TO 1928.

Year.		Capital Cost.	Net Revenue from Rates.	Management and Working Expenses.	New Works Construction.	Interest and Redemption of Loans, including Sinking Fund (a)
		£	£	£	£	£
1924	••	5,872,547	402,272	157,370	785,068	294,420
1925		6,364,380	481,571	187,420	491,833	368,295
1926	•••	6,776,465	516,351	198,143	412,085	373,053
1927	••	7,266,706	642,328	222,450	490,241	378,137
1928	••	7,617,956	669,603	215,448	375,038	383,221

(a) In addition to interest on loans, the following payments have been made for interest on overdraft :--Year 1926, £96 11s. 6d.; year 1927, £17,007 14s. 4d.; year 1928, £24,008 11s. 1d. These amounts have not been included in the figures quoted in the table.

CHAPTER IV.—LOCAL GOVERNMENT.

(ii) Country Towns Water Supply. In addition to the city of Brisbane, there were at the end of the year 1927, thirty-four country towns in Queensland provided with water supply systems constructed by municipalities chiefly from Government loans. The subjoined statement gives particulars of all water supply systems, exclusive of Brisbane, for the year 1927:—

QUEENSLAND .- PARTICULARS OF COUNTRY WATER SUPPLY SYSTEMS, 1927.

	Cost of Const	ruction to 31st	December, 1927-£1,9	903,068.		
R	eceipts.	£	Expendit	ure.		£
Rates and sales		209,635	Office and salaries			21,876
Government an	d other loans	165,434	Construction			164,206
Other	••	32,339	Maintenance	••		102,025
			Interest and redem	ption		78,618
			Other expenses	•••	••	20,055
Total	••	407,408	Total		••	386,780
Assets	••	1,665,138	Liabilities			1,351,156

4. South Australia.—(i) General. The water supply and sewerage systems in this State are constructed and maintained by the Public Works Department.

(ii) Adelaide Waterworks. (a) Summary. The following table gives particulars for the years 1923-24 to 1927-28, the figures for consumption being recorded by gaugings taken at the reservoirs and including evaporation and absorption. There are 53,689 meters in the Adelaide District.

Year en	ded 30th J	ine	Number of Assess- ments.	Annual Value.	Area Supplied.	Capacity of Reservoirs.	Length of Mains.	Annual Consump- tion.
	<u>. </u>		No.	£	Acres.	Million	Miles.	1,000
1004			100.000	2 704 755	111 005	Gallons.	1.070	Gallons.
1924	••	••	100,002	3,794,755	111,295	7,753	1,076	6,720,000
1925	••	••	104,301	4,202,080	111,872	7,753	1,108	6,836,000
1926		• •	115,237	4,712,962	111,872	7,753	1,146	7,517.000
1927	• •	••	119,058	4,996,390	114,452	7,753	1,193	7,150,000
1928			124.359	5,148,282	114,457	7,753	1,224	7,979,000

ADELAIDE WATERWORKS .- SUMMARY, 1923-24 TO 1927-28.

(b) Finances. Particulars for the years 1923-24 to 1927-28 are given below :---

ADELAIDE WATERWORKS .--- FINANCES, 1923-24 TO 1927-28.

			- Revenue.			Percentage of Net		
Year e 30th Ju		Capital Cost.	Rates.	Total.	Engineer- ing Branch.	Revenue Branch.	Total.	Of Net Revenue on Capital Cost.
		£	£	£	£	£	£	%
1924	•••	3,100,856	194,158	268,574	53,673	10,972	64,645	6.58
1925	• •	3,166,088	220,151	280,327	59,020	11,193	70,213	6.64
1926		3,241,024	240,538	312,728	62,147	12,201	74,348	7.35
1927		3,281,781	276,621	351,163	62,710	11.332	74,042	8.44
1928		3,379,517	372,117	469,844	65,968	11,292	77,260	11.62

(iii) Adelaide Sewerage. Particulars for the years 1923-24 to 1927-28 are given hereunder:---

				Capital	Reve	enue.	Working	Expenses.	Percentage
Year e 30th J		Length of Sewers.	Number of Con- nexions.	Cost of Revenue Producing Works.	Rates, etc.	Total.	Mainten- ance, etc.	Total.	of Net Revenue On Capital Cost.
									
		Miles.	No.	£	£	£	£	£	%
1924		406	45,415	1,095,683	87,066	100,707	19,428	29,646	6.49
1925		424	47,413	1,166.066	95,464	105,188	19,616	28,826	6.55
1926	••	437	49,380	1,160,394	106,148	114,933	24,924	32,704	7.09
1927	• •	448	51,296	1,326,638	131,780	139,732	20,887	28,075	8.42
1928	••	483	53.077	1.433.991	180,176	187,016	23,927	31.010	10.88

ADELAIDE SEWERAGE .-- SUMMARY, 1923-24 TO 1927-28.

(iv) Country Towns Water Supply. (a) Summary. The chief items of information regarding these undertakings are set forth in the table below for the years 1923-24 to 1927-28.

COUNTRY TOWNS WATERWORKS, SOUTH AUSTRALIA.—SUMMARY, 1923–24 TO 1927–28.

Year e	nded 30th Ju	ne—	Number of Assessments.	Area Supplied.	Capacity of Reservoirs.	Length of - Mains.	Annual Consump tion.	
	· · ·		No.	Acres.	Million Gallons.	Miles.	1,000 Gallons.	
1924			60.674	11,252,740	8,679	3,415	984.714	
1925	••	••	60,684	11,565,800	8,679	3,600	1,181,706	
1926	••	••	45,346a	11,721,033	9,031	3,754	1,374,555	
1927	•••	• •	43,113	11,731,961	9,032	3,920	1,386,655	
1928	• •		47,783	11.745.957	9,032	4,161	1.278,774	

(a) Assessments were regrouped in 1926.

(b) Finances. The next table gives financial information for the years 1923-24 to 1927-28:--

COUNTRY TOWNS WATERWORKS, SOUTH AUSTRALIA.—FINANCES, 1923-24 TO 1927-28

		Reve	nue.	Wor	king Expen	ses.	Percentage
Year ended 30th June	Capital Cost.*	Rates.	Total.	Engineer- ing Branch.	Revenue Branch.	Total.	of Net Revenue on Capital Cost.
1924 1925 1926 1927 1928	£ 5,200,184 6,754,682 7,189,448 7,945,357 8,653,373	£ 84,241 93,124 98,573 126,222 167,522	£ 120,599 126,032 140,318 173,707 219,426	£ 66,007 58,840 62,442 81,728 89,970	£ 8,303 8,077 7,040 7,200 7,873	£ 74,310 66,917 69,482 88,928 97,843	% 0.89 0.87 0.98 1.07 1.41

(v) Other Sewerage Systems. Information in summarized form is given below regarding the two suburban sewerage systems, viz., the Glenelg system and the Port Adelaide and Semaphore system, for the years 1923-24 to 1927-28 :--

		Length	Number		· Reve	enue.	Working	Expenses.	Percentage of Net
Year e 30th Ju		of Sewers.	of Con- nexions.	Capital Cost.	Rates.	Total.	Mainten- ance.	Total.	Revenue on Capital Cost.
		Miles.	No.	£	£	£	£	£	%
1924		72	7,208	451,709	17.538	18,855	14,595	15,165	0.81
1925		78	7,756	475,340	19,552	20,884	9.118	9.755	2.34
1926		84	8,394	509,483	21,240	22,422	10,745	11.405	2.16
1927	•••	88	8,934	543,026	23,998	24,961	10,714	11,623	2.46
1928	• •	92	9,331	561,572	37,747	38,632	10,277	11,176	4.89

SUBURBAN SEWERAGE SYSTEMS, SOUTH AUSTRALIA.—SUMMARY, 1923–24 TO 1927–28.

5. Western Australia.—(i) General. The water supply and sewerage systems of Western Australia are all 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) Goldfields Water Supply, (c) Water Supply of other towns, (d) Agricultural Water Supply, (e) other Mines Water Supply, and (f) artesian and sub-artesian waters. The consumption of water by the railways is not included in figures for water supplied given hereunder.

(ii) Metropolitan Water Supply, Sewerage and Drainage. (a) General. The sources of the metropolitan water supply are the Victoria Reservoir, Bickley Brook, Mundaring Reservoir, thirteen bores, and the Armadale, Churchman Brook, Canning River, and Wungong pipe head dams. The sewerage system consists of septic tanks and percolating filters for Perth, and septic tanks and ocean outfall for Fremantle and Subiaco. At the 30th June 1928, the number of premises connected with sewers was 18,696.

(b) Summary. The following table gives particulars regarding water supply for the years 1924 to 1928 :---

Year ended 30th June—		Estimated Population	Number of Houses	Water Supplied.		ge Daily	Number of Meters.	Length of Mains.
		Supplied.	Supplied.	Supplied.	Per Head.	Per House.		
1924 1925 1926 1927 1928	··· ·· ··	No. 174,580 178,600 184,000 192,000 199,000	No. 39,386 40,741 42,302 44,235 46,457	1,000 Gallons. 3,089,825 2,909,095 3,131,144 2,777,186 3,136,946	Gallons. 48.36 44.62 46.63 39.63 42.92	Gallons. 214.93 195.63 202.79 175.85 184.48	No. 22,114 23,416 24,750 27,572 33,752	Miles. 700 713 760 782 798

WATER SUPPLY, WESTERN AUSTRALIA.-SUMMARY, 1924 TO 1928.

(c) Finances. The table hereunder gives separate information for the water supply and sewerage and drainage branches for the years 1924 to 1928:—

		W	ater Supply.		Sewerage and Drainage.			
Year (Soth J		Capital Cost.	Revenue.	Expendi- ture.	Capital Cost.	Revenue.	Expendi- ture.	
		£	£	£	£	£	£	
1924		1,722,594	135,250	152,824	1,055,612	83,388	76,532	
1925	••	2,162,771	140,811	169,011	1,150,261	91,073	78,830	
1926		2,553,179	149,176	188,235	1,243,217	96,600	80,165	
1927	•••	2,762,036	198,951	198,340	1,341,722	85,970	84,020	
1928		2,982,104	224,510	207,492	1,430,832	97,782	88,677	

WATER SUPPLY AND SEWERAGE AND DRAINAGE, WESTERN AUSTRALIA.— FINANCES, 1924 TO 1928.

(iii) Goldfields Water Supply. The source of supply for the Coolgardie and adjacent goldfields, as well as for towns and districts on or near the pipe-line, is the Mundaring Reservoir, which has a capacity of 4,650 million gallons. There are three classes of consumers—the railways, the mines, and "other," and in 1927-28 the railways consumed 8 per cent., the mines 17 per cent., and "other" 75 per cent. of the supply. The following table gives details for the years 1924 to 1928 :—

GOLDFIELDS WATER SUPPLY, WESTERN AUSTRALIA.—SUMMARY, 1924 TO 1928.

	ended June	Total Con- sumption.	Number of Services.	Length of Water Mains.	Capital Cost.	Revenue.	Expendi- ture.
1924		1,000 gallons. 1,159,000	No. 10,628	Miles. 1,303	£ 3,487,887	£ 167,597	£ 212,713
1925	••	1,139,000	10,706	1,371	3,544,274	178,495	215,517
1926	••	1,161,000	10,676	1,454	3,642,059	179,402	218,956
1927	••	1,106,000	10,594	1,483	3,656,147	168,183	207,583
1928	••	1,120,000	10,443	1,488	3,677,067	165,679	181,009

(iv) Water Supply of Other Towns. During the year 1927-28 there were 26 towns provided with water supplies, of which 12 are controlled by Water Boards and 14 by the Public Works Department. The total supplies to the latter towns for the year ending 30th June, 1928, were as follows:—Domestic, 107,000,000 gallons, and Railways, 25,000,000 gallons. The estimated population was 17,000, and the average daily domestic consumption was 17 gallons per head.

(v) Agricultural Water Supply. During the year 1927-28, 23 tanks were excavated and 8 wells sunk, all of which yielded fresh water. During the 18 years from the 1st July, 1910, to the 30th June, 1928, 468 tanks were built, 330 wells sunk, and 2,714 bores put down to a total depth of 134,054 feet. Of the bores mentioned, 459 yielded fresh and 249 stock water.

(vi) Artesian and Sub-artesian Waters. Up to the 30th June, 1928, the total number of bores put down in search of artesian or sub-artesian water was 234, including 49 sunk in the metropolitan area, ranging in depth from 32 to 4,006 feet.

6. Tasmania.—(i) Hobart Water Supply. The cost of this undertaking to the 30th June, 1928, was £431,261, but a considerable amount of reticulation work has been done out of revenue and not charged to capital account. The outstanding loans at 30th June, 1928, amounted to £357,636. At the same date the number of tenements supplied in the city and suburbs was 10,283 and the length of reticulation mains 121³/₄ miles. The revenue for the years 1924 to 1928 was as follows :--

Heading.	1924.	1925.	1926.	1927.	1928.
Revenue	£	£	£	£	£
	. 34,965	34,935	39,527	37,153	38,822

HOBART WATERWORKS .- REVENUE, 1924 TO 1928.

(ii) Hobart Sewerage System. The revenue for the year ended 30th June, 1928, was £38,922. Up to that date 80§ miles of sewers had been laid in connexion with the original city system at a cost of £213,410, and 8,321 tenements connected. Since the original city was sewered, the Municipalities of Queenborough and New Town have been included in the city, and are now being sewered. In Queenborough $25\frac{1}{2}$ miles of sewers, connecting with 1,410 tenements, have been constructed at a cost of £119,470. In New Town a total of 36 miles of sewers has been laid, and 1,368 properties connected. The cost to 30th June, 1928, including surveys and sewerage outfall, was £110,409.

§ 6. Harbour Boards and Trusts.

1. New South Wales.—(i) Sydney Harbour Trust. (a) General. The Sydney Harbour Trust, which consists of three Commissioners appointed by the Government, controls the whole of the wharves resumed by the Government in 1901. The Commissioners also provide and maintain the lighting and marking of the harbour, and carry out all necessary dredging. The whole of what might be termed city wharves is owned by the Commissioners and leased to various shipping companies, but the Trust directly operates and maintains a certain number of open wharves. Outside the city area the wharves are, to a large extent, privately controlled, but all structures beyond high-water mark are held under leases issued by the Trust. The extent of wharfage accommodation now available for use totals 76,107 lineal feet, inclusive of 9,267 lineal feet privately owned, 4,693 lineal feet of cross wharf and 3,427 lineal feet of ferry wharves.

The depth of water at the entrance to the port is not less than 80 feet and in the channels there are 40 feet at low-water spring tides. The foreshores of Sydney Harbour are about 200 miles in length. The area of the water in the port is 14,284 acres, of which 3,000 acres have a depth ranging from 35 to 160 feet.

Since its inception, the Trust has spent \pounds 7,504,243 on the reconstruction and extension of the wharfage and improvements to the port and vested area. Over 14,381 lineal feet of old and obsolete wharfage have been demolished, and 34,155 lineal feet of new berths have been constructed. Other improvements include 2,910,000 square feet of floor area of new sheds and nearly 4 miles of new roadways.

During the year 1928, 1,630,131 tons of material were dredged at a cost of £98,647. In the process of towing such material, 35,482 miles were run at a cost of £35,330.

(b) Finances. The subjoined table gives particulars concerning the finances of the Trust for the years 1924 to 1928:---

		Rev	enue.					
Year ended 30th June	Wharfage and Harbour Rates.	Tonnage Rates and Berthing Charges.	Other Sources.	Total.	Expendi- ture.	Total Capital Debt.	Interest.	Balance.
		·						
	£	£	£	£	£	£	£	£
1924	553,295	44,879	299,183	897,357	276,883	10,417,859	528,743	91,731
1925	587,157	58,735	324,510	970,402	283,040	10,644,468	526,944	160,418
1926	618,075	53,143	344,660	1,015,878	298,101	10,956,555	554,446	163,331
1927	674,311	54,935	354,610	1,083,856	320,033	11,299,989	569,884	193,939
1928	673,418	46,678	358,197	1,078,293	344,000	11,590,431	584,814	149,479
		1						

SYDNEY HARBOUR TRUST.—FINANCES, 1924 TO 1928.

HARBOUR BOARDS AND TRUSTS.

2. Victoria.—(i) Melbourne Harbour Trust. (a) General. Information regarding the origin and constitution of this Trust will be found in Official Year Book No. 12, pp. 970 et seq. In 1928, the length of sheds in the port was 20,427 feet, covering an area of 1,207,656 square feet. The quantity of material raised by the dredging and excavation done in the improvement of the river and bay amounts to 89,735,401 cubic yards. The Trust has expended £339,633 in reclaiming land within its jurisdiction.

(b) Finances. The following table gives particulars of the revenue and expenditure of the Trust from 1924 to 1928 inclusive. Up to 31st December, 1928, the total capital expenditure amounted to $\pounds 7,582,143$.

Pa	rticulari	5.		1924.	1925.	1926.	1927.	1928.
. <u>:</u>				Revent	JE.		<u></u>	
Rates, rents, etc Interest Other receipts Total	•••	•••		$ \begin{array}{r} & \pounds \\ 711,558 \\ & 669 \\ 17,095 \\ \hline \\ \hline \\ 729,322 \end{array} $	£ 712,733 285 23,213 736,231	£ 739,460 79 20,394 759,933	£ 799,075 43 20,549 819,667	£ 707,899 2,149 21,239 731,287
			Ex	PEN DITUR	Е.			
Management and Interest	gener	al expense	es`	£ 74,086 131,674	£ 85,655 151,891	£ 98,717 159,353	£ 97,289 161,197	£ 96,854 182,492

MELBOURNE HARBOUR T	RUST.—FINANCE	5, 1924	10	1928.
---------------------	---------------	---------	----	-------

		1			
· ·	£	£	£	£	£
Management and general expenses	74,086	85,655	98,717	97,289	96.854
Interest	131,674	151,891	159,353	161,197	182,492
Total	205,760	237,546	258,070	258,486	279,346
Less standing charges added to works	43,749	. 48,128	49,309	55,588	58,092
Total	162,011	189,418	208,761	202,898	221,254
Wharfage and other refunds	4,879	3,761	3,683	2,623	3,352
Consolidated revenue of Victoria	140,382	136.494	143,002	148,282	143,648
Flotation of loans expenses	5	10	15	8	3,500
Maintenance	130,234	166,610	142,917	148,680	137,504
Total expenditure	437,511	496,293	498,378	502,491	509,258
Surplus on revenue account	291,811	239,938	901 555	017 170	
Less depreciation and renewals account	251,011	200,900	261,555	317,176	222,029
and sinking fund	213,000	213,000	213,000	213,000	213,000
Net surplus on revenue account	78,811	26,938	48,555	104,176	9,029

Land and property Deepening waterways Wharves construction Approaches construction Other harbour improven Floating plant		··· ·· ·· ··	548 137,488 194,318 25,483 23,826 3,192 3,440	37,699 145,808 285,072 46,130 18,631 97,354 2,718	30,962 169,053 129,382 15,412 40,416 9,221 4,891	20,144 204,536 246,587 35,619 15,735 125,690 5,045	10,869 261,634 161,235 78,249 17,253 2,193 1,268
Total	••	••	388,295	633,412	399,337	653,356	532,701

CAPITAL EXPENDITURE.

(ii) Geelong Harbour Trust. (a) General. The Geelong Harbour Trust was constituted in 1905, and is under the control of three Commissioners appointed by the Governor in Council. The Commissioners have vested in them the Port of Geelong, which includes that portion of Port Phillip east of a line from the right bank of Little River at its mouth south-easterly to a point in line with the east side of Mercer-street, Portarlington. This area comprises Corio Bay, Portarlington, and some miles of Bay frontage. In addition, certain lands abutting upon the River Barwon and Barwon River Heads are vested in the Commissioners and form part of the Port. The Commissioners have established facilities for the export of grain, frozen meat, and other produce, and have also constructed extensive abattoirs and freezing works. A large amount of money has been expended in the reclamation of waste lands, and on part of such lands a dairy farm with a complete system of drainage and irrigation has been established.

(b) Finances. The following table gives financial details for the years 1924 to 1928:-

Year.		Loans.		Sinking Fund.	Revenue.	Expenditure.	
			£	£	£	£	
1924			591,000	36,912	61,356	52,315	
1925			591,000	41,167	70,730	57.027	
1926	••		591,000	45,746	67,073	66,230	
1927	••		599,716	47,658	65,631	99,948	
1928	••		622,105	(a)	57,411	55,056	

GEELONG HARBOUR TRUST .-- FINANCES, 1924 TO 1928.

(a) Not available.

(iii) Harbour Boards. The Harbour Boards Act of 1927 provides for the constitution of Harbour Boards for the following ports :--Gippsland Lakes; Welshpool; Warrnambool; Port Fairy; Portland. These ports have, hitherto, been under the control of the Department of Ports and Harbours of Victoria. The first board to be constituted under this Act is the Warrnambool Harbour Board. (See Victoria Gazette, 6th June, 1928, page 1595.)

3. Queensland.—(i) Bowen Harbour Board. (a) General. The Bowen Harbour Board consists of seven members, of whom two are appointed by the Governor in Council and the remainder elected by the electors of the Town of Bowen and adjacent shires. The district under its jurisdiction comprises the area within the boundaries of the Town of Bowen, the Shires of Prosperine and Wangaratta, and division I. of the Shire of Ayr.

(b) Finances. The capital expenditure for the year 1928 was £13,019, while for the same period the receipts were £12,443 and the expenditure £13,019.

(ii) Bundaberg Harbour Board. (See Official Year Book No. 20, page 140.)

The Cairns Harbour Board consists of (iii) Cairns Harbour Board. (a) General. twelve members, representing the city of Cairns and eight adjoining shires. The wharves at Cairns, which are all under the control of this Board, are of reinforced ferro-concrete. and 1,900 feet in length, and form an unbroken quay line of 1,500 feet partly connected with railway communication along front of same where considered advisable for handling direct ex trucks. A log paddock with a jetty wharf, equipped with off loading ramps for handling floater logs, separates the recently constructed 400 feet of reinforced concrete wharfage, known as the Overseas Wharf, from the lower quay. This new structure will greatly relieve the congestion experienced in previous years during the busy season. This wharf has full railway communication at front and rear thereof. The Board have opened negotiations with the sugar mills and shipping companies for the further installation of electric conveyors throughout the wharf sheds for the handling of cargo generally. Mechanical sugar-handling conveyors have been installed in sugar shed at a cost of over £38,465. The wharves are electrically lighted and furnished with railways and crane services, including one 8-ton electric portal crane costing over £5,000 especially installed for handling sinker logs. There is a special railway wharf with facilities for handling floater logs. A cold storage plant has been built at a cost of £9,000.

(b) Finances. During the year 1928, the gross revenue of the Board was £59,836, derived from harbour, berthage, and miscellaneous dues, etc.

(iv) Gladstone Harbour Board. (a) General. The Gladstone Harbour Board is composed of seven members, two of whom are appointed by the Governor in Council and five elected by the electors of the town of Gladstone and the shires of Calliope and Miriam Vale. The works under the control of the Board are (i) Auckland Point Jetty and Wharf, constructed of reinforced concrete and wood, together with a two-way traffic approach and jetty for the handling of local cargo, the berth being 775 feet long, with an average depth alongside of 26 feet; (ii) the municipal wharf in Auckland-street; (iii) wool dumping plant on Auckland Point Jetty, consisting of two hydraulic dumps, capable of doing either single or double dumping; (iv) three large cargo sheds, each 140 feet by 30 feet; (v) 15-ton electric crane for coal and timber.

A 93-feet wooden extension to the Auckland Point Jetty has been approved and the construction is proceeding.

(b) Finances. The total capital expenditure to the end of 1928 amounted to £91,480. The revenue for 1928 was £5,421, and the expenditure £4,808.

(v) Mackay Harbour Board. (a) General. The Mackay Harbour Board consists of nine members elected by the electors of the city of Mackay and the shires of Pioneer, Sarina, Mirani and Nebo. The erection of mooring piles near the mouth of the river was completed during the year. This work will greatly facilitate the despatch of the large sugar exportations by the Adelaide Steamship Company's vessels, and the erection has been leased to the said company.

(b) Finances. Capital expenditure for the year 1928 was £17,222; receipts totalled £17,292; total expenditure amounted to £23,795.

(vi) Rockhampton Harbour Board. (a) General. The Rockhampton Harbour Board consists of eleven members, of whom seven are elected by the electors on the rolls for the city of Rockhampton, the town of Mount Morgan and the shires of Fitzroy and Livingstone. The remaining four are elected by the councillors of groups of inland shires.

In the port of Rockhampton, which comprises the tidal area of the Fitzroy River as far as the entrance to Keppel Bay, there are three principal places where steamers may lie and discharge cargo, viz., (i) Rockhampton itself, (ii) Port Alma, where the oversea steamers berth, and (iii) Broadmount, originally built for the oversea trade some years ago. The wharves at these three places are connected by rail with Rockhampton and with the main central line. The Board undertakes the work of improving the navigable channels throughout the estuary and river, and of maintaining the wharves at Port Alma and Rockhampton.

(b) Finances. The revenue for the year 1928 was $\pounds 27,581$; and the expenditure was $\pounds 25,778$, which included $\pounds 1,321$ interest on loans and overdraft.

(vii) Townsville Harbour Board. (a) General. The Townsville Harbour Board is composed of nine members, of whom two are appointed by the Governor in Council, and the remaining seven are elected by the electors of Townsville and adjacent towns and shires. All harbour works and conveniences for the use of shipping are under the control of the Board.

(b) Finances. The total expenditure since the inception of the Board is £1,809,380, while the receipts for the year 1928 were £76,071 and the expenditure £62,920.

4. Westerii Australia.—(i) Fremantle Harbour Trust. (a) General. Fremantle Harbour is controlled by a Board of five Commissioners appointed by the Governor in Council. A description of the works was given in a previous Year Book (see No. 12, p. 973). Since that account was written, the inner harbour and entrance channel have been dredged to a depth of 36 feet below the lowest known low water. The berthage accommodation at all the quays has also been deepened to 36 feet.

(b) Finances. The following table gives financial data for the years 1924 to 1928 :---

Year ended				Gross Amount Paid to the Treasury.						
30th June			Expenditure.	Interest.	Sinking Fund.	Renewals Fund.	Surplus. Revenue.	Total.		
		£	£	£	£	£	£	£		
1924		357,450	146,177	85,703	21,185	2,000	96,612	205,500		
1925	••	421,255	171,391	87,783	21,564	2,000	130,776	242,123		
1926		443,395	185,137	90,013	21,879	2,000	113,290	227,182		
1927		499,936	223,441	94,094	22,545	2,000	142,245	260,884		
1928	••	535,503	271,598	97,537	23,171	2,000	133,850	256,558		

FREMANTLE HARBOUR TRUST.—FINANCES, 1924 TO 1928.

(ii) Bunbury Harbour Board. (a) General. The Bunbury Harbour Board consists of five members, appointed by the Government. The jetty is 4,900 feet long, with berthage accommodation of 2,700 feet on the west side and 3,000 feet on the east side and is electrically lighted. Vessels can load alongside to depths ranging from 16 to $27\frac{1}{2}$ feet. Five electric cranes and one steam gantry crane, each of 3 tons' lifting capacity, are available.

(b) Finances. Details for the last five years are given hereunder. Surplus revenue is paid into Consolidated Revenue Fund to meet interest and sinking fund :---

Year er	Year ended 30th June-		ed 30th June— Capital Expenditure.		Expenditure.	Paid to Consolidated Revenue Fund
		1	£	£	£	£
1924			450,632	33,836	10,707	23,129
1925			450,732	37,625	17,001	22,000
1926	••		448,416	36,229	27,364	20,100
1927	••		449,580	35,973	32,907	20,150
1928	••		452,385	33,267	26,486	15,250

BUNBURY HARBOUR BOARD .- FINANCES, 1924 TO 1928.

5. Tasmania.—(i) Marine Board of Hobart. (a) General. The Marine Board of Hobart consists of nine wardens elected by the ship-owners of the Port of Hobart and the importers and exporters of goods into or from any port within the jurisdiction of the Board. The Board has jurisdiction over all ports, harbours and waters within the limits of the coast line from South-West Cape round the southern and eastern coasts to Cape Portland, and within all islands adjacent to such coast line. The duties of the Board are to maintain all wharves within its jurisdiction which are not vested in another authority or belonging to any private person, to construct new wharves where necessary, and to improve the navigation where desirable.

(b) Finances. The following table gives details for the years 1924 to 1928 :--

			R	evenue.		Expenditure.				
	ended fune—	Capital Debt. ∘	Harbour Improve- ments, Debentures, etc.	General.	Total.	Harbour Improve- ments.	Interest and Sinking Fund.	General.	Total	
								——		
		£	£.	£	£	£	£	£	£	
1924		86,806	2,456	37,465	39,921	15,787	6,180	20,304	42,271	
1925		86,302	300	38,764	39,064	4,192	6,220	25,644	36,056	
1926		78,526		39,223	39,223	625	6,208	27,211	a 41,150	
1927		66,820		40,831	40,831	1,407	5,566	23,012	a 40,985	
1928		41,073		41,276	41,276	1,914	4,734	23,384	a 37,032	
1928	••	41,073		41,276	41,270	1,914	4,734	20,004	u 57,03	

MARINE BOARD OF HOBART .-- FINANCES, 1924 TO 1928.

(a) Including £7,106 from revenue in reduction of loans in 1926, £11,000 in 1927, and £7,000 in 1928.

(ii) Marine Board of Launceston. (a) General. The Marine Board of Launceston consists of five wardens, three elected by the ratepayers of the city of Launceston and two by ratepayers of the municipalities within the Tamar District. The jurisdiction of the Board extends from Cape Portland along the north coast of Tasmania to Badger Head. The chief work carried out has been to deepen the channel of the River Tamar to 16 feet and to maintain the wharves. An important work completed in 1923 was the removal to a depth of 30 feet of Porpoise Rock, situated 4 miles from the entrance of the port. A deepwater port has been provided at Bell Bay with a depth of 40 to 45 feet alongside. The wharfage accommodation at Launceston exceeds 2,000 feet.

FIRE BRIGADES.

	Усаг.				Total Capital Debt.	Revenue.	Expenditure	
1924					£ 330,713	£ 53,672	£ 46,044	
925		••	••		329,733	48,345	47,304	
926			•••		348,851	57,320	53,397	
927					363,163	56,163	56,245	
928		• • • •			378,732	66,206	61,936	

(b) Finances. The following table gives details for the years 1924 to 1928 :----

	Year.		Total Capital Debt.	Revenue.	Expenditure.
			£	£	£
1924	 		 330,713	53,672	46,044
1925	 	• •	 329,733	48,345	47,304
1926	 		 348,851	57,320	53,397
1927	 		 363,163	56,163	56,245
1928	• • •		 378,732	66,206	61,936

MARINE BOARD OF LAUNCESTON.-FINANCES, 1924 TO 1928.

(iii) Marine Board of Burnie. The length of the breakwater is 1,250 feet, with a depth up to 42 feet at low water, and a wharf alongside, 630 feet in length by 91 feet wide, with a depth at low water from 24 to 40 feet. There are two other timber wharves 600 feet and 400 feet long respectively. The receipts for the year ending 30th June, 1928, were £22,236, and the expenditure £22,318, including £14,500 interest on loans.

§ 7. Fire Brigades.

1. New South Wales,--(i) General. Under the Fire Brigades Act of 1909-27, a Board of Fire Commissioners consisting of eight members was formed, and fire districts constituted. The cost of maintenance of fire brigades is borne in proportions of quarter, quarter, and half by the Government, the municipalities, and the insurance companies concerned, but the expenditure must be so regulated that the proportion payable by the councils in a fire district shall not exceed the amount obtainable from $\frac{1}{2}d$. in the £ rate on the unimproved capital value of rateable land in the fire district : provided that the Board, with the consent of the Minister, and at the special request of the councils of the municipalities or shires constituting or forming part of a fire district or a majority in number of such councils may, as to that district, exceed the limit above provided.

(ii) Sydney Fire District. (a) Plant, etc. The Sydney fire district includes the City of Sydney and suburbs, comprising a total area of 246 square miles. On the 31st December, 1928, the Board had under its control in this district 75 stations, 598 permanent men, 260 partially-paid firemen, 2 steam and 75 motor fire engines, 163,000 feet of hose, and 662 telephone fire alarms. The length of wire used for telephone lines was 1,749 miles. There are in operation 324 sprinkler installations, 93 thermostatic alarms, 4 watchman's clock systems, and 290 private fire alarms.

(b) Finances. The subjoined table shows the receipts and disbursements of the Board for the past five years in respect of the Sydney Fire District :---

			Recei	pts.			
Year.	From Govern- ment.	From Municipali- ties.	From Fire Insurance Companies.	From Firms.	From other Sources.	Total.	Disburse- ments.
	£	£	£	£	£	£	£
1924	60,768	60,768	60,183	584	5,401	187,704	186,159
1925	60,768	60,768	60,093	675	5,154	187,458	196,672
1926	72,676	72,676	71,807	869	6,293	224,321	223,568
1927	59,193	59,193	116,226	2,160	7.311	244.083	240.072
1928	73,904	73,904	144,018	3,790	5,896	301,512	307,762

SYDNEY FIRE DISTRICT.—FINANCES, 1924 TO 1928.

2. Victoria.—(i) General. The Fire Brigades Act of 1915 provides for a Metropolitan Fire Brigades Board, and a Country Fire Brigades Board, each consisting of nine members, with local committees in country districts. The income of each board is derived in equal proportions from the Treasury, the municipalities, and insurance companies.

(ii) Metropolitan Fire Brigade Board. (a) Plant, etc. On the 30th June, 1928, the Board had under its control 41 stations, 291 permanent men, 170 partially-paid firemen, 78 special service firemen, 66 men engaged in the workshops, 15 in the tailoring department and 9 clerks, 1 motor-drawn steam fire engine, 7 petrol motor fire engines, 40 combination hose carriages and pumps, 4 petrol motor combination appliances, 2 petrol motor salvage vans, 3 special service vans, 4 motor cycles, 11 petrol motor hose wagons, 1 petrol delivery wagon, 3 motor lorries, 1 chief officer's car, 1 deputy chief officer's car, 12 inspection and instructional cars, 16 hand hose reels, 3 extension ladders and fire escapes, 4 Pompier ladders, 44 hand pumps, 12 smoke helmets, 1 smoke jacket, 114,741 feet of hose.

The electrical equipment of the brigade now consists of 1,541 fire alarm call boxes, of which 391 are directly connected to public and other buildings, together with 1,228 auxiliary fire alarms, and the remaining 1,150 are street alarms. The number of street fire alarm circuits is 490. In addition there are 273 sprinkler alarm installations connected by 144 circuits directly to the Brigade, and 34 buildings are protected by automatic fire alarm circuits. The total number of watchman's recording and detector clocks installed in Melbourne is now 109.

(b) Finances. The following table gives particulars for each year from 1923-24 to 1927-28 inclusive :---

Particulars.	;	1924.	1925.	1926.	1927.	1928.
		R	ECEIPTS.			
Contributions Receipts for services Interest and Sundries	 	£ 131,739 16,486 9,811	£ 151,322 20,138 11,642	£ 157,872 21,180 16,575	£ 170,127 24,224 20,078	£ 177,732 25,343 25,461
Total	••	158,036	183,102	195,627	214,429	228,536

METROPOLITAN FIRE BRIGADES BOARD, VICTORIA.—FINANCES, 1924 TO 1928.

108,787 85,477 100,651 104,215 118,615 Salaries Interest and sinking fund .. 15,210 11,682 12,982 16,314 10,821 59,172 80,277 85,928 68,880 93,101 Other expenditure . . 181,213 197,474 209,925 228,030 155,470 Total

(iii) Country Fire Brigades Board. (a) Plant, etc. At 30th June, 1928, there were 117 municipal councils and 106 insurance companies included in the operations of the Act. The brigades are composed chiefly of volunteers, but in the large centres a few permanent station-keepers and partially-paid firemen are employed. Complete fire alarm systems are installed in 27 of the larger provincial cities and townships. There were 147 registered brigades and 2,687 registered firemen at 30th June, 1928. The equipment included 31 motor pumps, 27 motor tenders, 2 steam fire engines, and numerous manual engines and hose reels. (b) Revenue and Expenditure. Revenue and expenditure for the years 1924 to 1928 (30th June) are given below :---

Particulars.			1924 (Six Months to 30th June).	1925.	1926.	1927.	1928.	
Revenue Expenditure	 	 	£ 16,907 16,432	£ 25,133 23,684	£ 29,733 31,113	£ 31,139 29,948	£ 33,326 33,309	

COUNTRY FIRE BRIGADES BOARD, VICTORIA.—REVENUE AND EXPENDITURE, 1924 TO 1928.

3. Queensland.—(i) General. The Act of 1920 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 Treasurer two-sevenths, insurance companies three-sevenths, and local authorities two-sevenths. All volunteer fire brigades must be registered.

(ii) Fire Brigades Boards. (a) Plant, etc. At the end of the year 1927 there were fire brigades in 30 towns, with a total strength of 148 permanent men, 279 partly paid, and 97 volunteers. The plant included 45 motor, 3 steam, and 7 manual fire engines, 54 hose reels, consisting of 22 motor, 3 horse, and 29 hand reels, and 113,154 feet of hose. The total number of call points was 728. The Metropolitan Fire Brigade protects an area of 32 square miles and has a staff of 149 men. There are 199 fire alarm circuits, 311 street fire alarms, 15 private coded alarms not available to public, 69 automatic thermostats, 35 sprinkler installations, 12 push button alarms, and 19 direct telephone alarms.

(b) Revenue and Expenditure. The following table gives details for the years 1923 to 1927 :---

FIRE BRIGADE BOARDS, QUEENSLAND.—REVENUE AND EXPENDITURE, 1923 TO 1927.

		Reve	enue.	Expenditure.				
Year.	From Govern- ment.	From Local Authorities.	From Insurance Companies.	Total.	Salaries and Wages.	Buildings, Repairs, etc.	Plant, Stores, etc.	Totał.
	£	£	£	£	£	. £	£	£
1923 1924 1925 1926 1927	16,054 17,140 18,485 19,454 20,768	15,094 16,347 18,597 19,196 21,069	22,455 24,489 27,928 30,289 30,990	64,190 61,212 73,295 93,657 90,995	35,803 40,032 41,280 47,283 50,035	12,336 3,344 3,970 25,828 17,846	10,166 10,081 11,461 11,047 10,194	64,597 65,183 71,330 97,032 93,590

4. South Australia.—(i) General. The Fire Brigades Act of 1913 and amendments provide for a Board of five members, and the expenses and maintenance of brigades are defrayed as to two-ninths by the Treasury, five-ninths by insurance companies, and two-ninths by the municipalities concerned.

(ii) Fire Brigades Board. (a) Plant, etc. At the end of 1928 there were altogether 26 fire brigade stations. The strength of the brigades consists of 112 permanent firemen and 99 auxiliary firemen. The plant consists of 1 steam fire engine, 12 motor engines, 18 motor hose carriages, 52,860 feet of hose, one 90-ft. turntable escape ladder, 2 telescopic curricle ladders, 2 fire escapes and petrol-driven fire float. There are 331 fire alarm circuits, 17 automatic systems, and 38 sprinkler installations.

(b) Revenue and Expenditure. The following table shows the revenue of the Board for the years 1924 to 1928, the expenditure in each year being the same :--

1 1114	DICIGNIDED	Donne,		HOOTMIEN			., ./	
	Heading.	1	1924.	1925.	1926.	1	1927.	1928.
Revenue	••	•••	£ 38,173	£ 47,103	£ 52,276	!	£ 50,309	£ 51,787

FIRE BRIGADES BOARD, SOUTH AUSTRALIA.-REVENUE, 1924 TO 1928.

5. Western Australia.—(i) General. Under the 1916 Act every municipal or road board district is constituted a fire district under the control of the Western Australian Fire Brigades Board. The income of the Board is derived as to two-eighths from Government, three-eighths from municipalities, and three-eighths from insurance companies.

(ii) Western Australian Fire Brigades Board. (a) Plant, etc. The whole of the brigades throughout the State are now controlled by the Western Australian Fire Brigades Board, and number 41. The staff at the 30th September, 1928, included a chief officer, deputy chief officer, third officer, district officer, motor engineer, electrical engineer, 12 other officers, 102 permanent, 16 partially-paid, and 480 volunteer firemen. The plant comprised 5 steam and 18 motor engines, 18 motor hose carriages, 35 reels, and 75,200 feet of hose. There are 353 private fire alarm circuits, 534 street fire alarms, 6 automatic systems, and 35 sprinkler installations.

(b) Finances. The following table gives details for the years 1924 to 1928 :--

WESTERN AUSTRALIAN FIRE BRIGADES BOARD.—FINANCES, 1924 TO 1928.

	Ist December—				Estimated Value.		
Year ended 31			Revenue.	Expenditure.	Land and Buildings.	Plant.	
			£	£	£	£	
1924	••		38,720	38,621	48,650	28,000	
1925			50,341	46,539	60,440	29,590	
1926			(a)36;314	(a)37,990	65,700	32,200	
1926–27 (b)		!	50,468	` 50,997	66,000	33,000	
1927–28 (b)			55.048	54,021	68,600	36,900	

(a) Nine months only.

(b) Year ended 30th September.

6. Tasmania.—(i) General. The municipal council of any municipality may, under the Act of 1920, petition the Governor to proclaim the municipality or any portion of it to be a fire district, each district to have a Board of five members. The expenses of each Board are borne in equal proportions by contributions from the Treasurer, the municipality concerned, and insurance companies insuring property within the district.

(ii) Hobart Fire Brigade Board. (a) Plant, etc. At the end of 1928 the staff consisted of 13 permanent and 12 partially-paid firemen. There were at that date also 2 motor pumps, 1 ladder and water tower combination, 1 extension and 1 curricle ladder, 2 motor hose carriages, 3 horse and 3 hand reels, 2 Pompier ladders, and 10,750 feet of hose. There are 24 fire alarm circuits, 60 street alarms, 15 auxiliary boxes, 3 automatic systems, and 3 sprinkler installations.

(b) Revenue and Expenditure. The revenue for the years 1927 and 1928 amounted to £6,440 and £6,468 respectively, expenditure being the same.