

## 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 are 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 present issue of 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 end of 1921, the "National" works consisted of 58 miles of roads, 283 bridges with a total length of 108,631 feet, and 23 ferries, while in the unincorporated areas of the Western Division there were 6,053 miles of roads (of which 213 miles were metalled or ballasted, 163 formed only, and 3,437 cleared only), 99 bridges of a total length of 13,602 feet, 340 culverts, and 6 ferries under the control of the Public Works Department.

(iii) *Expenditure on Roads, Bridges and Ferries.* The total Government expenditure on roads, bridges and ferries from 1857 to 1921-22 was £24,982,383. The following table shows the expenditure for each year from 1917-18 to 1921-22 :—

**ROADS, ETC.—EXPENDITURE BY PUBLIC WORKS DEPARTMENT,  
NEW SOUTH WALES, 1917-18 TO 1921-22.**

Year ending 30th June.	1918.	1919.	1920.	1921.	1922.
	£	£	£	£	£
Expenditure .. ..	74,459	88,591	116,034	163,121	542,205

During the year ended 30th June, 1922, a main roads vote of £171,232 was distributed among the municipalities and shires, a general oversight over the expenditure thereof being exercised by Departmental officers.

2. *Victoria.*—(a) *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, 1921, being £965,646. An annual payment of £50,000 is also made out of Consolidated Revenue to the Board for maintenance works.

(b) *Direct Expenditure by Government.* The following table shows the amounts of money expended directly by the Government on roads and bridges during the years 1917-1918 to 1921-22 :—

**ROADS AND BRIDGES—GOVERNMENT EXPENDITURE, VICTORIA,  
1917-18 TO 1921-22.**

Year.	1917-18.	1918-19.	1919-20.	1920-21.	1921-22.
	£	£	£	£	£
Expenditure .. ..	19,782	20,591	7,832	10,842	23,622

(c) *Country Roads Board.* The duties of this Board were given in some detail in the preceding number of the Year Book (see No. 15, p. 526).

The borrowing of a sum of £3,000,000 by the Government has been authorized for the purpose of making roads. One half of the amount expended on permanent works and maintenance must be refunded by the municipalities affected, six 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 first of July in each year. A special rate, not exceeding six pence 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 traction-engines are credited to the Country Roads Board Fund. The total loan expenditure for permanent works to the 30th June, 1921, was £2,177,245. The following table gives the revenue and expenditure on permanent and maintenance works for the five years 1916-17 to 1920-21:—

**COUNTRY ROADS BOARD, VICTORIA—REVENUE AND EXPENDITURE,  
1916-17 TO 1920-21.**

Year ended 30th June.	Revenue.					Expenditure.	
	Motor Regis- tration and Licence Fees.	Unused Roads etc., Licence Fees.	Contributions by Municipalities.		Total.	Permanent Works.	Main- tenance.
			Permanent Works.	Main- tenance.			
	£	£	£	£	£	£	£
1917 .. ..	44,746	24,358	23,527	..	96,707	226,603	130,537
1918 .. ..	58,485	23,736	30,256	..	116,521	226,599	173,757
1919 .. ..	67,666	22,374	29,841	82,453	261,655	284,734	179,133
1920 .. ..	85,303	22,072	37,573	89,730	294,498	335,755	192,320
1921 .. ..	98,135	21,441	50,036	90,335	342,865	271,869	221,395

(d) *Developmental Roads.* For the purpose of constructing and maintaining subsidiary or developmental roads, the Government may borrow the sum of £2,000,000. 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, 1921 was £693,309, and the total expenditure to that date was £1,058,210.

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. The duties of this Board 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 Board must consider such objections and may vary its 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 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) taxes and fees on motor vehicles, traction engines and wheels of vehicles, (c) fees and rents for unused roads, (d) moneys received for the sale of timber, sand, etc., on any main road, and (e) all other moneys received or recovered by the Board. Wherever possible, the Board 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 Board 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, 1922, the receipts of the Board amounted to £110,945, including £60,000 from the Treasury Loan Fund and £49,188 from motor fees, and the disbursements to £40,063, including £9,540 expenditure on permanent works and £1,118 on maintenance of main roads. At that date, 1,210 miles of roads had been gazetted as main roads, 1,217 miles had been surveyed, and the estimated cost of works for which plans were in hand or completed, including bridges, was £95,592.

4. **South Australia.**—In the sparsely settled districts outside the incorporated areas, the roads and bridges are constructed and maintained by the Public Works Department, which expended thereon during the year ended 30th June, 1921, the sum of £29,997. During the same year, the Government expended £120,223 from loan funds on certain main roads. Under the Main Roads Act of 1922, the Government is authorized to borrow up to £300,000 for the purpose of reconstructing main roads and for acquiring quarries and working the same. A large amount of money is allocated annually to the municipal corporations and district councils solely for the construction and maintenance of main roads within their boundaries.

The Roads Improvement Act 1921 provides for the constitution of a Roads Advisory Board, consisting of three members of the Public Service appointed by the Governor. Main roads may be proclaimed. The duties of the Board are to advise the Minister as to the moneys which should be expended by each council on the construction, maintenance and keeping in repair of the main roads within its district, and the amount of money voted for main roads which should be allocated to each council. The Minister determines (a) the total amount of money to be expended by each council for such purposes during each financial year, (b) the amount to be allocated to each council, and (c) the amount to be spent by each council out of revenue, for which a council may declare a special rate not exceeding fourpence in the pound, but the amount under (c) must not exceed one-half the amount under (b). Should a council make default in carrying out the work prescribed, the Engineer for Roads and Bridges may undertake it, and half the amount of the cost thereof becomes a debt due by such council to the Minister.

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 central Government.

Up to the 30th June, 1922, the loan expenditure on these works was £3,776,066. In addition, half the proceeds of the sale of land has formed a Crown Lands Fund for the construction of roads to new holdings. Under this provision £658,616 has been expended. This fund has in recent years more than met the demands on it, and expenditure therefrom since 1918 has been limited to £10,000 annually, the balance being used for redemption of debt. The following table gives the total expenditure up to the 30th June, 1918, and the annual expenditure during the years 1918–19 to 1921–22 by the State on the construction of roads and bridges, together with the mileage of new roads and the number of new bridges built during those four years :—

**ROADS AND BRIDGES, TASMANIA—GOVERNMENT EXPENDITURE ON  
CONSTRUCTION TO 30th JUNE, 1922.**

Period.	Expenditure.		New-road Mileage.		New Bridges.
	Loans.	Crown Lands Fund.	Cleared.	Metalled.	
	£	£	Miles.	Miles.	No.
Total to 30th June, 1918 .. ..	3,403,644	632,116	..	..	..
1918–19 .. ..	90,101	6,995	81	89	36
1919–20 .. ..	81,940	6,563	67	68	17
1920–21 .. ..	100,621	4,744	62	80	8
1921–22 .. ..	99,760	8,198	69	73	27

(ii) *Maintenance.* The maintenance of roads and bridges is undertaken by the municipalities with some assistance from the central 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 1921–22 the amount available for 1,049 miles of main road was £27,000. 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.

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, 1921 :—

**ROADS AND BRIDGES.—GOVERNMENT LOAN EXPENDITURE TO THE  
30th JUNE, 1921.**

Expenditure.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	All States.
	£	£	£	£	£	£	£
Total ..	1,854,775	3,531,678	931,775	1,929,966	412,552	3,676,396	12,337,142

The following table shows the annual expenditure from loans on roads and bridges by the central Governments in each State during the years 1916–17 to 1920–21 :—

**ROADS AND BRIDGES.—LOAN EXPENDITURE BY STATES, 1917 TO 1921.**

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	All States.
	£	£	£	£	£	£	£
1916–17 ..	5,428	252,836	..	54,939	5,879	..	319,082
1917–18 ..	22,374	241,892	..	43,693	2,600	..	310,559
1918–19 ..	13,089	360,524	..	22,008	4,310	90,101	490,032
1919–20 ..	6,674	623,570	..	66,393	14,538	81,940	793,115
1920–21 ..	13,555	965,646	..	120,223	32,121	100,621	1,232,166

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 1921 being 183,985 square miles, of which 2,845 square miles are included in the former and 181,140 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 1917 to 1921 :—

MUNICIPALITIES, NEW SOUTH WALES—SUMMARY, 1917 TO 1921.

Year.	No. of Municipalities.	Sydney and Suburbs.		Country.		Length of Roads.	Bridges.	Ferries.
		Area.	Population.	Area.	Population.			
1917	185	95,259	762,480	1,742,275	453,800	(a)	(a)	(a)
1918	184	95,259	777,140	1,710,675	463,500	10,214	929	12
1919	183	95,259	811,910	1,710,475	482,860	(a)	(a)	(a)
1920	185	95,259	881,594	1,725,875	525,264	(a)	(a)	(a)
1921	185	95,259	906,320	1,725,875	531,090	10,187	745	26

(a) Not available.

Of the 10,187 miles of roads, 4,474 were metalled, ballasted or gravelled, 1,912 formed only, and 2,162 cleared only, while 1,639 miles were natural surface.

(b) *Unimproved and Improved Values*. The following table gives a comparison of the unimproved and improved values for the years 1917 to 1921 inclusive :—

MUNICIPALITIES, NEW SOUTH WALES.—CAPITAL VALUES, 1917 TO 1921.

Year.	Sydney.	Suburbs.	Metropolitan.	Country.	Total.
UNIMPROVED VALUE.					
	£	£	£	£	£
1917 .. ..	31,130,368	36,808,755	67,939,123	24,350,474	92,289,597
1918 .. ..	31,880,295	38,176,261	70,056,556	24,629,668	94,686,224
1919 .. ..	31,831,054	39,672,190	71,503,244	25,289,371	96,792,615
1920 .. ..	33,077,620	46,847,825	79,925,445	29,060,263	108,985,708
1921 .. ..	35,887,412	51,027,987	86,915,399	30,706,273	117,621,672
IMPROVED VALUE.					
	£	£	£	£	£
1917 .. ..	81,976,260	101,493,562	183,469,822	62,055,080	245,524,902
1918 .. ..	82,027,200	106,647,308	188,674,508	63,368,253	252,042,761
1919 .. ..	82,808,760	111,686,717	194,495,477	66,059,272	260,554,749
1920 .. ..	84,580,400	127,414,223	211,994,623	77,900,508	289,895,131
1921 .. ..	99,647,060	141,632,450	241,279,510	88,922,248	330,201,758

(c) *Revenue and Expenditure.* The following table gives particulars of the revenue and expenditure of municipalities for the year ending 31st December, 1921, under various headings :—

**MUNICIPALITIES, NEW SOUTH WALES.—REVENUE AND EXPENDITURE, 1921**

Particulars.	Sydney.	Suburbs.	Country.	Total
REVENUE.				
General fund .. ..	£	£	£	£
Trading accounts .. ..	2,068,153 (a)	1,373,092	939,857	2,312,949 (b)
Special and local funds .. ..		12,002	379,806	391,808 (b)
		23,375	262,392	290,767 (b)
Gross revenue .. ..	2,068,153	1,413,469	1,582,055	5,063,677
EXPENDITURE.				
General fund .. ..		1,471,529	932,885	2,404,414 (b)
Trading accounts .. ..	2,060,635 (a)	13,673	330,221	343,894 (b)
Special and local funds .. ..		26,341	244,317	270,658 (b)
Gross expenditure .. ..	2,060,635	1,511,543	1,507,423	5,079,601

(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 subjoined table shows the gross revenue and expenditure of all municipalities for the five years 1917 to 1921 :—

**MUNICIPALITIES, NEW SOUTH WALES.—REVENUE AND EXPENDITURE, 1917 TO 1921.**

Municipalities.	1917.	1918.	1919.	1920.	1921.
GROSS REVENUE.					
Sydney .. ..	£ 1,161,406	£ 1,263,170	£ 1,483,810	£ 1,724,858	£ 2,068,153
Suburban .. ..	899,375	935,108	1,012,024	1,200,139	1,413,469
Country .. ..	1,064,483	1,141,795	1,271,005	1,357,065	1,582,055
Total .. ..	3,125,264	3,340,073	3,766,839	4,282,062	5,063,677
GROSS EXPENDITURE.					
Sydney .. ..	£ 1,228,187	£ 1,246,130	£ 1,454,277	£ 1,747,972	£ 2,060,635
Suburban .. ..	872,942	912,266	987,885	1,145,765	1,511,543
Country .. ..	968,099	1,043,633	1,228,553	1,293,564	1,507,423
Total .. ..	3,069,228	3,202,029	3,670,715	4,187,301	5,079,601

(d) *Assets and Liabilities.* The financial position of the municipalities as at the 31st December, 1921, is shown by the following statement of assets and liabilities. The amounts relating to each fund are not available for 1921, as heretofore, owing to the amalgamation of a number of special accounts with the general fund.

**MUNICIPALITIES, NEW SOUTH WALES.—ASSETS AND LIABILITIES, 1921.**

Particulars.	Sydney.	Suburbs	Country.	Total
<b>ASSETS.</b>				
	£	£	£	£
Bank balance and cash ..	13,652,090 (a)	220,533	314,023	534,556 (b)
Outstanding rates ..		84,304	167,240	251,544 (b)
Sundry debtors ..		67,296	163,441	230,737 (b)
Stores and materials ..		24,578	71,527	96,105 (b)
Land, buildings, etc. ..		624,228	3,259,519	3,883,747 (b)
Other ..		39,161	61,715	100,876 (b)
<b>Total ..</b>	<b>13,652,090</b>	<b>1,060,100</b>	<b>4,037,465</b>	<b>18,749,655</b>
<b>LIABILITIES.</b>				
Loans, outstanding interest and sundry creditors ..	13,190,947 (a)	1,257,326	1,098,314	2,355,640 (b)
Debts due to Government and interest thereon ..		95,527	1,695,706	1,791,233 (b)
Bank overdrafts ..		129,292	90,930	220,222 (b)
Other ..		12,217	93,201	105,418 (b)
	<b>13,190,947</b>	<b>1,494,362</b>	<b>2,978,151</b>	<b>17,663,460</b>

(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, 1917 TO 1921.**

Year.	No. of Shires.	Area.	Population.	Unimproved Capital Value.	Length of Roads.	Bridges.	Ferries.
	No.	sq. miles.	No.	£	miles.	No.	No.
1917 ..	136	180,658	658,880	107,695,315	(a)	(a)	(a)
1918 ..	136	180,658	673,860	109,133,215	83,309	3,567	98
1919 ..	136	180,708	692,230	110,881,306	(a)	(a)	(a)
1920 ..	136	181,140	670,123	120,872,326	(a)	(a)	(a)
1921 ..	136	181,140	676,130	130,834,456	85,458	3,627	175

(a) Not available.

Of the 85,458 miles of roads, 17,216 miles were metalled or ballasted, 12,200 formed only, and 26,538 cleared only, the balance being natural surface.

(b) *Revenue and Expenditure.* The revenue and expenditure of shires for the years 1917 to 1921 are shown in the following table. Included in the receipts for 1921 are Government grants amounting to £152,753:—



## SHIRES, NEW SOUTH WALES.—REVENUE AND EXPENDITURE, 1917 TO 1921.

Particulars.	1917.	1918.	1919	1920.	1921.
REVENUE.					
<i>General Fund—</i>	£	£	£	£	£
General rates (including interest) ..	672,473	710,983	742,026	825,781	968,886
Government endowment ..	151,446	162,188	153,234	156,429	178,420
Public works ..	167,696	157,737	230,673	196,045	188,533
Health administration ..	3,987	3,865	13,731	79,410	84,014
Public services ..	10,682	11,487	12,481	14,630	15,540
Shire property ..	14,343	14,258	15,539	13,456	16,145
Miscellaneous ..	7,303	7,427	7,192	12,125	8,939
<i>Special and Local Funds</i> ..	84,374	93,101	114,885	57,540	87,124
Total revenue ..	1,112,304	1,161,046	1,289,761	1,355,416	1,547,601
EXPENDITURE.					
<i>General Fund—</i>					
Administrative expenses ..	100,649	99,391	115,657	146,762	140,300
Public works ..	901,730	916,351	1,013,337	994,731	1,187,349
Health administration ..	9,149	9,292	26,237	84,282	89,344
Public services ..	18,256	19,370	21,293	26,239	33,782
Shire property ..	16,211	16,884	17,037	14,935	18,721
Miscellaneous ..	15,912	15,526	16,034	8,589	9,418
<i>Special, Local, and Loan Funds</i> ..	78,819	86,905	98,403	50,210	78,474
Total expenditure ..	1,140,726	1,163,719	1,307,998	1,325,748	1,557,388

(c) *Assets and Liabilities.* The finances of the shires at the end of the year 1921 showed an excess of assets of £393,372. The following table gives particulars of assets and liabilities as at the 31st December, 1921 :—

## SHIRES, NEW SOUTH WALES.—ASSETS AND LIABILITIES, 1921.

Assets.	Amount.	Liabilities.	Amount.
	£		£
Bank balances and cash ..	157,643	Loans outstanding, interest and	
Outstanding rates ..	107,234	sundry creditors ..	213,543
Sundry debtors ..	33,587	Bank overdrafts ..	89,008
Stores and materials ..	25,442	Other ..	51,722
Land, buildings, etc. ..	421,009		
Other ..	2,730		
Total ..	747,645	Total ..	354,273

2. *Victoria.*—(i) *General.* Local Government is established throughout the State (with the exception of French Island), 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 1921–22 a sum of £66,312 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 ratable property for the years 1918 to 1922 inclusive :—

### MUNICIPALITIES, VICTORIA.—SUMMARY, 1918 TO 1922.

Year ending 30th September.	Number of Municipal- ities.	Estimated Population.	Number of Ratepayers (both sexes).	Estimated Number of Dwellings.	Estimated Value of Ratable Property.	
					Total.	Annual.
CITIES, TOWNS, AND BOROUGHES.						
	No.	No.	No.	No.	£	£
1918 .. ..	52	844,970	219,076	192,724	158,777,843	8,912,303
1919 .. ..	52	859,470	224,757	196,815	164,306,704	9,227,807
1920 .. ..	52	877,880	228,518	199,147	172,838,636	9,687,320
1921 .. ..	55	886,030	237,037	203,446	193,947,624	10,864,184
1922 .. ..	53	914,371 <sup>a</sup>	245,589	204,144 <sup>a</sup>	210,501,055	11,869,636

### SHIRES.

	No.	No.	No.	No.	£	£
1918 .. ..	139	613,380	186,551	141,082	172,558,872	8,735,794
1919 .. ..	138	622,260	188,032	141,600	176,297,529	8,922,859
1920 .. ..	138	628,420	188,892	141,918	184,599,186	9,340,172
1921 .. ..	138	628,970	198,801	144,270	205,555,121	10,350,524
1922 .. ..	139	610,987 <sup>a</sup>	201,956	141,842 <sup>a</sup>	215,984,328	10,875,948

(a) Census figures.

(b) *Revenue and Expenditure.* The following table shows the revenue from various sources, and the expenditure under various heads, exclusive of loan revenue and expenditure, of municipalities during the years 1917 to 1921 :—

### MUNICIPALITIES, VICTORIA.—REVENUE AND EXPENDITURE, 1917 TO 1921.

Items.		1917.	1918.	1919.	1920.	1921.
REVENUE.						
		£	£	£	£	£
Taxation	Rates .. ..	1,395,723	1,462,640	1,560,968	1,750,778	2,083,931
	Licences .. ..	108,651	109,916	136,517	135,383	126,952
	Dog fees .. ..	20,883	21,481	21,074	22,575	23,682
	Market and weigh- bridge dues ..	67,726	71,737	85,240	87,845	91,448
Government endowments and grants .. ..		68,364	62,460	96,429	74,563	65,581
Contributions for streets, etc.		54,620	63,910	93,900	73,182	84,936
Sanitary charges ..		96,484	101,791	101,996	116,096	133,244
Rents .. ..		62,953	65,821	69,845	85,517	92,717
Other sources .. ..		487,962	566,788	714,156	879,024	890,625
Total .. ..		2,363,366	2,526,544	2,880,125	3,224,963	3,593,116

MUNICIPALITIES, VICTORIA.—REVENUE AND EXPENDITURE, 1917 TO 1921—*continued.*

Items.	1917.	1918.	1919.	1920.	1921.
EXPENDITURE.					
Salaries, etc. .. ..	£ 210,034	£ 214,797	£ 226,692	£ 246,851	£ 284,158
Sanitary work, street cleaning, etc. .. ..	243,774	244,984	248,956	306,775	345,834
Lighting .. ..	97,685	98,511	100,679	102,945	115,968
Fire brigades' contributions	33,939	32,786	35,120	39,637	46,512
Public works { Construction	200,151	232,977	294,874	208,326	238,165
{ Maintenance	897,136	1,046,474	1,152,247	1,385,347	1,683,619
Formation of private streets, etc. .. ..	63,499	75,474	111,125	82,746	130,125
Redemption of loans .. ..	112,020	124,797	137,688	128,664	133,786
Interest on loans .. ..	274,113	277,435	257,057	264,147	276,065
Charities .. ..	20,350	19,977	21,103	25,031	29,468
Other expenditure .. ..	186,310	178,043	332,347	313,650	315,085
Total .. ..	2,339,011	2,546,255	2,917,888	3,104,119	3,598,785

(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 1917 to 1921 :—

## MUNICIPALITIES, VICTORIA.—ASSETS AND LIABILITIES, 1917 TO 1921.

Items.	1917.	1918.	1919.	1920.	1921.
ASSETS.					
MUNICIPAL FUND—	£	£	£	£	£
Uncollected rates .. ..	138,617	132,217	133,585	133,573	158,301
Other assets .. ..	442,388	427,046	550,283	483,724	591,508
LOAN FUND—					
(a) Sinking funds—					
Amount at credit .. ..	745,784	596,550	465,132	489,332	523,834
Arrears due .. ..	1,732	5,054	1,093	3,098	483
(b) Unexpended balances	286,206	238,906	204,761	221,405	331,561
PROPERTY—					
Buildings, markets, etc. ..	3,848,320	3,871,232	3,938,068	4,077,892	4,457,527
Waterworks .. ..	252,069	268,815	271,581	270,147	256,169
Gasworks .. ..	109,215	110,819	114,505	117,704	123,454
Total .. ..	5,824,331	5,650,639	5,679,008	5,796,875	6,442,837
LIABILITIES.					
MUNICIPAL FUND—					
Arrears due sinking funds	1,732	5,054	1,093	3,098	483
Overdue interest .. ..	24,425	6,920	6,611	7,091	5,379
Bank overdrafts .. ..	233,160	317,410	484,785	442,326	542,462
Other liabilities .. ..	233,189	269,947	280,475	281,675	352,518
LOAN FUND—					
Loans outstanding .. ..	6,030,343	5,764,050	5,041,429	5,192,069	5,595,614
Due on loan contracts .. ..	42,428	47,145	129,192	220,188	158,009
Due on current contracts	98,538	78,115	64,037	85,368	102,191
Total .. ..	6,663,815	6,488,641	6,007,622	6,231,815	6,756,656

3. Queensland.—(i) *General.* The whole of the State 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 1917 to 1921 :—

**MUNICIPALITIES, QUEENSLAND.—SUMMARY, 1917 TO 1921.**

Year.	No.	Area.	Popula- tion.	Number of Inhabited Dwellings.	Capital Value.	Assets.	Liabilities.	
							Government Loans.	Total.

**CITIES AND TOWNS.**

		sq. miles.	No.	No.	£	£	£	£	
1917	..	35	406	320,450	62,839	16,771,990	1,829,543	261,385	1,478,978
1918	..	36	507	330,272	65,588	17,436,371	1,988,957	270,826	1,599,025
1919	..	35	510	346,019	66,879	17,648,597	2,037,948	304,204	1,667,595
1920	..	35	510	330,044	69,340	19,066,071	2,161,774	457,170	1,867,186
1921	..	36	522	339,420	71,257	19,350,707	2,579,726	506,131	2,081,724

**SHIRES.**

1917	..	139	669,488	409,845	88,437	45,276,512	567,438	181,862	306,294
1918	..	137	669,387	411,278	88,384	45,553,989	594,828	173,024	352,819
1919	..	136	669,384	425,855	92,030	46,250,148	625,883	191,551	398,272
1920	..	135	669,384	422,683	95,173	47,259,059	723,871	299,361	513,623
1921	..	134	669,372	423,857	99,364	49,051,635	800,451	338,681	620,180

(b) *Revenue and Expenditure.* The following table shows the revenue and expenditure (including loan moneys) of cities and towns, and of shires for each year from 1917 to 1921 :—

**MUNICIPALITIES, QUEENSLAND.—REVENUE AND EXPENDITURE,  
1917 TO 1921.**

Year.	Revenue.			Expenditure.			
	Rates.	Government Subsidies.	Total.	Public Works.	Loan Redemp- tion.	Office Expenses and Salaries.	Total.

**CITIES AND TOWNS.**

		£	£	£	£	£	£	
1917	..	495,510	30,012	622,481	475,689	24,062	56,179	648,228
1918	..	535,124	16,937	655,538	455,824	21,916	61,731	680,837
1919	..	612,476	45,833	798,473	577,993	20,925	68,585	860,958
1920	..	700,321	180,110	1,024,834	774,969	30,234	76,703	1,074,648
1921	..	791,259	94,453	1,025,504	842,567	32,696	92,194	1,180,420

**SHIRES.**

1917	..	485,375	16,138	572,688	395,687	12,250	86,112	555,264
1918	..	506,447	23,448	599,042	502,390	13,864	89,387	666,893
1919	..	538,769	41,000	690,476	507,506	18,080	97,047	718,018
1920	..	616,025	123,554	860,043	618,287	18,136	110,603	831,807
1921	..	666,951	86,237	844,834	671,997	22,732	134,380	925,953

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 Roads Advisory Board 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 remained unchanged, the total being 184, of which 10 corporations and 14 district councils are in the metropolitan area, and 24 corporations and 136 district councils in outside areas. According to the latest available information, there are 956 miles of roads under the control of corporations and 42,438 miles under the control of district councils, and of these totals, 10 miles are wood-blocked and 10,529 miles macadamized. 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 1917 to 1921 :—

**LOCAL AUTHORITIES, SOUTH AUSTRALIA.—SUMMARY, 1917 TO 1921.**

Year.	Area.	Estimated Population.	Occupied Dwellings.	Capital Value.	Assessment Value.	Outstanding Loans.
<b>MUNICIPAL CORPORATIONS.</b>						
	Acres.	No.	No.	£	£	£
1917 .. ..	53,226	195,809	44,311	39,799,949	2,354,649	354,021
1918 .. ..	53,287	202,328	44,768	41,765,761	2,103,195	348,744
1919 .. ..	53,949	218,932	45,814	42,401,746	2,337,394	343,926
1920 .. ..	53,949	208,022	45,674	44,106,632	2,300,858	343,643
1921 .. ..	53,959	214,730	46,782	47,980,109	2,421,920	382,293
<b>DISTRICT COUNCILS.</b>						
1917 .. ..	29,620,681	237,323	55,698	54,605,364	2,704,374	17,895
1918 .. ..	29,392,214	236,550	56,529	56,334,777	2,767,309	18,007
1919 .. ..	29,602,382	260,409	57,127	57,503,456	2,829,198	23,836
1920 .. ..	29,602,382	259,096	57,548	60,184,690	2,938,336	35,797
1921 .. ..	29,605,269	264,712	57,630	63,510,162	3,160,976	38,131

(b) *Revenue and Expenditure.* The next table gives the revenue and expenditure of corporations and district councils for the years 1917 to 1921, 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, 1917 TO 1921.**

Year.	Local Government (exclusive of Government Grants Account).						Government Grants Account (Main Roads).	
	Revenue.			Expenditure.			Revenue.	Expenditure.
	Rates.	Subsidies.	Total.	Roads.	Other Public Works.	Total.		
MUNICIPAL CORPORATIONS.								
1917 ..	£ 189,594	£ 24,084	£ 291,195	£ 96,058	£ 103,474	£ 289,235	£ 15,787	£ 14,045
1918 ..	194,497	26,821	297,907	103,640	102,482	296,590	13,033	14,640
1919 ..	215,605	25,280	334,092	114,102	140,457	340,172	14,734	15,408
1920 ..	233,645	27,347	364,200	115,013	163,260	379,709	16,703	17,113
1921 ..	279,992	29,094	420,060	137,129	194,966	444,782	23,927	21,559
DISTRICT COUNCILS.								
1917 ..	155,677	36,674	222,494	126,714	35,172	205,079	111,567	94,299
1918 ..	162,718	38,298	233,107	165,499	29,235	250,610	126,865	149,038
1919 ..	167,161	38,555	249,622	176,056	30,896	270,108	120,790	129,967
1920 ..	180,414	37,730	298,953	179,802	52,891	310,676	128,345	114,891
1921 ..	212,801	43,316	315,166	189,332	40,048	318,614	208,608	180,891

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 two latter 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 the number of municipalities, their area, population, number of dwelling houses, capital value (including improvements), annual value, and length of roads and streets, for the years 1918 to 1922. The figures for 1921 include those for one municipality which was dissolved on the 1st July, 1921, and for the population and number of dwellings in 1920 and 1921, the census-figures for 4th April, 1921, are given.

**MUNICIPALITIES, WESTERN AUSTRALIA.—SUMMARY, 1918 TO 1922.**

Year ended 31st Oct.—	Municipalities.	Area.	Population.	Dwelling Houses.	Valuation of Ratable Property.		Length of Roads and Streets.
					Capital Value.	Annual Value.	
	No.	Acres.	No.	No.	£	£	Miles.
1918 ..	25	58,070	148,431	33,789	26,077,875	1,509,736	1,120
1919 ..	23	60,911	151,575	33,626	26,172,435	1,506,691	1,118
1920 ..	23	60,911	166,222	35,492	26,280,406	1,550,134	1,135
1921 ..	22	60,911	166,222	35,492	29,947,232	1,673,545	1,140
1922 ..	21	58,981	162,561	34,537	29,492,571	1,710,389	992

(b) *Revenue and Expenditure*. The following table gives the revenue and expenditure of municipalities during the years 1918 to 1922 :—

**MUNICIPALITIES, WESTERN AUSTRALIA.—REVENUE AND EXPENDITURE, 1918 TO 1922.**

Year ended the 31st October—	Revenue.				Expenditure.			
	From Rates.	From Govt. Grants.	From other sources.	Total.	Works and Improvements.	Disbursements in respect of Loans.	Other Expenses.	Total.
	£	£	£	£	£	£	£	£
1918 ..	171,315	1,870	374,992	548,177	75,086	135,617	327,784	538,487
1919 ..	177,408	3,595	377,421	558,424	71,907	135,448	351,365	558,720
1920 ..	190,171	1,142	471,859	663,172	95,194	147,396	423,233	665,823
1921 ..	250,356	710	531,589	782,655	132,011	156,123	461,547	749,681
1922 ..	263,008	300	571,394	834,702	180,537	173,038	493,635	847,210

(c) *Assets and Liabilities*. The following table shows the assets and liabilities of municipalities at the 31st October in each financial year 1918 to 1922 :—

**MUNICIPALITIES, WESTERN AUSTRALIA.—ASSETS AND LIABILITIES, 1918 TO 1922.**

Year ended the 31st October—	Assets.				Liabilities.	
	Balance in Hand.	Value of Property.	Accrued Sinking Funds.	Total.	Outstanding Debts and Bonds.	Total.
	£	£	£	£	£	£
1918 ..	35,016	1,440,479	335,459	1,907,272	1,753,316	1,825,056
1919 ..	41,806	1,426,270	372,168	1,967,776	1,738,568	1,823,929
1920 ..	36,087	1,456,109	385,692	2,011,498	1,745,908	1,836,596
1921 ..	64,687	1,514,671	409,879	2,089,501	1,782,471	1,890,307
1922 ..	45,461	1,533,276	412,578	2,100,799	1,767,562	1,857,490

(iii) *District Road Boards.* (a) *Summary.* The following table shows the number of road districts, their area, approximate unimproved value, length of roads in existence, assets and liabilities and outstanding loans, for the years 1917 to 1921. The unimproved values given are only approximate, allowance being made for three districts for which only the annual values are available. The population at the date of the census of 4th April, 1921, was 160,970, and the number of dwellings 41,662.

**DISTRICT ROAD BOARDS, WESTERN AUSTRALIA.—SUMMARY, 1917 TO 1921.**

Year ended 30th June—	Number of Road Districts.	Area.	Unimproved Capital Value (Approximate).	Length of Roads in Existence.	Assets.	Liabilities.	Out- standing Loans.
	No.	sq. miles.	£	miles.	£	£	£
1917 ..	117	957,828	14,507,000	29,942	256,245	137,994	101,070
1918 ..	116	975,830	14,427,000	31,018	265,033	149,127	107,155
1919 ..	118	975,820	14,435,000	33,669	272,441	173,002	120,887
1920 ..	118	975,820	14,553,000	34,631	280,066	191,823	140,185
1921 ..	119	975,820	14,547,000	36,506	307,521	219,660	154,411

(b) *Revenue and Expenditure.* The revenue and expenditure of district road boards are shown in the following table for the years 1917 to 1921 :—

**DISTRICT ROAD BOARDS, WESTERN AUSTRALIA.—REVENUE AND EXPENDITURE, 1917 TO 1921.**

Year ended 30th June—	Revenue.				Expenditure.			
	Rates.	Government Grants.	Other.	Total.	Adminis- tration.	Works.	Other.	Total.
	£	£	£	£	£	£	£	£
1917 ..	113,686	30,226	55,383	199,295	26,335	126,316	36,526	189,177
1918 ..	116,245	32,594	46,187	195,026	27,969	139,514	38,682	206,165
1919 ..	118,144	27,692	53,748	199,584	29,591	132,276	42,245	204,112
1920 ..	135,644	53,234	68,902	257,780	31,722	152,172	59,471	243,365
1921 ..	149,904	39,172	85,659	274,735	36,891	179,317	69,008	285,216

(iv) *Local Boards of Health.* (a) *General.* On the 31st October, 1921, there were twenty-three local boards of health within municipalities, and on the 30th June, 1921, seventy-three under control of road boards, and thirty extra-municipal boards. Of the latter seventy-three, four under the control of road boards and ten extra-municipal boards were inactive during the year.

(b) *Finances.* The following table shows the number of boards, their revenue and expenditure, and the assets and liabilities of such as were active from 1917 to 1921. As already stated, 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, 1917 TO 1921.**

Year.	Number.	Revenue.			Expenditure.		Assets.	Liabilities.
		Rates.	Sanitary Charges.	Total.	Sanitary Service.	Total.		
		£	£	£	£	£	£	£
1917..	121	42,967	52,392	99,455	67,830	93,886	77,695	11,481
1918..	123	41,358	51,000	97,741	66,652	99,240	77,159	10,857
1919..	120	40,781	53,113	99,955	74,390	111,360	85,614	19,915
1920..	124	49,012	52,775	123,645	82,856	122,575	78,938	16,944
1921..	126	57,194	63,484	133,021	89,709	131,400	83,875	20,872

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 year 1917 to 1921. The latest available figures for inhabited dwellings is for the year 1921, when the number was 45,950.

MUNICIPALITIES, TASMANIA.—SUMMARY, 1917 TO 1921.

Year.	Number of Municipalities.	Valuations.			Outstanding Loans.	Length of Roads.
		Annual Value.	Unimproved Value.	Total Capital Value.		
	No.	£	£	£	£	Miles.
1917 .. ..	50	1,769,443	17,868,274	35,447,336	627,053	11,419
1918 .. ..	50	1,787,234	18,363,948	36,232,654	708,158	11,395
1919 .. ..	50	1,872,336	18,650,310	37,121,328	1,929,651	11,395
1920 .. ..	49	1,934,790	19,334,867	38,736,226	1,983,513	11,639
1921 .. ..	49	2,119,136	20,438,383	41,549,299	2,234,255	11,741

(b) *Revenue and Expenditure.* The following table gives the revenue and expenditure of all municipalities for the years 1917 to 1921 :—

MUNICIPALITIES, TASMANIA.—REVENUE AND EXPENDITURE, 1917 TO 1921.

Year.	Revenue.			Expenditure.			
	Rates.	Government Grants.	Total.	Adminis- tration.	Works and Services.	Interest and Sinking Fund.	Total.
	£	£	£	£	£	£	£
1917 .. ..	202,119	18,527	470,402	38,923	345,500	86,291	487,615
1918 .. ..	216,232	22,266	557,009	40,501	319,026	165,439	558,939
1919 .. ..	240,661	33,967	578,886	39,338	398,101	125,240	585,491
1920 .. ..	255,432	29,072	757,060	45,931	420,110	289,250	770,060
1921 .. ..	303,625	28,239	888,017	60,377	453,774	120,034	657,412

7. Northern Territory.—(i) *Municipality of Darwin.* The following particulars relate to the year 1921–22 :—Area 2,024 acres, population 1,000, number of occupied dwellings 228, and of other buildings 130. Revenue from general rates £2,826, from Government grants £1,560, total £4,386 ; expenditure £5,917.

(ii) *Bagot Road District.* During the year 1921–22 the receipts amounted to £235, and the expenditure to £4, leaving (with a balance of £275 brought forward from the previous year) a balance in hand of £506.

#### § 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 1921. Victoria : 30th September, 1921, except Melbourne, 31st December, and Geelong, 31st August, 1921. Queensland : calendar year 1921. South Australia : Corporations, 30th November, and district councils, 30th June, 1921. Western Australia : Municipalities, 31st October, 1921, district road boards, 30th June, 1921. Tasmania : calendar year 1921.



2. Number, Revenue, Expenditure, and Valuation of Local Authorities.—The following table shows the number, revenue, expenditure, 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.

#### LOCAL AUTHORITIES IN EACH STATE.—FINANCIAL SUMMARY, 1921.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Total.
No. of local authorities ..	321	192	170	184	141	49	1,057

#### RECEIPTS.

	£	£	£	£	£	£	£
Rates—							
General ..		2,083,931	1,009,783	352,368	366,628	96,198	
Other ..		375,326	448,427	140,425	154,310	207,427	
Government grants	6,611,278	65,581	180,690	289,949	39,882	28,139	
Loans and other sources		1,068,278	231,438	185,019	406,570	556,253	
Total ..	6,611,278	3,593,116	1,870,338	967,761	1,057,390	888,017	14,987,900

#### EXPENDITURE.

Works, services, etc.		2,513,711	1,514,564	757,877	663,002	453,774	
Interest on loans and overdrafts		276,065	39,334	17,207	90,086	101,546	
Redemptions, sinking funds, etc. ..	6,636,989	133,786	55,428	17,865	79,283	18,488	
Administration ..		284,158	226,574	91,300	96,987	60,377	
Other ..		391,065	270,473	81,597	105,539	23,227	
Total ..	6,636,989	3,598,785	2,106,373	965,846	1,034,897	657,412	15,000,302

#### VALUATIONS.

Capital value of property ..	224,456,128	426,485,383	68,402,342	111,490,271	444,494,232	41,549,299	..
Annual value of property ..	(b)	22,745,584	(b)	5,582,896	41,673,545	2,119,136	..

(a) Unimproved capital value of all ratable property. (b) Not available. (c) The valuation of road districts is the unimproved capital value. (d) Excluding district road boards.

3. Local Government Loans, 1921.—The following table shows the amount of loans raised by local authorities during the year 1921, of loans current at the end of that year, of liability on account of interest and sinking fund, and of loans redeemed during 1921 :—

#### LOCAL AUTHORITIES.—LOANS, 1921.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Total.
	£	£	£	£	£	£	£
Loans raised during year ..	2,111,962	572,851	221,901	58,070	55,418	254,099	3,274,301
Loans current at end of year	11,743,498	5,595,614	1,963,492	420,424	1,553,957	2,234,255	23,511,240
Annual liability on account of interest	506,875	(b) 276,000	87,978	20,050	90,522	119,297	1,100,722
Total sinking fund at end of year ..	1,069,365	524,317	(a)	25,621	382,925	239,159	(a)
Amount of loans redeemed during year ..	(a)	133,786	55,428	17,837	47,852	188,769	(a)

(a) Not available. (b) Approximate.

## § 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 Board of Water Supply and Sewerage, 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, 1922, the mileage of water mains laid was 118 miles, as against 128 miles in the preceding year, making the total length in sizes from 3 inches to 72 inches in diameter, 2,999 miles. The most important work completed was the pumping station at Ryde, which was erected for the purpose of maintaining an adequate supply of water for the whole of the North Sydney suburbs. The 36-in. main from Potts Hill through the western suburbs to Leichhardt was also finished and brought into commission. By raising it 20 feet, the storage capacity of the impounding dam for Manly was increased from 90 million to 428 million gallons.

(b) *Water Supplied, etc.* The following table gives the number of houses and estimated population supplied, and other details for the years 1918 to 1922 :—

WATERWORKS, SYDNEY.—WATER SUPPLIED, 1918 TO 1922.

Year ended 30th June—	Number of Houses. Supplied.	Estimated Population Supplied.	Average Daily Supply.	Total Supply for the Year.	Average Daily Supply.		Mains Laid.
					Per House.	Per Head of Estimated Population.	
	No.	No.	1,000 Gallons.	1,000 Gallons.	Gallons.	Gallons.	Miles.
1918 ..	196,685	993,425	41,358	15,096,030	206	41.63	98
1919 ..	204,308	1,021,540	45,557	16,628,342	223	44.59	106
1920 ..	212,046	1,060,230	48,021	17,527,753	226	45.29	142
1921 ..	221,886	1,109,430	48,496	17,701,000	218	43.71	128
1922 ..	229,274	1,146,370	51,002	18,616,000	222	44.49	118

(c) *Finances.* The next table gives details of the finances for the years 1918 to 1922 :—

WATERWORKS, SYDNEY.—FINANCES, 1918 TO 1922.

Year ended 30th 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.	Net Profit after Paying Working Expenses and Interest.
	£	£	£	%	%	£	£
1918 ..	523,979	195,448	8,472,700	37.30	6.18	343,716	— 15,185
1919 ..	627,288	219,322	8,900,391	34.96	7.04	377,885	30,081
1920 ..	664,975	291,618	9,584,723	43.85	6.93	433,170	— 59,813
1921 ..	855,751	347,298	10,323,252	40.58	8.28	473,889	34,564
1922 ..	923,798	376,203	11,130,857	40.72	8.30	543,164	4,431

NOTE.—The minus sign (—) signifies loss.

(iii) *Metropolitan Sewerage Systems. (a) General.* In addition to the usual progress made in connecting additional houses and constructing new sewers, six tanks have been erected at the North Sydney outfall works for the treatment of sewage by the activated sludge process in substitution for septic tanks, and 707,721,000 gallons of sewage were treated by the new process.

(b) *Houses Drained, Population Served, Length of Sewers, etc.* The subjoined table gives the number of houses drained, the estimated population served, the length of sewers and stormwater drains, the length of ventilating shafts erected, and the length of sewers ventilated for the years 1918 to 1922 :—

**SEWERAGE SYSTEMS, SYDNEY.—PARTICULARS OF SERVICES, 1918 TO 1922.**

Year ended the 30th June—	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.
1918 .. ..	139,777	698,885	1,113.34	60.07	479,464	1,039
1919 .. ..	141,798	708,990	1,131.72	60.11	484,798	1,052
1920 .. ..	145,304	726,520	1,161.94	63.73	503,362	1,096
1921 .. ..	148,923	744,615	1,196.96	63.73	514,536	1,122
1922 .. ..	153,789	768,945	1,226.96	63.73	527,766	1,162

(c) *Finances.* The following table shows the revenue, working expenses, capital cost, interest, etc., for the sewerage branch of the Metropolitan Board of Water Supply and Sewerage for the years 1918 to 1922 :—

**SEWERAGE SYSTEMS, SYDNEY.—FINANCES, 1918 TO 1922.**

Year ended the 30th 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 or Loss after Payment of Working Expenses and Interest.
	£	£	£	£	%	£	£
1918 ..	429,669	147,444	6,870,927	34.31	6.25	283,661	— 1,436
1919 ..	497,406	161,951	6,963,573	30.54	7.14	291,347	54,108
1920 ..	512,621	202,360	7,124,813	39.47	7.26	328,239	— 17,978
1921 ..	615,615	229,441	7,329,632	37.27	8.39	341,674	44,500
1922 ..	683,434	244,916	7,553,906	35.83	9.05	373,671	64,847

NOTE.—The minus sign (—) represents a loss.

(iv) *Newcastle Water Supply. (a) General.* No works of great importance were completed during the year ended 30th June, 1922, but 13 miles of water mains were laid, bringing the total up to 477 miles. The construction of the Chichester River pipe-line is being carried out by the Public Works Department, but is not yet completed.

(b) *Particulars of Services.* The following table gives the average daily supply of water, the total quantity pumped during the year, and the number of houses and population supplied for the years 1918 to 1922 :—

**NEWCASTLE WATER SUPPLY.—SUMMARY, 1918 TO 1922.**

Year ended 30th June—	Number of Houses Supplied.	Estimated Population Supplied.	Average Daily Supply.	Total Quantity Pumped for the Year.	Average Daily Supply.		Mains Laid.
					Per House.	Per Head of Estimated Population.	
	No.	No.	1,000 gallons.	1,000 gallons.	Gallons.	Gallons.	Miles.
1918 ..	23,257	116,285	3,443	1,256,628	148	29.60	6
1919 ..	24,079	120,395	4,065	1,483,807	169	33.76	13
1920 ..	24,864	124,320	4,319	1,580,906	174	34.74	11
1921 ..	25,874	129,370	4,688	1,711,187	181	36.23	14
1922 ..	26,758	133,790	4,626	1,688,537	173	34.57	13

(c) *Finances.* The next table gives the revenue, working expenses, capital debt, and net profit for the years 1918 to 1922 :—

## NEWCASTLE WATER SUPPLY.—FINANCES, 1918 TO 1922.

Year ended 30th June—	Revenue.	Working Expenses.	Capital Debt.	Percentage of Working Expenses on Revenue.	Percentage of Revenue on Capital Debt.	Interest and Sinking Fund.	Profit or Loss after Paying Working Expenses, Interest, and Sinking Fund.
	£	£	£	%	%	£	£
1918 ..	80,607	32,350	787,250	40.13	10.24	37,583	10,674
1919 ..	91,204	36,297	878,599	39.80	10.38	40,000	14,907
1920 ..	97,469	45,516	973,512	46.70	10.01	42,972	8,981
1921 ..	116,320	59,895	1,379,427	51.49	8.43	46,299	10,126
1922 ..	113,217	63,736	1,819,534	56.29	6.22	50,785	— 1,304

NOTE.—The minus sign (—) represents loss.

(v) *Newcastle Sewerage Works.* (a) *General.* Further progress has been made by the Department of Public Works with the construction of the sewerage works of Newcastle and suburbs, and further completed works, comprising the reticulation and ventilation of parts of Waratah, were transferred by the Department to the Hunter District Water Supply and Sewerage Board.

(b) *Sewerage Connections and Length of Sewers.* During the year ended 30th June, 1922, the number of properties connected with sewers was 1,198, making a total of 13,416. New sewers of a total length of 6 miles were constructed by the Board, bringing the total length of sewers under the Board's control to 157 miles.

(c) *Finances.* Particulars are given in the following table of revenue, working expenses, capital debt, interest, and profit or loss of the sewerage branch of the Board for the years 1918 to 1922 :—

## NEWCASTLE SEWERAGE.—FINANCES, 1918 TO 1922.

Year ended 30th June—	Revenue.	Working Expenses.	Capital Debt.	Percentage of Working Expenses on Revenue.	Percentage of Revenue on Capital Debt.	Interest and Sinking Fund.	Loss after Paying Working Expenses, Interest, and Sinking Fund.
	£	£	£	%	%	£	£
1918 ..	24,215	9,478	463,858	39.14	5.22	23,219	8,482
1919 ..	26,721	9,784	480,390	36.61	5.56	25,206	8,269
1920 ..	20,050	12,734	518,804	45.40	5.41	27,892	12,576
1921 ..	32,164	16,007	555,513	49.77	5.79	30,577	14,420
1922 ..	39,477	18,863	577,833	47.78	6.83	34,446	13,832

(vi) *Water Supply and Sewerage in Country Towns.* (a) *General.* Under the Local Government Act of 1919, the Public Works Department may, upon application by any municipal council, construct, out of moneys voted by Parliament therefor, waterworks and sewerage works, and when completed transfer the control thereof to the council. The cost must be repaid in instalments, with interest fixed by the Governor, spread over a period not exceeding one hundred years.

(b) *Waterworks.* Up to the 30th June, 1922, waterworks had been completed in 63 towns and handed over to the respective municipal councils, with the exception of the Junee Water Supply, which has been placed under special administration, and the Grafton Water Supply, which is vested in a Board composed of three members of the Grafton council and three members of the South Grafton council. The capital debt of all waterworks on the date mentioned was £1,512,488, and the annual amount payable in instalments and for interest was £60,125. The water supply of Broken Hill, on which loan

expenditure to the amount of £481,795 was incurred, was constructed under a special Act, and the undertaking is administered by the Minister for Public Works. A few municipalities have also constructed waterworks out of their own resources.

(c) *Sewerage Works.* Sewerage and storm-water drainage works were completed in twenty municipalities at the 30th June, 1922. The capital debt thereon amounted to £513,414, and the amount payable annually in instalments and for interest to £22,184.

2. *Victoria.*—(i) *A. The Melbourne and Metropolitan Board of Works.* (a) *General.* All land within thirteen miles of the General Post Office is included within the metropolitan area for water supply and sewerage purposes. This area covers 434 square miles, and on the 24th April, 1923, embraced 21 cities, one town and part of another, one borough and parts of 13 shires, or a total of 37 municipalities or portions thereof. The Board is also empowered to supply water to certain municipalities outside the thirteen-mile radius, to the Metropolitan Farm at Werribee, and the outfall-sewer area. Various other shires also arrange for bulk supplies of water. The liability on Government loans on the 30th June, 1922, was £938,182, and for loans raised by the Board £12,580,310. The Board is still empowered to borrow £621,442 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 1917-18 to 1921-22 :—

**WATER SUPPLY AND SEWERAGE, MELBOURNE.—REVENUE AND EXPENDITURE, 1917-18 TO 1921-22.**

Particulars.	1917-18.	1918-19.	1919-20.	1920-21.	1921-22.
<b>ORDINARY RECEIPTS.</b>					
	£	£	£	£	£
Water supply .. ..	335,674	353,466	394,007	419,474	446,875
Sewerage, etc. .. ..	308,904	364,025	396,718	404,234	454,521
Live stock—Metropolitan farm ..	58,124	57,201	53,051	43,975	19,994
Interest { Water supply .. ..	1,053	826	1,707	1,021	1,917
{ Sewerage .. ..	8,514	7,525	9,509	8,737	8,477
Sinking fund proceeds .. ..	30,275	..	..	..	..
Total .. ..	742,544	783,043	854,992	877,441	931,784
<b>ORDINARY EXPENDITURE.</b>					
General management .. ..	50,094	49,700	51,259	59,420	65,612
Live stock, etc.—Metropolitan farm	85,195	63,595	60,851	68,742	53,162
Maintenance { Water supply .. ..	39,024	39,580	60,362	67,131	62,919
{ Sewerage .. ..	61,332	56,221	62,149	78,037	74,861
Interest { Water supply .. ..	140,906	145,458	147,750	156,645	179,034
{ Sewerage .. ..	354,211	361,898	362,886	369,204	411,828
War expenditure: Safeguarding works, etc. .. ..	6,458	3,535	1,195	..	..
Patriotic, Relief Funds, etc. ..	..	713	100	104	80
Sinking fund investment .. ..	..	30,000	5,036	4,813	..
Pensions and Compensation Allowances .. ..	..	..	..	..	6,007
Total .. ..	737,220	750,700	751,588	804,096	853,503
<b>LOAN RECEIPTS.</b>					
Water supply .. ..	3,482	2,720	4,712	7,016	11,748
Sewerage .. ..	42,673	47,339	53,973	47,769	46,120
Proceeds of loans .. ..	77,025	176,125	543,853	543,616	1,573,326
Miscellaneous .. ..	4,431	4,857	4,351	3,196	17,497
Total .. ..	127,611	231,041	606,889	601,597	1,648,691

**WATER SUPPLY AND SEWERAGE, MELBOURNE.—REVENUE AND EXPENDITURE, 1917-18 TO 1921-22—continued.**

Particulars.	1917-18.	1918-19.	1919-20.	1920-21.	1921-22.
<b>LOAN EXPENDITURE.</b>					
Water supply construction ..	£ 23,569	£ 35,237	£ 55,937	£ 119,744	£ 316,329
Sewerage construction ..	182,431	191,012	265,516	257,240	300,818
Expenses in floating and redemption of loans ..	26,429	27,151	249,617	378,820	1,111,814
Miscellaneous ..	1,273	9,263	27,622	46,478	82,222
<b>Total ..</b>	<b>233,702</b>	<b>262,663</b>	<b>538,692</b>	<b>802,282</b>	<b>1,811,183</b>

**B. Melbourne Water Supply. (a) Progress of Work.** During the year ended 30th June, 1922, the construction of the lower section of the Maroondah Dam was further advanced, as also the tunnel for the diversion of the river at the O'Shanassy Dam site. A new service reservoir, to contain 43½ million gallons, was commenced at Mitcham, and the 24-in. mains from Mitcham to Notting Hill and from Camberwell to Malvern were completed. Up to the 30th June, 1922, the total amount expended on the O'Shanassy scheme was £499,962.

**(b) Quantity of Water, Number of Houses, and Population Supplied.** The following table gives various particulars for the years 1918 to 1922. The rate levied over the period has remained at sixpence in the pound.

**WATER SUPPLY, MELBOURNE.—PARTICULARS OF SERVICES, 1918 TO 1922.**

Year ended 30th June—	Number of Houses Served.	Estimated Population Supplied. (a)	Average Daily Supply.	Total Supply for the Year.	Average Daily Supply.		Length of Mains, Reticulation, etc.
					Per House.	Per Head of Estimated Population.	
	No.	No.	1,000 Gallons.	1,000 Gallons.	Gallons.	Gallons.	Miles.
1918 ..	161,743	735,607	39,133	14,283,490	241.94	53.20	1,694
1919 ..	165,046	751,115	41,222	15,045,938	249.76	54.88	1,708
1920 ..	170,550	771,871	44,360	16,235,587	260.10	57.47	1,723
1921 ..	177,998	785,845	46,772	17,071,857	262.77	59.52	1,783
1922 ..	184,453	802,144	47,661	17,396,103	258.39	59.42	1,857

(a) 31st December of previous year.

**(c) Capital Cost, Revenue, Expenditure and Surplus.** The following table shows 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, 1922, together with the total amounts to that date :—

**WATER SUPPLY, MELBOURNE.—FINANCES, 1918 TO 1922.**

Year ended 30th June—	Capital Cost.	Revenue.	Working Expenses.	Percentage of Working Expenses on Revenue.	Interest.	Surplus.
	£	£	£	%	£	£
1918 ..	21,214	331,955	60,714	18.29	139,458	131,783
1919 ..	32,245	372,180	59,394	15.96	153,573	159,213
1920 ..	47,251	398,173	62,941	15.80	156,588	178,644
1921 ..	112,025	407,093	78,755	19.34	173,550	154,788
1922 ..	310,578	438,399	86,925	19.82	196,746	154,728
<b>Total ..</b>	<b>5,390,920</b>	<b>10,740,156</b>	<b>1,851,535</b>	<b>17.24</b>	<b>4,646,526</b>	<b>4,242,095</b>

*C. Melbourne Sewerage. (a) Progress of Work.* During the year ended 30th June, 1922, two electric centrifugal pumping units, with a daily capacity of 18 million gallons, were installed at the pumping station. Four reticulation areas were completed, and six new areas commenced, while twenty minor reticulations and extensions were carried out.

*(b) Number of Houses Connected, etc.* The following table gives the number of houses connected, the estimated population served, the total length of sewers, and the number of gallons of sewage pumped for the years 1918 to 1922 :—

MELBOURNE SEWERAGE.—SUMMARY, 1918 TO 1922.

Year ended 30th June—	Number of Houses Connected.	Estimated Population Served.	Length of Sewers.	Sewage Pumped.
	No.	No.	Miles.	1,000 Gallons.
1918 .. ..	151,622	697,461	1,626	13,208,141
1919 .. ..	155,238	714,095	1,604	12,964,252
1920 .. ..	158,735	730,181	1,704	12,576,051
1921 .. ..	161,955	717,460	1,734	13,813,897
1922 .. ..	166,871	739,239	1,774	14,320,960

*(c) Finances.* The capital cost, revenue, working expenses (exclusive of renewals), percentage of working expenses on revenue, interest and deficiency for the years 1918 to 1922 are given below :—

MELBOURNE SEWERAGE.—FINANCES, 1918 TO 1922.

Year ended 30th June—	Capital Cost.	Revenue.	Working Expenses.	Percentage of Working Expenses on Revenue.	Interest.	Deficiency.
	£	£	£	%	£	£
1918 .. ..	155,911	327,399	85,327	26.06	345,521	103,449
1919 .. ..	138,884	379,900	87,954	23.15	372,235	80,289
1920 .. ..	158,288	409,057	95,287	23.29	373,925	60,155
1921 .. ..	203,324	411,177	119,304	29.01	378,023	86,150
1922 .. ..	242,220	441,516	121,045	27.41	422,295	101,824
Total ..	8,322,790	6,360,351	1,499,576	23.58	7,014,278	2,153,503

*(d) Metropolitan Sewage Farm.* A further 341 acres were acquired in 1922, bringing the total area up to 13,219 acres. The capital cost to the 30th June in that year was £611,856. The following table gives the capital cost, revenue, working expenses (exclusive of renewals), interest, net cost of sewage purification, and trading profit for the years 1918 to 1922 :—

METROPOLITAN SEWAGE FARM.—FINANCES, 1918 TO 1922.

Year ended 30th June—	Capital Cost.	Revenue.	Working Expenses.	Interest.	Net cost of Sewage Purification.	Trading Profit.
	£	£	£	£	£	£
1918 .. ..	8,050	29,346	14,567	22,374	7,595	24,435
1919 .. ..	6,667	38,847	13,827	22,668	(a) 2,352	34,112
1920 .. ..	8,099	46,921	18,296	22,964	(a) 5,661	41,061
1921 .. ..	21,245	22,925	22,744	23,550	23,360	15,750
1922 .. ..	12,472	2,993	23,588	28,711	49,306	(b) 4,837

(a) Profit.

(b) Loss.

(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 borough of Newtown and Chilwell, and one the shires of Bellarine, Corio and South Barwon. The amount of loan money which may be raised is limited to £725,000 for water supply undertaking, £502,000 for sewerage undertaking, and £200,000 for sewerage installations to properties under the deferred payment system. The population supplied is about 37,000.

(b) *Water Supply.* The catchment area is about 16,000 acres. The works comprise the Korweinguboorra 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 2,709,335,280 gallons, and there are 178 miles of reticulation mains within the city of Geelong and its suburbs. The total expenditure on waterworks to the 30th June, 1922, was £471,000, and the revenue for the year 1921-22 was £36,424.

(c) *Sewerage Works.* The sewerage scheme consists of a main outfall sewer to the ocean at Black Rock, about 9 miles from Geelong, and 75 miles of reticulation mains have already been laid. The drainage area is 8,081 acres, and the number of buildings within the drainage area is 8,800 and within the sewered areas 7,200, while 6,200 buildings have been connected with the sewers. Up to the 30th June, 1922, the total expenditure on sewerage works was £397,547 and on the cost of sewerage installations under deferred payment conditions £125,941. The revenue amounted to £28,533.

(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 £250,000, and consist of treatment works and a main outfall sewer, 4,000 feet of which had been completed by the end of April, 1922.

(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 are controlled by Waterworks Trusts or by municipal corporations.

The following table gives particulars as to the waterworks under the control of trusts and municipal corporations for the years 1918 to 1922:—

#### COUNTRY WATERWORKS, VICTORIA.—FINANCES, 1918 TO 1922.

Year.	Under Waterworks Trusts.				Under Municipal Corporations.			
	Number of Trusts.	Capital Cost.	Capital Indebtedness.	Current Interest Outstanding.	Number of Corporations.	Capital Cost.	Capital Indebtedness.	Current Interest Outstanding.
	No.	£	£	£	No.	£	£	£
1918 ..	98	1,196,335	904,229	12,632	29	773,998	514,115	10,379
1919 ..	98	1,210,097	907,087	13,898	29	779,834	515,240	9,658
1920 ..	98	1,189,259	892,222	14,970	29	782,115	515,364	10,614
1921 ..	98	1,215,526	905,842	10,171	29	784,465	512,185	2,300
1922 ..	98	1,256,973	936,112	11,342	29	785,602	509,358	1,590

3. *Queensland.*—(i) *The Metropolitan Water Supply and Sewerage Board.* (a) *General.* The filtration works on Holt's Hill having been put into operation, the whole of the water supply in the Brisbane area is now filtered. Four additional filter-beds are under construction. The service reservoirs on Bartley's Hill, Highgate Hill and Wickham Terrace have a total capacity of seven million gallons. A new reservoir is being constructed on Tarragindi Hill, a suburb of Brisbane, to contain approximately 14,000,000 gallons. This reservoir is now so near completion that it will probably be ready for use early in 1923.

(b) *Brisbane Waterworks. Summary.* The following table shows the length of mains, the number of tenements connected, the population supplied, the total quantity of water



supplied, the average daily supply, and the average daily supply per head of population during each year from 1918 to 1922 :—

**WATERWORKS, BRISBANE.—SUMMARY, 1918 TO 1922.**

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.
	Miles.	No.	No.	1,000Gallons.	Gallons.	Gallons.
1918 .. ..	451½	34,450	172,250	3,159,105	8,655,082	50.24
1919 .. ..	477½	36,998	178,620	3,628,478	9,941,036	55.65
1920 .. ..	505	40,266	193,160	3,293,061	8,997,436	46.58
1921 .. ..	546½	42,408	206,685	3,360,747	9,207,627	44.54
1922 .. ..	576½	46,025	221,080	3,648,833	9,996,805	45.22

The total length of the trunk mains is 129½ miles.

(c) *Brisbane Sewerage Scheme.* The outfall sewers are completed, and the main sewer from the treatment works to North Quay, a distance of 11 miles, is nearly completed. In addition a main sewer 3½ miles long, with a tunnel under the Brisbane River, is completed, while other sewers and the treatment works are nearly finished. The construction of the power house and pumping stations was commenced during the year. Altogether 79,429 feet of main sewers and 49,313 feet of reticulation sewers are complete, and 29,113 feet of the former are under construction. The number of houses which have been surveyed is 22,311.

(d) *Brisbane Waterworks and Sewerage Works Finances.* The subjoined table gives the total capital cost, the revenue and working expenses, the amount of interest and loan redemption during the years 1918 to 1922 :—

**WATER AND SEWERAGE WORKS, BRISBANE.—FINANCES, 1918 TO 1922.**

Year.	Capital Cost.	Revenue.	Working Expenses.	New Works Construction.	Interest and Redemption of Loans.
	£	£	£	£	£
1918 .. ..	2,683,846	134,121	65,653	259,132	64,039
1919 .. ..	3,115,002	156,743	79,667	431,156	72,354
1920 .. ..	3,661,580	216,620	94,070	546,578	88,033
1921 .. ..	4,057,994	269,741	97,379	396,414	105,259
1922 .. ..	4,618,211	303,379	105,397	560,217	188,038

(ii) *Country Towns Water Supply.* In addition to the City of Brisbane there were at the end of the year 1921 thirty towns in Queensland provided with water supply systems, constructed by municipalities chiefly from Government loans. The subjoined statement gives particulars of all the water supply systems exclusive of Brisbane, for the year 1921 :—

**COUNTRY WATER SUPPLY SYSTEMS, QUEENSLAND, 1921.**

Cost of Construction to 31st December, 1921—£1,058,347.					
Receipts.			Expenditure.		
	£				£
Rates and sales of water .. ..	121,104		Administration .. ..		20,079
Government loans .. ..	20,601		Construction .. ..		28,174
Other .. ..	5,088		Maintenance .. ..		44,988
			Interest and redemption .. ..		32,387
			Other expenses .. ..		26,627
Total receipts .. ..	146,793		Total .. ..		152,255
Assets .. ..	806,193		Liabilities .. ..		551,945

4. South Australia.—(i) *General.* The whole of the water supply systems as well as the several sewerage systems are constructed and maintained by the Public Works Department.

(ii) *Adelaide Waterworks.* (a) *Summary.* The following table gives particulars for the years 1917–18 to 1921–22. The figures for consumption are as recorded by gaugings taken at the reservoirs and include evaporation and absorption. There are very few meters in the Adelaide district.

## ADELAIDE WATERWORKS.—SUMMARY, 1917-18 TO 1921-22.

Year ended 30th June—		Number of Assessments	Annual Value.	Area Supplied.	Capacity of Reservoirs.	Length of Mains.	Annual Consumption (a).
		No.	£	Acres.	Million Gallons.	Miles.	1,000 Gallons.
1918	..	79,423	2,173,634	106,465	4,106	901	4,266,000
1919	..	80,747	2,214,089	106,465	4,106	915	5,292,000
1920	..	83,085	2,336,093	106,465	4,106	947	5,626,000
1921	..	84,995	2,584,704	106,465	7,753	991	5,179,000
1922	..	87,279	2,781,473	111,295	7,753	1,010	5,873,000

(a) For previous year ending 31st December.

(b) *Finances.* Particulars available are shown in the subjoined table for the years 1917–18 to 1921–22 :—

## ADELAIDE WATERWORKS.—FINANCES, 1917-18 TO 1921-22.

Year ended 30th June—	Capital Cost.	Revenue.		Expenses.			Percentage of Net Revenue on Capital Cost.
		Rates.	Total.	Engineering Branch.	Revenue Branch.	Total.	
	£	£	£	£	£	£	%
1918	2,039,007	92,650	118,985	27,438	6,860	34,298	4.15
1919	2,079,957	93,328	126,111	29,161	6,982	36,143	4.33
1920	2,172,518	96,103	137,488	35,902	7,508	43,410	4.33
1921	2,768,769	107,665	177,722	42,700	9,678	52,378	4.53
1922	2,843,507	134,472	204,996	43,811	9,956	53,767	5.32

(iii) *Adelaide Sewerage.* Particulars for the years 1917–18 to 1921–22 are given hereunder :—

## ADELAIDE SEWERAGE.—SUMMARY, 1917-18 TO 1921-22.

Year ended 30th June—	Length of Sewers.	Number of Connections.	Capital Cost of Revenue-Producing Works.	Revenue.		Working Expenses.		Percentage of Net Revenue on Capital Cost.
				Rates, etc.	Total.	Maintenance, etc.	Total.	
	Miles.	No.	£	£	£	£	£	%
1918	354	37,043	830,703	59,345	78,405	12,054	23,998	6.55
1919	358	37,837	847,160	60,808	75,505	13,226	23,636	6.12
1920	363	38,979	860,438	65,744	86,076	13,396	24,046	7.21
1921	368	40,168	894,085	74,582	87,183	16,222	28,587	6.55
1922	373	41,240	946,213	79,562	90,525	17,083	29,893	6.41

(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 1917-18 to 1921-22 :—

**COUNTRY TOWNS WATERWORKS, SOUTH AUSTRALIA.—SUMMARY,  
1917-18 TO 1921-22.**

Year ended 30th June—	Number of Assessments.	Area Supplied.	Capacity of Reservoirs.	Length of Mains.	Annual Consumption (a).
	No.	Acres.	Million Gallons.	Miles.	1,000 Gallons.
1918 .. .. .	55,716	4,200,704	4,977	3,002	788,920
1919 .. .. .	56,242	4,201,294	4,977	3,031	967,773
1920 .. .. .	57,258	4,202,360	5,068	3,070	958,068
1921 .. .. .	58,552	4,847,295	4,978	3,136	770,030
1922 .. .. .	57,623	4,850,448	4,978	3,176	823,123

(a) For previous year ending 31st December.

(b) *Finances.* The next table gives financial information for the years 1917-18 to 1921-22 :—

**COUNTRY TOWNS WATERWORKS, SOUTH AUSTRALIA.—FINANCES,  
1917-18 TO 1921-22.**

Year ended 30th June—	Capital Cost.	Revenue.		Working Expenses.			Percentage of Net Revenue on Capital Cost.
		Rates.	Total.	Engineering Branch.	Revenue Branch.	Total.	
	£	£	£	£	£	£	%
1918 .. .. .	3,860,437	72,887	101,682	26,100	5,309	31,409	1.82
1919 .. .. .	3,924,385	70,722	101,262	31,412	5,782	37,194	1.63
1920 .. .. .	4,017,265	70,526	108,584	38,651	6,297	44,948	1.58
1921 .. .. .	4,168,876	73,024	110,656	42,084	7,220	49,304	1.47
1922 .. .. .	4,368,091	66,527	96,373	50,475	7,821	58,296	0.87

(v) *Other Sewerage Systems.* The following table gives information in summarized form regarding the two suburban sewerage systems, viz. : the Glenelg system and the Port Adelaide and Semaphore system, for the years 1917-18 to 1921-22 :—

**SUBURBAN SEWERAGE SYSTEMS, SOUTH AUSTRALIA.—SUMMARY,  
1917-18 TO 1921-22.**

Year ended 30th June—	Length of Sewers.	Number of Connections.	Capital Cost.	Revenue.		Working Expenses.		Percentage of Net Revenue on Capital Cost.
				Rates.	Total.	Main-tenance.	Total.	
	Miles.	No.	£	£	£	£	£	%
1918 .. .. .	56	3,683	337,587	7,545	8,634	4,273	4,445	1.24
1919 .. .. .	57	4,303	346,195	8,710	9,869	5,129	5,454	1.27
1920 .. .. .	58	4,657	354,084	8,765	9,849	5,581	5,952	1.10
1921 .. .. .	59	5,216	372,520	10,507	11,606	10,148	10,607	0.27
1922 .. .. .	63	5,868	400,198	12,145	13,520	10,347	10,978	0.64

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 included in the 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, Lower Bickley Brook, Mundaring Reservoir, five bores and the Armadale Pipe Head Dam and Well. The sewerage system consists of septic tanks and percolating filters for Perth and septic tanks and ocean outfall for Fremantle.

(b) *Summary.* The following table gives particulars regarding water supply for the years 1918 to 1922.

At the 30th June, 1922, the number of houses connected with sewers was 14,486.

#### WATER SUPPLY, WESTERN AUSTRALIA.—SUMMARY, 1918 TO 1922.

Year ending 30th June—	Estimated Population Supplied.	Number of Houses Supplied.	Water Supplied.	Average Daily Supply.		Number of Meters.	Length of Mains.
				Per Head.	Per House.		
	No.	No.	1,000 Gallons.	Gallons.	Gallons.	No.	Miles.
1918 .. ..	136,428	32,498	1,873,679	37.63	157.96	20,771	614
1919 .. ..	153,183	33,406	2,186,987	39.11	179.36	20,443	623
1920 .. ..	166,414	34,677	2,256,100	37.04	177.76	21,437	633
1921 .. ..	171,198	35,666	2,327,042	37.24	178.75	21,367	645
1922 .. ..	175,876	36,641	2,600,697	40.51	194.46	21,511	659

(c) *Finances.* The table hereunder gives the capital cost, the revenue and the expenditure of the water supply and sewerage and drainage branches separately for the years 1918 to 1922:—

#### WATER SUPPLY AND SEWERAGE AND DRAINAGE, WESTERN AUSTRALIA.—FINANCES, 1918 TO 1922.

Year ended 30th June—	Water Supply.			Sewerage and Drainage.		
	Capital Cost.	Revenue.	Expendi- ture.	Capital Cost.	Revenue.	Expendi- ture.
	£	£	£	£	£	£
1918 .. ..	1,057,444	91,380	88,082	935,595	53,259	61,578
1919 .. ..	1,080,876	89,215	90,907	933,886	54,457	64,325
1920 .. ..	1,119,910	96,882	103,570	947,411	59,628	66,001
1921 .. ..	1,223,951	113,439	117,136	958,452	61,961	71,773
1922 .. ..	1,309,262	122,669	129,412	968,540	70,086	72,153

(iii) *Goldfields Water Supply.* The source of supply for the Coolgardie and adjacent goldfields, as well as for places 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 1921–22 the railways consumed 7½ per cent., the

mines 23 per cent., and "other" 69½ per cent. of the supply. The following table gives statistical data for the years 1918 to 1922 :—

**GOLDFIELDS WATER SUPPLY, WESTERN AUSTRALIA.—SUMMARY, 1918 TO 1922.**

Year ended 30th June—	Total Consumption.	Number of Services.	Length of Water Mains.	Capital Cost.	Revenue.	Expenditure.
	1,000 gallons.	No.	Miles.	£	£	£
1918 .. ..	1,044,000	12,207	1,231	3,393,522	199,302	283,547
1919 .. ..	1,117,000	12,231	1,222	3,393,510	203,266	287,562
1920 .. ..	1,126,000	12,244	1,221	3,401,543	176,364	295,574
1921 .. ..	1,130,000	12,238	1,219	3,427,300	187,010	311,070
1922 .. ..	1,153,320	10,789	1,224	3,432,234	180,127	297,027

(iv) *Water Supply of other Towns.* During the year 1921–22, there were ten other towns provided with water supplies, apart from those in the metropolitan area and those supplied by the Goldfields Water Scheme. The total consumption of water by these ten towns for the year ending 30th June, 1922, was 115,962,000 gallons, and the estimated population served was 10,316. The average daily consumption was 30.80 gallons per head. In eleven other towns the water supplies are administered by local boards.

(v) *Agricultural Water Supply.* During the year 1921–22, five tanks were excavated, five wells sunk, and 25 bores put down. The total depth of the bores was 1,241 feet. One yielded fresh water, two stock water, and the balance were either dry or yielded only salt water. During the twelve years from the 1st July, 1910, to the 30th June, 1922, 370 tanks were built, 297 wells sunk, and 2,599 bores put down to a total depth of 128,104 feet. Of the bores mentioned, 443 yielded fresh, and 236 stock water.

(vi) *Other Mines Water Supply.* Seven bores were put down to a total depth of 462 feet during the year 1921–22. Three of these provided fresh, and two salt water. Two fresh-water wells were also sunk to a depth of 65 feet. All of these were on the Eastern Goldfields.

(vii) *Artesian and Sub-artesian Waters.* Up to the 30th June, 1922, the total number of bores put down in search of artesian or sub-artesian water was 127, ranging in depth from 56 to 4,006 feet.

6. *Tasmania.*—(i) *Hobart Water Supply.* The cost of this undertaking to the 31st December, 1922, was £393,004, but a considerable amount of reticulation work has been done out of revenue and not charged to capital account. The outstanding loans at 31st December, 1922, amounted to £342,805. At the same date the number of tenements supplied in the city and suburbs was 9,450, the population 45,500, and the length of reticulation mains 101 miles. The revenue and expenditure for the years 1918 to 1922 were as follows :—

**HOBART WATERWORKS.—REVENUE AND EXPENDITURE, 1918 TO 1922.**

Heading.	1918.	1919.	1920.	1921.	1922.
	£	£	£	£	£
Revenue .. ..	24,166	26,832	28,287	30,671	36,798
Expenditure .. ..	26,490	27,468	30,696	33,773	33,697

(ii) *Hobart Sewerage System.* The revenue for the year ended 31st December, 1922, was £19,774. Up to that date 75 miles of sewers had been laid in connexion with the metropolitan system at a cost of £198,813, and 7,416 tenements connected. In connexion with

the suburban sewerage systems, 17½ miles of sewers, connecting with 501 tenements, were constructed at a cost of £105,809. The sewerage of New Town is being proceeded with, the cost of construction, including surveys and sewerage outfall to 31st January, 1923, being £28,150.

(iii) *Water Trusts.* Apart from a number of water trusts incorporated in municipalities, in 1921 there were three such trusts, the revenue of which amounted to £994 and the expenditure to £1,180.

## § 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 are 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 60,000 lineal feet, exclusive of 7,800 lineal feet privately owned.

The depth of water at the entrance to the port is not less than 80 feet, and in the channel 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 £5,535,040 on the reconstruction and extension of the wharfage of the port. Over 12,000 lineal feet of old and obsolete wharfage have been demolished, and nearly 30,000 lineal feet of new berths have been constructed. Other improvements include 2,250,000 square feet of floor area of new sheds and nearly four miles of new roadways.

During the year 1922, 1,297,182 tons of material were dredged at a cost of £39,288. In the process of towing such material, 31,283 miles were run at a cost of £33,923.

(b) *Finances.* The subjoined table gives particulars concerning the finances of the Trust for the years 1918 to 1922:—

SYDNEY HARBOUR TRUST.—FINANCES, 1918 TO 1922.

Year ended the 30th June—	Revenue.				Expenditure.	Total Capital Debt.	Interest.	Balance.
	Wharfage and Harbour Rates.	Tonnage Rates and Berthing Charges.	From Other Sources.	Total.				
	£	£	£	£	£	£	£	£
1918 ..	280,476	26,862	269,121	576,459	170,854	8,796,521	348,023	57,582
1919 ..	323,253	31,347	264,300	618,900	179,899	8,691,972	336,823	102,178
1920 ..	323,306	22,398	312,609	658,313	206,450	8,959,887	353,037	98,826
1921 ..	429,986	43,577	323,648	797,211	244,764	9,449,213	438,210	114,237
1922 ..	451,981	44,465	330,676	827,122	261,120	9,868,165	488,552	77,450

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.* During the year 1922, the length of sheds in the port has been increased by 1,100 feet, making the total length 19,468 feet, covering an area of 1,125,295 square feet. The quantity of material raised by the dredging and excavation done in the improvement of the river and bay amounts to 74,000,000 cubic yards. The Trust has expended £335,679 in reclaiming land within its jurisdiction.

(b) *Finances.* The following table gives particulars of the revenue and expenditure of the Trust from 1918 to 1922 inclusive. Up to 30th June, 1922, the total capital expenditure amounted to £4,885,456.

MELBOURNE HARBOUR TRUST.—FINANCES, 1918 TO 1922.

Particulars.	1918.	1919.	1920.	1921.	1922.
REVENUE.					
	£	£	£	£	£
Rates, rents, etc. .. .. .	314,777	323,253	380,203	491,677	589,583
Interest .. .. .	123	193	46	42	80
Other receipts .. .. .	10,691	10,851	10,253	9,718	12,808
Total .. .. .	325,591	334,297	390,502	501,437	602,471
EXPENDITURE.					
Management and general expenses ..	45,373	45,570	51,178	57,226	61,763
Interest .. .. .	95,980	104,245	106,735	114,860	144,883
Total .. .. .	141,353	149,815	157,913	172,086	206,646
Less standing charges added to works	23,595	23,495	29,150	30,862	34,628
Total .. .. .	117,758	126,320	128,763	141,224	172,018
Wharfage and other refunds ..	2,382	1,677	2,529	3,064	3,866
Consolidated revenue of Victoria ..	62,305	62,460	75,554	96,224	114,986
Flotation of loans expenses ..	3,012	7,956	300	29,525	35
Redemption of loans expenses ..	2,392	4,499	..	615	..
Maintenance .. .. .	35,706	77,766	105,147	120,412	126,051
Total expenditure .. .. .	223,555	280,678	312,293	391,064	416,956
Surplus on revenue account .. .. .	102,036	53,619	78,209	110,373	185,514
Less depreciation and renewals account and sinking fund .. .. .	52,000	52,500	52,500	65,000	100,000
Net surplus on revenue account	50,036	1,119	25,709	45,373	85,514
CAPITAL EXPENDITURE.					
	£	£	£	£	£
Land and property .. .. .	1,153	964	3,221	2,461	11,906
Deepening waterways .. .. .	108,037	68,746	80,720	81,699	98,331
Wharves construction .. .. .	37,321	77,305	50,084	79,206	45,613
Approaches construction .. .. .	11,417	3,774	2,364	1,565	9,084
Other harbour improvements ..	7,352	3,068	2,936	14,099	25,311
Floating plant .. .. .	811	1,435	834	2,957	1,708
General plant .. .. .	130	509	883	1,131	925
Total .. .. .	166,221	155,801	141,042	183,118	192,878

(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 Corio Bay, Portarlington, some miles of Bay frontage, and certain lands on the River Barwon and at Barwon Heads. The Commissioners have established complete 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 four years 1919 to 1922 :—

GEELONG HARBOUR TRUST.—FINANCES, 1919 TO 1922.

Year.	Loans.	Sinking Fund.	Revenue.	Expenditure.
	£	£	£	£
1919 .. .. .	591,000	27,542	48,213	56,207
1920 .. .. .	591,000	27,954	50,020	60,625
1921 .. .. .	591,000	28,667	49,636	53,605
1922 .. .. .	591,000	29,379	54,234	52,066

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 ratepayers 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 Proserpine and Wangaratta, and division I. of the Shire of Ayr.

(b) *Finances.* The capital expenditure up to the 31st December, 1922, was £45,590, while for the year 1922 the receipts were £8,585 and the expenditure £6,407.

(ii) *Bundaberg Harbour Board.* (a) *General.* The Bundaberg Harbour Board was constituted under the Act of 1895, and consists of nine members, of whom one is appointed by the Governor in Council, four by adjacent local authorities, and four by persons who have paid harbour dues amounting to five pounds and upwards. The Harbour Board District consists of the area comprised within the boundaries of the City of Bundaberg and the Shires of Gooburrum and Woongarra. The jurisdiction of the Board extends over the harbour of Bundaberg and certain lands adjacent to the River Burnett.

(b) *Finances.* The revenue for the year 1922 amounted to £5,803 as against £4,281 for the previous year, and the expenditure to £5,433 as compared with £4,001 for 1921.

(iii) *Cairns Harbour Board.* (a) *General.* The Cairns Harbour Board consists of twelve members, representing the town of Cairns and eight adjoining shires. The wharves at Cairns, which are all under the control of this Board, are constructed of reinforced ferro-concrete, 1,200 feet having been completed, while 300 feet are still under construction. There is also under construction an electrically-driven mechanical sugar-handling conveyor, estimated to cost £35,000.

(b) *Finances.* During the year 1922 the revenue of the Board was £44,256, of which £40,032 was derived from harbour, berthage and miscellaneous dues.

(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, the berth being 680 feet long, with an average depth alongside of 26 feet, and (ii) the municipal wharf in Auckland-street.

(b) *Finances.* The total capital expenditure to the end of 1922 amounted to £60,000. The revenue for 1922 was £2,332 and the expenditure £2,536.

(v) *Mackay Harbour Board.* (a) *General.* The Mackay Harbour Board consists of nine members, elected by the ratepayers of the City of Mackay and three adjacent shires. The works being carried out are in connexion with the director wall in the Pioneer River, of which about 7,900 feet have already been built, leaving a further 3,700 feet not yet completed.

(b) *Finances.* The total capital expenditure of the Board from its inception in 1897 is not available, but the capital expenditure for the year ended 31st December, 1922, was £1,174. During the year 1921 the receipts amounted to £10,650 and the expenditure to £16,969.

(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 of forty-five 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 1922 was £33,632, of which £9,671 represented loans, and the expenditure was also £33,632, which included £10,043 interest on loans.

(vii) *Townsville Harbour Board.* (a) *General.* The Townsville Harbour Board was created in 1896, and 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 £1,464,560, while the receipts for the year 1922 were £56,821 and the expenditure for the same year £64,720.

(viii) *Harbour Boards—Financial Summary.* The following table shows the total revenue and expenditure of Harbour Boards and the outstanding loans for the years 1917 to 1921:—

#### HARBOUR BOARDS, QUEENSLAND.—FINANCIAL SUMMARY, 1917 TO 1921.

Year.	Number of Boards.	Revenue.			Expenditure.			Outstanding Loans.
		Wharfage and Harbour Dues.	Government Loans.	Total.	Works and Maintenance.	Interest and Redemption of Loans.	Total.	
		£	£	£	£	£	£	£
1917	5	110,300	5,750	134,957	75,584	36,920	126,446	860,011
1918	5	116,852	4,950	142,306	88,817	36,557	146,824	856,422
1919	6	87,153	9,044	139,592	65,629	35,570	128,663	886,677
1920	6	108,212	17,712	179,432	90,761	51,492	178,436	887,628
1921	7	117,417	46,219	183,949	101,563	65,452	199,341	979,341

4. *Western 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 1918 to 1922:—

#### FREMANTLE HARBOUR TRUST.—FINANCES, 1918 TO 1922.

Year ended 30th June—	Revenue.	Expenditure.	Gross Amount Paid to the Treasury.				
			Interest.	Sinking Fund.	Renewals Fund.	Surplus Revenue.	Total.
	£	£	£	£	£	£	£
1918 .. ..	162,659	83,354	64,450	18,414	..	..	82,864
1919 .. ..	185,817	94,093	70,861	18,837	..	2,026	91,724
1920 .. ..	281,600	130,740	73,872	19,301	2,000	54,513	149,686
1921 .. ..	301,065	133,904	77,240	19,819	2,000	71,410	170,469
1922 .. ..	282,038	126,597	80,218	20,277	2,000	56,491	158,986

(ii) *Bunbury Harbour Board.* (a) *General.* The Bunbury Harbour Board was constituted in 1909, and consists of five members appointed by the Government. The jetty is 4,900 feet long with berthage accommodation of 2,750 feet on the west side and 3,000 feet on the east side. The depth of water alongside ranges from 16 to 27½ feet. Electric and steam gantry cranes are available.

(b) *Finances.* The following table gives the capital expenditure for each of the five years ending 30th June, 1918, to 1922, together with the revenue and expenditure for the same years. Any surplus revenue is paid into the Consolidated Revenue Fund to meet interest and sinking fund.

**BUNBURY HARBOUR BOARD.—FINANCES, 1918 TO 1922.**

Year ended 30th June—				Capital Expenditure.	Revenue.	Expenditure.	Paid to Consolidated Revenue Fund.
				£	£	£	£
1918	..	..	..	328,851	9,598	4,851	4,747
1919	..	..	..	338,392	12,510	5,381	7,129
1920	..	..	..	377,688	16,487	8,013	8,474
1921	..	..	..	417,611	28,980	8,843	20,137
1922	..	..	..	440,965	26,175	9,818	16,357

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 1918 to 1921 and for the half-year ending 30th June, 1922:—

**MARINE BOARD OF HOBART.—FINANCES, 1918 TO 30th JUNE, 1922.**

Year.	Capital Debt.	Revenue.			Expenditure.			
		Harbour Improvements, Debentures, etc.	General.	Total.	Harbour Improvements.	Interest and Sinking Fund.	General.	Total.
	£	£	£	£	£	£	£	£
1918 ..	106,350	3,775	20,046	23,821	3,131	5,400	15,487	24,018
1919 ..	106,350	367	21,505	21,872	108	5,700	14,603	20,411
1920 ..	106,350	4,568	30,584	35,152	3,859	5,585	21,807	31,251
1921 ..	96,350	..	30,055	30,055	1,080	5,400	29,470	35,950
1922 to 30th June ..	92,350	..	16,133	16,133	3	3,265	11,975	15,243

(ii) *Marine Board of Launceston.* (a) *General.* The Marine Board of Launceston consists of five wardens elected by the ratepayers of the city of Launceston. 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, for which investigations have been made and which is to be commenced in 1923, is the removal of Porpoise Rock, which lies 4 miles from the entrance to the river. It is also proposed to establish a deepwater port at Bell Bay and to extend the wharfage accommodation at Launceston.

(b) *Finances.* The following table gives details for the years 1918 to 1922 :—

**MARINE BOARD OF LAUNCESTON.—FINANCES, 1918 TO 1922.**

Year.	Total Capital Debt.	Capital Debt Tamar Improvement.	Revenue.	Expenditure.
	£	£	£	£
1918 .. ..	223,039	166,801	35,094	32,639
1919 .. ..	231,539	184,301	33,748	30,238
1920 .. ..	263,718	216,480	39,569	40,865
1921 .. ..	303,861	256,822	44,421	45,688
1922 .. ..	318,361	271,322	47,638	40,021

(iii) *Marine Board of Burnie.* The length of the breakwater is 1,250 feet, with a depth alongside up to 42 feet at low water. There are three timber wharves, 600 feet, 610 feet, and 400 feet long respectively. Owing to the working of the Marine Act 1921, the financial year now ends on the 30th June, and the receipts for the half-year ending 30th June, 1922, were £9,810, and the expenditure £14,554, including £11,000 interest on construction loans.

(iv) *Other Boards and Trusts.* In addition to the three Marine Boards mentioned above, there are four Marine Boards and three Harbour Trusts, which have control of the smaller ports and harbours.

(v) *Financial Summary.* The total receipts and expenditure of the ten marine Boards and Harbour Trusts for the years 1917 to 1921 are shown in the following table :—

**MARINE BOARDS AND HARBOUR TRUSTS, TASMANIA.—FINANCIAL SUMMARY, 1917 TO 1921.**

Year.	Receipts.				Expenditure.
	Taxes, Rents, etc.	Government and Loans.	Other.	Total.	
	£	£	£	£	£
1917 .. ..	61,370	35,734	7,648	104,752	103,715
1918 .. ..	64,426	898	15,156	80,480	90,543
1919 .. ..	73,485	998	15,552	90,035	100,298
1920 .. ..	85,845	5,154	83,412	174,411	207,378
1921 .. ..	109,363	3,867	4,957	118,187	116,358

## § 7. Fire Brigades.

1. *New South Wales.*—(i) *General.* Under the Fire Brigades Act of 1909, a Board of Fire Commissioners consisting of five members was formed and fire districts established. The cost of maintenance of fire brigades is borne in equal proportions 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 must not exceed the amount obtainable from a farthing in the pound rate on the unimproved capital value of the district.

(ii) *Sydney Fire District.* (a) *Plant, etc.* The Sydney fire district includes the City of Sydney and suburbs, comprising a total area of 258 square miles. On the 31st December, 1922, the Board had under its control in this district 67 stations, 315 permanent men, 167 partially-paid firemen, 3 steam and 60 motor fire engines, 14 horses, 141,867 feet of hose, and 542 telephone fire-alarms. The length of wire used for telephone lines was 1,340 miles.

(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:—

**SYDNEY FIRE DISTRICT.—FINANCES, 1918 TO 1922.**

Year.	Receipts.						Disbursements.
	From Government.	From Municipalities.	From Fire Insurance Companies.	From Firms.	From other Sources.	Total.	
	£	£	£	£	£	£	£
1918	34,231	34,231	33,858	373	3,950	106,643	107,104
1919	34,198	34,198	33,819	379	4,339	106,933	115,637
1920	47,808	47,808	47,218	589	3,815	147,238	143,262
1921	54,355	54,355	53,820	535	6,457	169,522	163,528
1922	53,979	53,979	53,425	554	4,745	166,682	163,750

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 Brigades Board.* (a) *Plant, etc.* On the 30th June, 1922, this Board had under its control 41 stations, 271 permanent men, 130 partially-paid firemen, 50 special-service firemen, 5 motor drawn steam fire engines, 8 petrol motor fire pumps, 57 other petrol motor appliances, 2 steam fire engines, 96,397 feet of hose, and 363 fire-alarm circuits having 1,092 street fire alarms, 1,072 containing telephones.

(b) *Finances.* The following table gives particulars as to the financial operations of the Board during each year from 1917–18 to 1921–22 inclusive:—

**METROPOLITAN FIRE BRIGADES BOARD, VICTORIA.—FINANCES,  
1918 TO 1922.**

Particulars.	1918.	1919.	1920.	1921.	1922.
RECEIPTS.					
	£	£	£	£	£
Contributions .. ..	84,418	85,569	95,225	117,893	125,685
Receipts for services ..	6,645	7,197	9,651	10,807	21,857
Interest and sundries ..	1,960	2,766	3,593	11,797	3,926
Total .. ..	93,023	95,532	108,469	140,497	151,468
EXPENDITURE.					
	£	£	£	£	£
Salaries .. ..	58,900	60,915	67,060	85,537	87,523
Interest and sinking fund ..	13,610	14,971	12,970	14,100	21,136
Other expenditure .. ..	25,057	20,968	26,963	41,859	46,198
Total .. ..	97,567	96,854	106,993	141,496	154,857

(iii) *Country Fire Brigades Board.* (a) *Plant, etc.* At the end of the year 1922 there were 112 municipal councils and 92 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 watchmen are employed. There were 137 registered brigades and 2,454 registered firemen at the end of the year 1922. The equipment included 22 motor tenders, 3 steam fire engines, and numerous manual engines and hose reels.

(b) *Revenue and Expenditure.* The following table shows the revenue and expenditure of the Country Fire Brigades Board for the years 1918 to 1922 :—

**COUNTRY FIRE BRIGADES BOARD, VICTORIA.—REVENUE AND EXPENDITURE, 1918 TO 1922.**

Particulars.	1918.	1919.	1920.	1921.	1922.
	£	£	£	£	£
Revenue .. ..	13,923	15,585	18,816	19,995	22,718
Expenditure .. ..	14,552	15,308	18,544	20,353	23,122

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 1921 there were fire brigades in 27 towns, with a total strength of 112 permanent men, 261 partly paid, and 85 voluntary. The plant included 13 motor, 5 steam, and 13 manual fire engines, 71 hose reels, consisting of 16 motor, 10 horse, and 45 hand reels, and 85,909 feet of hose. The total number of call points was 266. The Metropolitan Fire Brigade protects an area of 32 square miles and has a staff of 136 men.

(b) *Revenue and Expenditure.* In the following table are given the revenue and expenditure of all the fire brigades in Queensland for the years 1917 to 1921 :—

**FIRE BRIGADE BOARDS, QUEENSLAND.—REVENUE AND EXPENDITURE, 1917 TO 1921.**

Year.	Revenue.				Expenditure.			
	From Government.	From Local Authorities.	From Insurance Companies.	Total.	Salaries and Wages.	Buildings, Repairs, etc.	Plant, Stores, etc.	Total.
	£	£	£	£	£	£	£	£
1917 ..	9,919	9,971	9,764	30,893	16,846	1,588	4,573	27,921
1918 ..	10,901	11,093	10,857	33,931	20,037	1,252	3,889	30,430
1919 ..	12,135	12,162	12,266	38,356	23,090	4,937	4,938	38,641
1920 ..	13,724	13,320	20,330	48,573	28,583	4,499	7,793	56,306
1921 ..	14,637	14,524	22,313	54,685	31,513	3,866	8,856	55,263

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

(ii) *Fire Brigades Board.* (a) *Plant, etc.* At the end of 1922 there were altogether 21 fire brigade stations. The strength of the brigades consists of 105 permanent firemen and 66 auxiliary firemen. The plant consists of 5 steam fire engines, 1 motor engine, 21 motor hose carriages, 1 floating fire engine, 4 hose reels, 9 horses, and 61,830 feet of hose

(b) *Revenue and Expenditure.* The following table shows the revenue of the Board for the years 1918 to 1922, the expenditure in each year being the same :—

**FIRE BRIGADES BOARD, SOUTH AUSTRALIA.—REVENUE, 1918 TO 1922.**

Heading.	1918.	1919.	1920.	1921.	1922.
	£	£	£	£	£
Revenue .. ..	27,952	31,129	33,568	35,817	37,306

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 forty-two. The staff at the 31st December, 1921, included a chief officer, deputy chief officer, third officer, motor engineer, electrical engineer, 7 other officers, 70 permanent, 33 partially-paid, and 573 volunteer firemen. The plant comprised 7 steam, 3 motor and 4 manual engines, 39 reels, and 75,200 feet of hose.

(b) *Finances.* The following table gives details for the years 1917 to 1921 :—

**WESTERN AUSTRALIAN FIRE BRIGADES BOARD.—FINANCES, 1917 TO 1921.**

Year ended 31st December—	Revenue.	Expenditure.	Estimated Value.	
			Land and Buildings.	Plant.
	£	£	£	£
1917 .. ..	32,243	32,329	52,500	27,500
1918 .. ..	27,247	31,042	52,500	27,600
1919 .. ..	26,299	28,557	52,000	27,600
1920 .. ..	30,100	33,423	49,000	26,000
1921 .. ..	40,630	35,511	46,840	26,000

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 municipalities concerned, and insurance companies insuring property within the district.

(ii) *Hobart Fire Brigade Board.* (a) *Plant, etc.* At the end of 1922 the staff consisted of 11 permanent and 17 partially-paid firemen. There were at that date also 1 motor pump, two motor hose carriages, 3 horse and 4 hand reels, and 4 ladders.

(b) *Revenue and Expenditure.* The revenue for the years 1921 and 1922 amounted to £4,581 and £4,803 respectively, expenditure being the same for each year.